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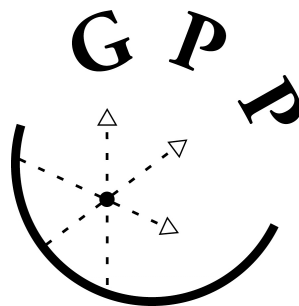
**NEGOTIATING INTERNATIONAL STANDARDS FOR  
ENVIRONMENTAL MANAGEMENT SYSTEMS: THE ISO 14000  
STANDARDS**

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Case Study for the UN Vision Project on Global Public Policy Networks



## INTRODUCTION

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Environmental pollution, habitat destruction, and other threats to the health of the planet are at the top of the current international agenda. Many of the resources at risk are inherently global, not tied to any single national territory or political jurisdiction. For example, the protective ozone layer in the upper atmosphere is being eaten away by actions taken in many different locales. Seemingly local accidents, such as a chemical spill at a single factory, become global when the toxic pollutants find their way into rivers and streams that traverse national borders. Many environmental problems can only be resolved through coordinated international action to change the behavior that causes a multitude of environmental sins.

The direct source of environmental pollution is the production process, and thus the parties most directly responsible for many environmental problems are corporations. Industrial style production has been very successful at raising living standards in many countries over the past century or so. But the method by which the modern corporation meets consumer demand for material goods has environmental costs that are increasingly evident. Since the 1960s, most industrialized countries have implemented national environmental policies to limit the impact of industrial production.

National regulatory systems in most developed countries, but particularly in the U.S., rely primarily on “command-and-control” policies. Environmental regulation typically focuses on determining which products a government should ban or which processes have to be modified, and include systems of monitoring and enforcement. (Vogel 1986) Added to these national systems are an increasing number of internationally negotiated obligations and environmental institutions addressing such issues as the depletion of the ozone layer by chemicals and the protection of the seas from pollution. Recently, however, traditional regulatory approaches have come under attack for inefficiency, anti-competitiveness, and bureaucratic red-tape. Many government regulators are seeking to design more efficient and market friendly programs. These include providing incentives for the private sector to develop more benign processes for producing goods and services. The goal is to persuade corporations to adopt more sustainable practices.

Public opinion in most industrialized countries continues to favor strong environmental regulations. Environmental activist groups have been keeping up the pressure on local and national governments to adopt and enforce new environmental protections. In recent years, many environmentalists have targeted corporations directly, in addition to their more traditional government lobbying. They have been mobilized by major disasters such as the chemical

accident at Bhopal and the oil spill caused by the Exxon Valdez accident. Activists put political pressure on companies through tactics such as consumer boycotts, shareholder resolutions, and media attention, and the more high profile cases have brought about significant change. The goal is to convince corporations to adopt more sustainable practices even when no government is forcing them to do so.

Corporations have responded in part by considering ways to improve industrial processes to meet the consumer and political demand for sustainable industrial development. One of the mechanisms they have turned to is the implementation of environmental management systems (EMS). EMS refers to the way in which a corporation develops and implements an organization-wide environmental policy as part of the overall management system of the company. After many years of haphazard evolution of different, *ad hoc* EMS systems, a number of efforts have been launched to develop common international standards to define and implement EMS. In the early 1990s, many industry representatives turned to their traditional standards-setting body to do so--the International Organization for Standardization (ISO). Today, the ISO is promoting a new voluntary standard for EMS called the ISO14000 set of standards.

#### THE INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

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The International Organization for Standardization (ISO, pronounced “eye-zoe”), is an international nonprofit federation of national standards organizations. It is based in Geneva but is not a member of the United Nations system. ISO was founded in 1946 when 26 delegates met to establish an organization to eliminate technical barriers to trade through “coordination and unification” of industrial standards. The first ISO standard was published in 1951--a reference temperature for industrial length measurement. (ISO n.a.; U.S. Environmental Protection Agency 1998) ISO has put forward more than 8,000 standards “for everything from paper sizes to film speed.”(EPA Standards Network 1995 p.1)

The purpose of the ISO is to develop standards, which are the “the specifications and criteria to be applied consistently in the choice and classification of materials, the manufacture of products, and the provision of services.”(ISO n.a.) These standards are intended to facilitate trade, exchange, and the development of technology, and to eliminate technical barriers to trade. The commitment of ISO members to engage in this system is part of a broader belief that economic and sustainable development depend upon the existence of an infrastructure for standardization.(ISO n.a.) The ISO typically develops product standards, and historically has not developed standards for production processes. It does not have any environmental mandate, unlike some other international organizations.

ISO members are the national standards setting associations “most representative of standardization in its country,” with one member per country. (ISO n.a.) These associations may be state agencies, public-private partnerships, private associations, or any mix of representation. ISO does not stipulate the structure or mandate for these bodies, but most member bodies have some type of government mandate. (ICF 1997) The majority of national members are represented by government or government-related agencies.(Cascio, Woodside, and Mitchell 1996) The American National Standards Association (ANSI) is the US representative to the ISO. ANSI is financially supported by the private sector, with technical support from government. In 1995, the National Institute for Standards and Technology (NIST), an arm of the US government, signed a Memorandum of Understanding that recognizes ANSI’s role as the US member body in the ISO. (Subcommittee on Technology 1996 p.27) ANSI procedures allow for public interest participation in the standard setting process. (Seifert 1998) The structure of ISO does not explicitly lay out formal roles for public, private, and nonprofit sector actors. Many national standards bodies do have rules about trying to balance different interests within the standards body, including government, industry, practitioners, users, and non-governmental organizations. All members are volunteers.

The ISO has three forms of membership--full voting members, plus corresponding and subscribing members that participate less directly or pay lower dues. The latter are generally held by countries that do not have a national standard setting system or are too poor to support full ISO membership. Not all countries have a national standards association, and therefore not every country is a voting member of the ISO. The ISO negotiating process is built on developing a consensus during negotiations, and it is open to participation by all interested parties. The rationale is that the final standard will not be useful in facilitating trade and production unless it is widely adopted. Market forces, in the shape of industries, must support the standard since it is entirely voluntary on the part of corporations. In addition, national regulatory systems also must support the standard. This requires full participation by national bodies, which represent a national consensus of industry and government on the content of a standard. One industry representative described the ISO process as “fantastically democratic,” although other observers would not agree. (Subcommittee on Technology 1996 p.91)

The foundation of all ISO activity is the member associations. The ISO itself is simply an umbrella under which they negotiate. (Salter 1993-94) They are the bodies charged with communicating with interested parties in their home countries about standards issues and ISO activities. They are expected to negotiate with domestic interests to develop a cohesive national

position on proposed standards, and then represent that position at ISO negotiations. They are also expected to provide a secretariat to staff the committees and subcommittees that deal with the standards in which that association is most interested.

The ISO Central Secretariat, which is relatively small, is financed by dues levied on member associations, in addition to the sale of standards and publications. Member associations are assessed varying amounts based on the country's GNP and trade figures. The Secretariat of each technical committee that develops a new standard is financed by whichever member body volunteers to staff and run it. Approximately 66% of the support for technical committees comes from the US, UK, Germany and France. (Krut and Gleckman 1998 p.47) Any "experts" that participate in the standards development process typically pays their own way.

In addition to facilitating the development of standards, the ISO also provides a number of related services. It established ISONET, a worldwide network of national standards information centers designed to provide information about standards, technical regulations, testing and certification activities. The ISONET generally also serves as the information center that each country must maintain under the terms of the Agreement on Technical Barriers to Trade of the GATT. ISO also provides training and consulting services, especially for developing country members, and usually works on these projects with the support of government aid agencies and industrialized country governments.

ISO generates new standards through a long, complicated and highly decentralized process. The detailed negotiations over the exact content of standards are carried out through technical committees, subcommittees and working groups. These are composed of representatives from industry, research centers, government, consumers, and international organizations. Industry is the agenda setter, source of all data, and driver of the process of standards setting. Each member body interested in a particular standard has a right to be represented on the relevant committee. International organizations typically take part in the work, and more than 500 international organizations are in liaison with ISO committees.

Typically, a particular industry sector identifies a need for new standards. A national association convinced of this need by its members will make a proposal to begin negotiations to the ISO Technical Management Board. If supported by two-thirds of the membership and at least five member associations are willing to participate directly, the ISO Board creates a new Technical Committee for the negotiations. The ISO defines the scope of the standard to be negotiated, usually through a working group of experts. The representatives of the national standards associations serving on relevant committees and subcommittees then negotiate detailed

specifications and build a consensus on a draft standard. Committees meet regularly around the world when developing standards, and operate in accordance with specific rules of procedure for technical work. The Central Secretariat of the ISO facilitates communication and information flow among member associations, and coordinates technical committee and subcommittee meetings.

The committees aim to achieve a consensus on a draft standard. Since it is the members most interested in a standard who contribute to its development, a consensus on the final draft will be likely to be voted on positively by the full membership and later on widely adopted by industry and government. Their negotiations are supposed to be informed by discussions with manufacturers, vendors and users, consumer groups, testing labs, governments, engineering professions, and research organizations. However, standard setting is fundamentally intended to be industry driven. Non-industry interest groups and representatives from developing countries tend to have less of a presence than technical experts, industry representatives and members from industrialized countries. The committee presents its final draft standards to the ISO Central Secretariat, which submits it to the full membership for a vote. The standard is adopted if it is approved by 2/3 of the members that participated in its development and 3/4 of all voting members. All ISO standards are voluntary and their adoption and implementation are market-driven. Typically, all standards are reviewed on a regular basis in order to see if further revisions are necessary.

### **1. Putting EMS on the ISO Agenda**

The negotiation of standards for environmental management systems landed in the lap of ISO after a number of developments convinced industry leaders of the need for them. Environmental management systems had become increasingly common within industry over the course of the 1980s and 1990s. Some companies adopted them to fend off further government regulation, some adopted them to respond to environmental activists, and some adopted them to promote corporate efficiency and sustainability. Moderate environmentalists became more willing to work with businesses to develop sustainable industrial development projects, often including EMS in their plans. The intense environmental activism of the years leading up to the UNCED at Rio awakened many business leaders to the need to develop better environmental policies. At Rio, business representatives advocated voluntary measures such as EMS as a way to implement some of the environmental goals agreed to at the conference. EMS also fit well with an emerging trend among many governments to deregulate their economies and develop market-based incentives to encourage the voluntary adoption of environmental policies by the business community.

Many businesses responded to public pressure by developing corporate environmental policy statements and EMS. To be effective, these had to be backed by some mechanism to incorporate environmental values into the traditional processes of a business organization. The ideal EMS is designed to strengthen the internal organizational accountability of a corporation by linking the environmental policy statement to actual lines of command and accountability, and by ensuring implementation of the environmental policy. Initially, different corporations developed their own separate and unique environmental policy statements and accompanying EMS. Some companies adopted them in a sincere effort to improve environmental management and outcomes, and many others adopted them in an attempt to allay public criticism.

Critics--and government regulators-- viewed corporate EMS with skepticism in part due to the lack of standards against which to measure them, making it difficult to compare their performance or understand exactly what a corporation meant when it said it had an EMS. Some non-governmental organizations (NGOs) proposed developing their own standards for corporations to adopt. Some national governments decided to develop standards in order to increase comparability and accountability. Britain developed its own national EMS standard, the

BS 7750, in 1995, and the European Union developed the regional European Union Eco-Management and Audit Scheme (EMAS). Many other governments appeared to be ready to follow suit. By the mid-1990s, there existed a plethora of corporate environmental codes of conduct, policy statements, EMS, NGO proposals, and national standards.

A number of different trends conspired to push the EMS onto the ISO agenda. Possible alternative arenas included everything from private sector industry associations to the public sector Organization for Economic Cooperation and Development (OECD) or the United Nations Environmental Programme (UNEP). First, the Uruguay Round of the GATT put emphasis on removing nontariff barriers to trade, which included many aspects of national environmental standards and “eco-labels.”(Lattanner n.a.) This increased the importance of examining differing national standards with an eye towards negotiating common standards.

Politically, the U.S. government became concerned that the EMS standards being developed in Europe potentially could become technical barriers to trade, and therefore it was anxious to find a means to negotiate international standards. The Clinton Administration had declared early on in its first term that the “default” standard setting body would be ISO.<sup>1</sup> It pushed to have ISO develop an international EMS standard as opposed to a regional European one.<sup>2</sup> (Morris 1997; Subcommittee on Technology 1996 p.22) However, not everyone agreed that ISO was the appropriate negotiating forum. Some American industry representatives had looked at an earlier ISO process, the ISO 9000, with dismay, claiming it had been overly dominated by European interests. James Thomas, president of ANSI, stated in a Congressional hearing, “We believe the blanket commitment to ISO made by the U.S. Government before it knew whether the ISO process would work for all US industries was an error in judgment. We believe that industry is in a much better position than government to determine whether any

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<sup>1</sup> In many ways, this was seen as simply a bureaucratically efficient policy, setting a “template” for U.S. participation in international standards setting.

<sup>2</sup> The U.S. Government generally has supported international standards setting, particularly in ISO and the International Electrotechnical Commission (IEC). (Subcommittee on Technology 1996 p.51) Some critics contend this policy is too broad, committing the US and US industry before knowing the final outcomes and ignoring other voluntary standard setting bodies such as the Association of Mechanical Engineers (ASME). (Subcommittee on Technology 1996 pp.59-64)

particular standards development process, including ISO, works for them.”(Subcommittee on Technology 1996 p.51)

A number of industry interests wanted some means to coordinate national, local and individual EMS systems. National and regional environmental standards were proliferating in areas such as labeling, environmental management, and product life cycle assessment. These standards tended to be inconsistent with one another, potentially could distort markets, and simply made it difficult for international enterprises to operate. (Cascio, Woodside, and Mitchell 1996 p.8) The Business Council for Sustainable Development (BCSD), formed in anticipation of the Rio conference, pushed the ISO to consider developing EMS standards and the UNCED organizers approached the ISO for a commitment to develop international environmental standards. (Cascio, Woodside, and Mitchell 1996 p.9) The BCSD promoted voluntary private sector initiatives on the environment, including EMS. International standards would decrease the costs to corporations of developing their own EMS, increase the legitimacy of EMS as a response to public concerns over the environment, and encourage more widespread adoption of EMS across industries.<sup>3</sup> Many industry leaders sought a common standard in order to prevent the creation of non-tariff trade barriers and to ward off further government regulation. U.S. corporate leaders in particular viewed the adoption of common international EMS standards as an incentive for governments to loosen environmental regulations. (Subcommittee on Technology 1996 p.3) An international standard on EMS would increase the legitimacy of efforts at corporate sustainability, however weak those might be. The most influential industry interests chose to turn to the ISO because they would have more influence there than in public intergovernmental organizations, they were familiar with the process, and it had the support of the US government.

Although the ISO traditionally had not dealt with process standards, which is what EMS is about, it had recently gained some experience in this area. It had successfully developed the ISO 9000 quality standards in 1987, which were management or process standards for documenting quality procedures, training employees, and decreasing defects in products.

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<sup>3</sup> Many business managers also argued in a favor of developing common environmental performance indicators for both the private and public sectors. Different entities often measured different scales: the production facility, the product, the company, the industry sector, the international level. For more on environmental performance indicators, see (Ranganathan and Willis 1999).

Indeed, these standards are considered to be some of the most successful in ISO's history. (Cascio, Woodside, and Mitchell 1996 p.7) Many advocates of having the ISO develop EMS standards looked upon the success of ISO 9000 as a model. Based on this success, and given the upcoming UN Conference on Environment and Development at Rio and the urging of the Business Council for Sustainable Development, the ISO leadership decided in 1991 to create a joint committee of ISO and the International Electrotechnical Commission (IEC) to form a Strategic Advisory Group on the Environment (SAGE). SAGE members included representatives from national standards association, trade associations, individual industrial firms and insurance companies, individual governments, NGOs and universities.

## **2. Technical Committee 207: Participation and Conflicts**

SAGE met repeatedly from 1991-93 to consider the relationship between ISO 9000 and EMS standards. It broke into six subgroups to address a variety of issues and evaluate the need for standards. Some subgroups began writing the standards, without authority, since they concluded standards were needed. The IEC eventually withdrew from SAGE. The US delegation to SAGE objected to the premature drafting of standards, and insisted that standard ISO procedures be followed. Some countries, such as Great Britain, Ireland, South Africa, and France, submitted their own standards as drafts for consideration. SAGE officials thought these would be easily revised once a formal technical committee of ISO was formed, but U.S. officials (and others) believed it left countries without drafts at a temporary disadvantage. (Cascio, Woodside, and Mitchell 1996 p.10-11)

The SAGE eventually recommended the formation of a separate Technical Committee for EMS standards. SAGE also suggested the new committee should reach out to other groups, including international organizations such as the UN Environmental Programme, the International Chamber of Commerce, and the World Wildlife Fund. (Krut and Gleckman 1998 p.50) However, the tensions within SAGE between European and US representatives persisted throughout the deliberations. When the ISO formed Technical Committee 207 for Environmental Management Standardization in June 1993, the Standards Council of Canada offered to manage the negotiations, and the Canadian Standards Association would administer the secretariat. Canada was seen as relatively "neutral." Due to the perception among Europeans that the US was not particularly committed to ISO 14000, the US was nearly left out of all leadership positions in TC207.(Cascio, Woodside, and Mitchell 1996 p.11)

TC 207 broke up into six subgroups and one working group. Forty-eight members officially participated in the committee work, along with thirteen observers. There were thirty-two active members, including thirteen developing countries. The latter included major emerging markets such as Brazil, China, Indonesia, Korea, and Thailand. (ICF 1997) The industrialized countries participated most heavily in the negotiations, especially of course Canada, the host. European countries, including Russia, central Europe, and the NIS all sent representatives. The US member association, ANSI, delegated administration of the TAG to two organizations, the American Society of Testing and Materials (ASTM) and the American Society for Quality Control (ASQC). (Cascio, Woodside, and Mitchell 1996 p.17) Most countries claimed their delegations included a balance of interests, but few could demonstrate this. (ICF 1997)

TC 207 met numerous times from 1991-96 at various locations around the world.<sup>4</sup> Its initial drafts drew heavily upon the drafts developed by the SAGE, but these eventually had to be substantially revised.<sup>5</sup> The mandate of TC 207 limited it significantly. The EMS standards would not address the same environmental issues already addressed by national regulatory bodies, such as environmental limit values, pollutant levels, technology requirements, and environmental characteristics of products. TC 207 would develop process standards and not product standards or specified end goals. Joe Cascio, head of the US TAG, complained that a surprising number of delegates, including some from the US, misunderstood the limits of this mandate. They tried to incorporate performance objectives into the standards, particularly the Europeans, who sought something comparable to the BS 7750 and EMAS requirements. (Cascio, Woodside, and Mitchell 1996 p.13-14, 29)

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<sup>4</sup> Instead of holding all meetings in one locale, the ISO committees typically meet in a variety of locations. This can be both a barrier and an invitation to attendance. It is one of the few examples I know of where an international organization “travels” to almost every corner of the world. This can be costly for many participants, but also is a welcome deviation of the norm of holding meetings in

Geneva or New York.

<sup>5</sup> SAGE deliberations in turn had been greatly influenced by the British standards, BS 7750.(Cascio, Woodside, and Mitchell 1996)

New proposals for draft standards go through a predetermined process with several stages: proposal review, working draft, committee draft, draft international standard, and finally an international standard if it is accepted. Once a draft is completed, it is presented for comments, and those comments are then incorporated into the next revision. At each stage, consensus is sought. Eventually, TC 207 reached a consensus on final draft standards. The ISO members voted on them in the spring of 1996 and they were officially published in September 1996.

The U.S. delegation to TC 207 that participated in developing the draft standards included different standards associations designated by ANSI to deal with specific subcommittees.<sup>6</sup> The U.S. Technical Advisory Group (TAG) to TC207 consisted of roughly 550 people. These included about 300 representatives from corporations, 70 trade associations representing a range of sectors, twenty federal agencies and six state agencies, and individuals representing a variety of environmental organizations (Environmental Defense Fund, National Wildlife Federation, Green Seal, Environmental Law Institute). (Subcommittee on Technology 1996 p.34, 43) The initial composition of the TAG was primarily business and government, and in 1994 the TAG invited the environmental NGO community to participate. (Seifert 1998) The U.S. established the EPA Standards Network as the means by which the Agency participates with full voting membership in the U.S. TAG. The Network develops draft policies and distributes information within EPA on developments in TC207. (EPA Standards Network 1995)

Industry representatives from different sectors and countries had different levels of interest and incentive to participate. For instance, those sectors that were most international also had the most interest in standardization in general. Those that tend to be most regulated on environmental issues also would feel compelled to participate, as did those industry leaders who perceived some economic and political benefit from adopting EMS and developing global EMS standards. The dominant industry sectors involved in TC207 meetings included: chemicals, plastics, timber, forestry, oil and gas, utilities, mining, metal fabrication, electronics, information technology, manufacturing, heavy transport, autos, and packaged goods.(ICF 1997) Small scale enterprises were under-represented. Industry leaders usually view ISO standards favorably if

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<sup>6</sup> In 1993, the U.S. EPA had formed the Voluntary Standards Network, an interagency mechanism to coordinate the EPA's participation in developing international standards. This Network has been deeply involved in TC207 negotiations. (EPA Standards Network 1995; ICF 1997 p.2)

their particular industry possesses either the only or the latest technology to meet a standard. Multinational corporations also tend to perceive direct benefits from international standardization, as do those that simply have the financial resources to develop and meet high standards.(Subcommittee on Technology 1996 p.50) Auditors, accountants and other consultants also participated in the negotiations, as these standards would open up a new and lucrative market for their services.<sup>7</sup> Four of the seven subcommittees of TC 207 were chaired by executives from such firms as KPMG Environmental Consulting, Merck and Bayer. In general, industry representatives in Technical Committee 207 were viewed as relatively cohesive in their preferences on the content of the standards, although multinational corporations were more supportive of the standards than small and medium-sized businesses.

Developing countries had limited participation in the initial phase. They lacked technical expertise, and attending all the meetings--or even staffing them--often stretched their financial capacity. They often had difficulty in obtaining information, transcripts, and drafts and so were unable to participate effectively.<sup>8</sup> Some developing countries complained that they had little time or ability to contribute to revisions to the initial draft since it did not reach them in time, if at all. A number complained that they did not actively contribute to writing the new standards, but that they would have no choice but to adopt them in order to be economically competitive.(Krut and Gleckman 1998 p.41) Not all developing countries have national standards associations and not all choose to participate as voting members, which also limited developing country participation. Twenty-five developing country members participated in TC 207, and twenty voted on the final draft standards. A few developing country delegations were financially supported by aid from developed countries and from international aid agencies, including the ISO Developing Country Committee (DEVCO), although the latter had only limited funding. (Clapp ; Krut and Gleckman 1998 p.42)

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<sup>7</sup> Some people complained that the negotiations were driven by the interests of the consultants and auditors. The EPA report on participation in ISO14000 negotiations states that consultants, academics, and scientists had less influence than industry and government, but more than nongovernmental organizations.(ICF 1997)

<sup>8</sup> For instance, Krut and Gleckman state that in June of 1996 the Kenyans had no information from the ISO about the forthcoming standards. (Krut and Gleckman 1998 p.40)

As one report baldly states, “national member bodies do not have a good record of involving non-governmental organizations, most specifically environmental and consumer groups.”(ICF 1997) The expense of representation and participation poses a barrier to many smaller organizations. At first many environmental and consumer groups did not realize how important these standards might become, and did not make a great effort to attend. One analyst also pointed out that because the public policy implications of the ISO 14000 standards were unclear, it was difficult for NGOs to raise needed financial support from charitable foundations.(Seifert 1998) Many NGOs found the decentralized process of ISO deliberations somewhat baffling, and most lacked any familiarity with ISO, and therefore faced a steep learning curve in their attempts to contribute to the process. Some NGO representatives expressed concern about participating in a forum that is industry-dominated, and they feared being co-opted or harming their reputation with their membership. High-profile NGOs did attend, typically as Liaison organizations that do not have a vote, and therefore cannot be held accountable for the resulting standards.<sup>9</sup>(ICF 1997) The initial set of environmental NGOs that joined in 1994 generally withdrew in 1996, since most of the ISO14001 document had been written prior to their participation. They were replaced by other NGOs that took a more direct interest in the remaining ISO 14000 standards, such as eco-labeling or forestry.(Seifert 1998)

Different national delegations made varying efforts to include NGOs, and their efforts increased over the course of the negotiations. For instance, the U.S. TAG sought more NGO participation, and worked with the NGO Initiative, providing meeting space and facilitating NGO networking. The U.S. TAG also provided arrangements for an environmental NGO forum at a meeting of the ISO TC 207 in 1998. The NGO Initiative Working Group on ISO 14000 also speaks directly with many TAG members prior to balloting. In a recent ballot on forestry, the Working Group was effective in making changes to the final report. Many NGO representatives are becoming skilled in ISO processes and actually represent the U.S. at TC 207 meetings. (Seifert 1998)

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<sup>9</sup> NGOs participating in TC207 as Liason organizations include: Consumers International, Environmental Defense Fund, European Environmental Bureau, Forest Stewardship Council, Friends of the Earth, Internatioanal Federation of Organic Agriculture, International Institute for Sustainable Deveolpment, International Network for Environmental Management, Sierra Club, World Wide Fund for Nature.(ICF 1997)

Regional and international organizations work with the technical committees and subcommittees of ISO and liaise with the head of the organization. They contributed to the negotiations in TC 207, but in a fairly uncoordinated fashion. The World Trade Organization now has a direct interest, since its Agreement on Technical Barriers to Trade (TBT) committed signatories to eliminate barriers to trade due to different standards or conformity assessment procedures. The TBT gives great weight to already existing international standards and standards setting bodies, which gave the ISO 14000 negotiations added significance.

One of the initial points of tension in the negotiations was between U.S. and European industry. Indeed, one participant claimed that the “difference in government approach to standards between Europe and the rest of the world was the principal cause of all difficulties experienced in drafting the ISO 14000 series. (Cascio, Woodside, and Mitchell 1996 p.14) European countries had transferred authority for standardization to the regional body, the European Committee for Standardization (CEN). The Europeans had led in developing ISO 9000, and some in U.S. industry claimed the results raised discriminatory barriers against U.S. producers. They also complained that European members vote as a bloc in ISO and thus outweigh U.S. interests. They worried that ISO standards are really European standards that favored European industry and technology. U.S. industry and political leaders took a keen interest in ensuring that American representatives participated in and influenced the course of the negotiations. They had been caught unprepared by ISO 9000 and its success. (Subcommittee on Technology 1996) U.S. government and private sector interests cooperated to develop a set of standards that would be compatible with the US regulatory system and US interests.

On the other side, some European representatives pressured the committee to complete its work quickly so that the new EMS standards could be supported within European legislation for an Eco-Audit and Management Scheme (EMAS), which was passed by the EU in 1995. The European standards association had recommended in 1994 that work on regional EMS standards be delayed in favor of ISO standards.(Subcommittee on Technology 1996 p.34-5) Other Europeans delegations, such as the Danish and Swedish, questioned the relationship between ISO 14000 and EMAS and asked whether the ISO standards would dilute or supplant the more comprehensive, performance-oriented EMAS.<sup>10</sup>(Krut and Gleckman 1998)

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<sup>10</sup> EMAS, like the British BS 7750 standards, include both process and performance goals. They constitute a complete system, unlike ISO 14000, which is specifically designed not

Another point of tension raised by U.S. industry and by many NGOs was over the role of consulting firms and ISO registrars. US industry complained that, after adoption of ISO 9000, its registrars influenced implementation too strongly, giving a bigger role to third-party certification than to the U.S.-preferred process of self-certification. This, they thought, might influence the course of negotiations over ISO 14000. (Subcommittee on Technology 1996 p.67-8) Many NGOs critically commented on the participation of consulting firms, which would be interested in developing a new market in EMS certification and environmental auditing and reporting.

A third sensitive issue concerned the application of ISO 14000 to small and medium sized enterprises (SMEs). The US delegation strenuously opposed any separate consideration for SMEs. The SMEs in developed and developing countries alike raised issues of cost, expertise, and appropriateness of international standards for EMS developed in large part by multinational industries. However, the US representatives argued that an EMS system would be costly but efficient for large and small firms alike, and that the standards could be flexible enough to accommodate their concerns. They also expressed concern that the EMS guidance document (ISO 14004) should be broadly applicable and there should not be a separate guidance document for SMEs, which some advocated. This might lead to a two-tier system with less stringent requirements for SMEs, thus diluting the value of certification. In a compromise, a resolution was adopted to monitor SME experience when adopting ISO standards, and this issue will be considered again in future.(Business and the Environment's ISO 14000 Update 1996a)

Finally, hanging over the entire negotiation process was the issue of EMS as a potential barrier to trade, and the new role of standards under the WTO Technical Barriers to Trade Agreement (TBT). Under the TBT, member countries commit to adopting international standards whenever possible. The TBT also describes acceptable national standards development programs. All participants sought to position themselves well under the new ISO 14000 standards. Many, particularly in the developing world, worried that these could become a means for particular industries and nations to gain advantage through the ways it would affect competitiveness or restrict trade as a non-tariff barrier.

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to substitute for national regulatory systems. They both also require public reporting, which the ISO standards do not require.(Cascio, Woodside, and Mitchell 1996)

### **3. The ISO 14000 Standards for Environmental Management Systems**

The end result of the initial round of negotiations was the ISO 14000 Environmental Management Systems Guidance Standard; the ISO 14001 specification document, plus various standards for environmental auditing. The entire range of the ISO 14000 set of standards will include environmental management, environmental auditing, life cycle assessment, environmental labeling, environmental performance, and others.<sup>11</sup> The main standard is ISO 14001, the only one written to be auditable, which addresses the internal and external effects of the firm on the environment throughout the life cycle of its products, including waste generation, pollution, energy use, noise, and depletion of natural resources.(Hogarth 1999) The standards can apply to a range of organizations including industrial and commercial corporations, government agencies, and nonprofit organizations. An organization registers under ISO 14000 by obtaining certification of its conformance with ISO 14001. A corporation can be certified as compliant with the ISO 14001 standard if it:

- (1) has an environmental policy statement designed by senior management, including a commitment to compliance, pollution prevention, and continual improvement;
- (2) complies with all relevant local, national and international law and regulation;
- (3) establishes objectives and targets in line with the environmental aspects of its operations that it has identified, along with compliance requirements and stakeholder interests;
- (4) provides an annual environmental report and ongoing monitoring and measurement under senior management review;
- (5) has a specified chain of command and accountability within the organization to implement environmental policy goals;
- (5) hires an independent firm to perform audits of its factories to certify compliance. (EPA 1998) (Krut and Gleckman 1998)

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<sup>11</sup> The full set of standards include ISO 14001, 4 and 31 on environmental management; ISO 14010-15 on environmental audits; ISO 14020-25 for environmental labeling; and ISO 14040-43 for product life cycle assessment. Only the ISO standards relating to environmental management have been published so far. The other standards are still being negotiated, and face many hurdles.

These standards do not specify environmental outcomes, the actual content of corporate environmental policy statements, or any particular environmental goals. Instead, the standards focus on ensuring that the management system of the corporation--its processes for attaining organizational goals--include an environmental component.

Though officially adopted by the ISO, an international body, the actual implementation of the ISO 14000 standards is via voluntary adoption by national governments and/ or by individual corporations. The standards are nonbinding, and in the case of industry, they are adopted only if market forces drive them in that direction. Governments can choose to adopt ISO voluntary standards into national regulatory and standards systems, either through an administrative process or through developing a national consensus.<sup>12</sup>

The results of the initial negotiations were then followed by a period of implementation and further negotiation on the remaining standards under ISO 14000. It was after the adoption of the first ISO14000 standards that many activist organizations became increasingly concerned over both the content of the standards and the process by which they were developed. In 1997, the U.S. EPA commissioned a report on participation in the TC207.(ICF 1997) Around the same time, two activist groups, ECOLOGIA and the Community Nutrition Institute, launched a project titled "NGO Initiative: ISO 14000" to stimulate debate over these standards and to increase NGO representation on the U.S. TAG.<sup>13</sup> (NGO Initiative n.a.)

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<sup>12</sup> The European Union is a special case. Two regional standards bodies, CEN and CENELEC, exist. When these regional bodies adopt a standard, the national members must by law adopt it as a national standard. In addition, CEN/ CENELEC has a relationship with the ISO governed by the Vienna Agreement, which seeks to avoid duplication by these bodies. An ISO standard can be simultaneously approved by CEN in a parallel ballot.

<sup>13</sup> The NGO Initiative Working Group on ISO 14000 includes representatives from the Pacific Institute, World Stewardship Institute, Environmental Law Institute, Tulane Environmental Law and Policy Center, Pennsylvania Environmental Council, Defenders of Wildlife, Greenseal, Pennsylvania Resources Defense Council, Sierra Club, The Nautilus Institute, Community Nutrition Institute, and Ecologia.(NGO Initiative: ISO 14000 n.a.)

#### **4. Implementation and Adoption**

Despite a lot of initial attention and publicity, private sector adoption of the standards started out slowly. It cost a lot for a factory to be certified, and there were relatively few experts or legitimate auditors to do the certification. The ISO 14000 standards competed with other standards, such as the national standards developed by Britain or the European-wide standards being developed by the European Union, the EMAS. The environmental community did not strongly support ISO 14000 or pressure companies to become certified because ISO 14000 does not include performance standards or public reporting requirements. In fact, the European Environmental Bureau, a major environmental umbrella group, came out against the ISO 14000 standards, viewing it as a threat to stricter EU regulations.(McCloskey 1996)

However, despite the confusion over competing standards, many European companies did quickly become certified, with East Asian companies following closely behind. Japanese companies today have the highest number of environmental certifications, while North and South America lag behind. (Chemical Market Reporter 1999; Hogarth 1999) Rapidly industrializing countries in East Asia believed that certification would demonstrate to buyers abroad that they could meet world standards and compete in world markets. Eventually, the European Union recognized ISO14000 under the EMAS regulations, and accepted certification as meeting part of the requirements for EMAS.(ICF 1997)

US corporations did not initially rush to adopt ISO 14000 standards even though American industry played such a big role in their development. Some, such as Lucent Technologies, planned to certify all its manufacturing facilities shortly after the ISO 14000 standard was published. Others, such as Elf Atochem, saw no clear case for pursuing certification, either from customer or public demand for it. (Business and the Environment's ISO 14000 Update 1996d) US environmental law and regulation was more stringent than the ISO standards, and therefore American executives did not feel compelled to become certified. Even before its publication, environmental executives at top U.S. corporations concluded ISO 14001 was extremely weak in promoting actual environmental improvements and therefore probably would not achieve significant changes. (Burdick 1999) Some U.S. companies have implemented an EMS without even seeking ISO certification, although they use ISO 14001 as a benchmark. Many major multinational corporations simply did not have a strong interest in EMS due to bureaucratic barriers, since the environmental division generally operates separately from other divisions of the corporation.

Joe Cascio, head of the U.S. Technical Advisory Group to TC207 and a strong advocate, said, "There should be no illusion that ISO 14001 will be easy to implement." (Subcommittee on Technology 1996 p.10) There is a cost to establishing a comprehensive EMS. A corporation seeking certification must first identify all its inputs and outputs that have effects on the environment. Managers have to familiarize themselves with all possible local, national and international regulations that might be applicable to its operations. The firm has to develop a corporate environmental policy and organizational lines of accountability to implement it. Managers and employees have to be trained in new procedures and values. The actual certification process requires costly third-party assessments (although self-certification is also an option), and the number of legitimate certifiers remains relatively small.<sup>14</sup> For small and medium-sized businesses, the burdens of ISO certification may be difficult to justify. Large companies must decide the relative costs of certifying one facility or many.

A certified corporation obtains a number of benefits that may outweigh the costs, however. Assessing these costs and benefits can be difficult, since some of the benefits include government fines not levied, lawsuits not filed, and citations not issued. (Hogarth 1999) Many in industry expressed concern throughout the negotiations about whether the implementation of ISO 14001 would increase paperwork and bureaucracy without improvements in environmental protection or in regulatory relief--the latter being a major incentive to consider certification. In a survey on the ISO 14001 draft standard in 1995, a number of executives also indicated that they thought ISO certification would create competitive advantages with customers, and symbolize the environmental leadership of that company. It would also strengthen their management systems, improve efficiency, and perhaps reduce insurance liability premiums. (Burdick 1999)

After a slow start, worldwide adoption is currently on the rise. Between 1996 and 1997, the number of certificates awarded jumped by close to 40% and they covered facilities in 129 countries. The Japanese Standards Association reported in 1998 that the number of companies gaining ISO 14001 certification had been increasing steadily. (Onitsuka 1998) In a recent survey, over 60% claimed their investment in certification paid off in less than a year. (Chemical Market Reporter 1999) Political pressure on companies to "do something" about their environmental performance is leading many of them to look at widely accepted measures such as ISO 14000 as one way to demonstrate that they are, in fact, doing something. Over time, many corporate

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<sup>14</sup>For a case study of how one company implemented ISO 14001, see the description of the Milan Screw Products certification process in (Hogarth 1999).

managers have become more familiar with EMS in general and especially with environmental auditing standards, so they are more willing to adopt ISO 14000. Increasing numbers of them have come to perceive EMS and other eco-efficiency measures as good business practice, and they want to benchmark their environmental performance against a standard.(Anonymous 1999) Some NGOs now accept EMS as one tool among many others to promote environmental responsibility within the private sector.

Some countries are beginning to adopt the ISO14000 into national regulatory systems. For instance, Indonesia declared in 1997 that it would adopt ISO 14000 as its national EMS standard.(Business and the Environment's ISO 14000 Update 1996c) Most governments, however, do not explicitly cite it in regulation. Instead, it is simply used as a mechanism to assure compliance with regulatory requirements without actually requiring ISO14000 certification. In Europe, certification is recognized as partially fulfilling EMAS requirements.(ICF 1997) European organizations have been rapidly gaining accreditation for conformity under their national systems for ISO 14000, and in in 1998, the national accreditation bodies of ten European countries agreed to recognize each others' accreditation for EMS. (Allen 1998) In the US, some major buyers, including the Pentagon, are beginning to require ISO 14000 certification of their suppliers, especially overseas suppliers. Many countries are providing subsidies for implementation support and training, including many newly industrializing countries. Few countries actually have implemented programs that provide regulatory relief to companies that are ISO certified, although this option is under consideration.(ICF 1997)

Many critics argue that the voluntary nature of the standards means that compliance will be low and enforcement of course will be non-existent. They also argue that, even accepting their voluntary nature, the standards will be weak because the ISO has yet to establish and develop further criteria for the ISO 14000 auditors and better standards for the corporate environmental reports required for certification. In fact, the issue of corporate environmental reporting has been taken up in another forum, which is attempting to negotiate global public reporting standards.(Ranganathan and Willis 1999)

## **5. Continued Negotiation**

Technical Committee 207 still continues its work today, as it develops further standards within under ISO 14000, and the negotiations have not always gone smoothly. For instance, the attempt to develop a consensus on environmental labeling standards (ISO 14020) has run aground. A

recent vote on the proposed standards failed by a narrow margin. It generated a heated debate over the definition of “consensus” in the ISO. The US delegation insisted that consensus had to be reached at every step of the process.(Business and the Environment's ISO 14000 Update 1996b) There exists great interest in developing better environmental performance indicators, and the ISO process has at least distinguished among different types of indicators and their purposes.<sup>15</sup> (World Resources Institute 1997)

Short-term revisions of ISO 14001 and ISO 14004 are already being evaluated to consider how to make them more compatible with the quality standards of ISO 9000.(Chemical Market Reporter 1999) A liaison group between the technical committees dealing with the two sets of standards has been formed to try to harmonize them. The initial standards published in 1996 will be reviewed and revised in 1999-2000. The US EPA already has formed a Working Group on ISO 14001 Revisions, and is pushing to clarify the relationship of the standard to regulatory compliance and enhance public reporting and pollution prevention. Disagreements exist within the US TAG over these revisions, however. (Horne 1999) In 1997, in the US, seven major trade associations and the General Electric Company formed an industry coalition aimed at keeping ISO 14001 voluntary and resisting any government efforts to incorporate it into the regulatory process.[The Environmental Management Report, 1997 #193]

Many observers believe that ISO eventually will consider outcomes-based standards in addition to the process standards already adopted. Leading advocates of the ISO 14000 standards development process also now admit that there would have been wider acceptance of the standards initially if they had been negotiated in a multi stakeholder process. Recent meetings of the committees and subcommittees involved in ISO 14000 have included a broader range of interests.

ISO itself supports wider participation through more subsidies for travel, training programs, and other mechanisms. The ISO Committee on Developing Country Matters (DEVCO) has established an ISO Programme for Developing Countries (DEVPRO). The latter is a plan to meet the needs of developing countries for training, coordination and documentation, including a manual on environmental management.(Dixon 1997) In June 1998, the ISO established a task force to look into ways to improve participation by NGOs and developing

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<sup>15</sup> The draft guidance on environmental performance indicators, ISO 14031, lists over 100 illustrative examples of these indicators, indicating the confusion over what to measure and how to do it. (World Resources Institute 1997)

countries in the work of TC 207 (despite opposition from the British, German and Swiss delegations, and with US abstention). Key support for this came from representatives of Australia, Sweden and the Netherlands. (Hale 1998; Morrill 1998)

## CRITICAL ASSESSMENT OF ISO 14000: CONTENT AND PROCESS

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The ISO 14000 standards have been criticized on two levels: content and process. The criticisms have come from all sides. Environmentalists fear these standards do too little, and free market activists fear they do too much.<sup>16</sup> In terms of substantive content, environmentalists point out as a weakness the fact that these EMS standards are not performance-oriented since they do not require corporations to achieve any particular environmental outcome. ISO 14000 does not require third-party conformity assessments and certification, nor does it require the results of any assessment to be made public. Management can choose on its own whether to certify the entire enterprise, or a specific factory, which some observers see as a weakness in the standards. The ISO EMS standards are viewed by many as inferior to standards being developed concurrently in national and regional contexts, such as those developed by the European Union.

For many activists, the danger is that these weak and inadequate standards might be widely adopted by companies worldwide. They worry that developing country governments will put pressure on certifiers in order to assure certification, which they may view as politically and economically necessary to remain competitive. There are fears in the U.S., for instance, that the federal government has stepped onto a “slippery slope” toward substituting the process standards of ISO 14000 for tougher performance standards.<sup>17</sup> (McCloskey 1996) And developing country representatives fear they will become a trade barrier, especially if the standards are not flexible enough to accommodate different national levels of development and different corporate capabilities. (Krut and Gleckman 1998 p.75) (Morris 1997)

Environmental activists are not the only ones critical of the content of ISO 14000. Free market advocates at first viewed the ISO voluntary standards as an alternative to traditional command and control regulation. However, the final ISO 14000 standards state that certification requires compliance with existing regulations, so that they reinforce traditional government policies instead of promoting reform. ISO 14000 registration is perceived to be an overlay costly means of achieving a low level of environmental improvement. Both environmentalists and

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<sup>16</sup> See, for instance, (Krut and Gleckman 1998; Morris 1997).

<sup>17</sup> Michael McCloskey of the Sierra Club argued in 1996 that the U.S. government was already showing evidence of a too-friendly attitude towards ISO 14000 by EPA programs and policies that encourage certification for entry into incentive programs and preferences in audits.(McCloskey 1996)

libertarians fear that ISO 14000 will be inflexible and will not encourage or accommodate new environmental technologies.(Morris 1997)

A number of criticisms have been leveled at the process by which the ISO 14000 standards have been developed. The ISO system theoretically provides a forum for numerous interests to participate directly in the development of standards. In reality, participation is determined at the national level, through the member associations. For many NGOs and developing countries, the process appears opaque, expensive, and industry-led.(ICF 1997; McCloskey 1996; Seifert 1998) The negotiations were dominated by industry interests, including consulting firms which would stand to gain a new market--especially in developing countries--if ISO 14000 were widely adopted.(Krut and Gleckman 1998 p.76) At the extreme, ISO 14000 is viewed as anti-democratic and misleading to the public.(McCloskey 1996) The ISO 14000 standards setting process diverges from previous ISO efforts because it addresses issues that are social and political in nature, outside the perceived competence of the ISO, in areas where it does not have legitimacy or authority. The ISO was not set up to be politically participatory or representative, although its structure certainly allows for the inclusion of a wide variety of interests. Krut and Gleckman, in a book laying out a critical case against the ISO14000 standards, summarize their concerns as: compliance, performance, external verification, public reporting, and public participation.(Krut and Gleckman 1998 p.98-99)

For many supporters of the system, the danger is that ISO 14000 will not be adopted widely at all. ISO standards compete with other ones, such as BS 7750 and EMAS. A number of public and private environmental bench marking systems now exist which could lessen the incentive for adoption of ISO 14000 standards. The lack of coordination with other environmental initiatives could undermine support for ISO standards. (Krut and Gleckman 1998) (McCloskey 1996; Morris 1997)

Advocates note a number of benefits to be gained from implementation of ISO 14000. Cascio, one of the most prominent promoters, argues that ISO 14000 will promote development and commerce by facilitating trade, improving environmental performance worldwide, and building international consensus about the need for environmental management and a common terminology for EMS.(Cascio, Woodside, and Mitchell 1996 p.65) He argues that although ISO 14000 does not specify environmental performance objectives, the standards nevertheless will improve environmental outcomes. The EMS portion of ISO 14000 will “raise the floor” on overall environmental management and performance around the world. “By promoting and implementing environmental management in organizations, ISO 14000 will play a part in global environmental progress, eventually allowing all countries to catch up to those that have had

environmental issues at the forefront of policy, initiatives, technology and regulation for over two decades.” (Cascio, Woodside, and Mitchell 1996 p.4) ISO 14000 standards will promote awareness of applicable law and regulation in countries where they are not vigorously enforced, and will promote processes that will increase compliance. In fact, it may even lead governments to tighten up their own regulatory systems.(Cascio, Woodside, and Mitchell 1996 p.173-4)

Industry advocates of ISO 14000 claim these standards represent a paradigm shift. The implementation of EMS would bring a gradual cultural change to organizations. The standard would require increased awareness, education and training of employees and managers to understand the environmental consequences of their actions.(Cascio, Woodside, and Mitchell 1996 p.71) EMS implementation would move industry from passively waiting for governments to issue rules and regulations, to actively seeking out and continuously improving their performance. ISO 14000 would improve overall compliance with existing national and international regulations, and would be a force for equalization of environmental regulations between countries.<sup>18</sup> Lynne Anderson, chair of the West Coast Working Group, an ad hoc advisory group to the US TAG, believes that adoption of the standards is an opportunity for organizations to showcase their positive efforts on environmental issues, and, as she puts it, a chance for environmental managers to be viewed as something more than “overhead.” (Lattanner n.a. p.3)

Many developing countries will not and perhaps cannot meet the performance objectives sought by industrialized countries and Northern activists. They object to any linking of trade and environmental protection, as can be seen in their position on this at the recent Seattle meeting of the WTO. Their regulatory systems often require and enforce relatively low levels of environmental performance. According to ISO 14000 advocates, a market-based voluntary standard propelled by demand, especially by buyers in developed countries, would increase the overall performance of these weakly regulated societies without leading to the imposition of trade sanctions.<sup>19</sup> (Cascio, Woodside, and Mitchell 1996 p.4, 67; Morris 1997) The adoption of

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<sup>18</sup> Of course, critics would not view this as a positive development, believing that harmonization along the lines of ISO standards would represent a weakening of environmental protection.

<sup>19</sup> Of course, many environmental activists object on these very same grounds—that without trade sanctions, these voluntary standards will never be widely implemented. They

ISO 14000 standards will require a certain degree of capacity building in developing countries.(Hansen n.a.) Cascio, the head of the U.S. TAG, predicts that eventually the widespread adoption of ISO 14000 will lead to equalization of environmental regulations across countries. As more and more companies attempt to become certified, the weaknesses of different national systems will become more apparent and stimulate reforms that strengthen environmental protection. (Subcommittee on Technology 1996 p.6) If this system becomes widely accepted, it may be incorporated into national regulatory policies. Regional accreditation and certification bodies may emerge, reducing the overall costs of the implementation infrastructure. Governments may accept ISO certification as a sign of compliance, and may be more lenient when a certified company seeks to obtain an operating permit, or may include relief under sentencing guidelines, as the U.S. has done. The legitimacy of the ISO standards depends to some degree on the integrity and reliability of the third-party conformity assessments that are part of the system, even its advocates concede. (Subcommittee on Technology 1996 p.12)

A number of observers have commented on the learning process that was involved in the ISO negotiations. Industry participants are learning at two levels: they are learning how to implement a more sustainable industrial management system through EMS, and they are learning that acceptable standards for environmental policies must be developed in a multi stakeholder process. The ISO leadership also learned about the need to take more active steps to be inclusive, especially of developing countries. Many national delegations, especially the U.S., are making a bigger effort to include non-industry interests among their representatives. The U.S. EPA included in a 1998 Fact Sheet on ISO14000 a paragraph noting that any interested party may participate, calling specifically form environmental groups and small and medium sized enterprises to contact a listed phone number if they were interested in joining the U.S. TAG.(EPA 1998 p.3)

NGOs, from the initial stages on up to current negotiations, clearly became more familiar with the ISO process and with the organization itself. Their representatives are becoming more effective when they participate on delegations, and have influenced some aspects of current standard setting. One analyst reported that, based on discussions with environmental NGO representatives to the U.S. TAG in 1997, the obstacles to participation have not been overwhelming and their efforts have been worthwhile. They have been able to gain support from

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express concern that ISO 14000 may be viewed as a substitute for tougher international regulations, especially ones that are linked to international trade.

others for their positions. Indeed, on some occasions, certain business actors, environmental professionals, government and NGOs find themselves supporting each other in a strategic alliance. Such strategic alliances may be the key to increasing the effectiveness of NGOs in TC 207. (Seifert 1998)

Public, private, and activist interests are limited in their ability to negotiate standards together through ISO processes. Trisectoral participation depends on the character of national delegations, and is not a subject of ISO policy. The decentralized negotiating process based on consensus within committees could conceivably be paralyzed by conflicting preferences as more and more interests are represented at their meetings. The process also could encourage lowest-common denominator standards, which is how many view the ISO 14000 standards. Finally, because standards are voluntary, they simply may not be adopted at all, and thus the process would lead to few positive outcomes at all.

## POLICY RECOMMENDATIONS

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The weaknesses of ISO, in terms of substance and process, point to a number of ways in which international standard setting might be improved. ISO needs to be more explicitly open to multiple stakeholders.(Camarota 1999) ISO rules and procedures should be revised to include a formal role for NGOs and stronger support for representation from developing countries. At some level, the ISO leadership has to grapple with the issue of whether it is the appropriate forum for developing international environmental standards. At the least, it should do so in conjunction with other environmental negotiating fora and intergovernmental organizations (IGOs). National and international regulatory systems should work to complement the ISO standards. For instance, governments could provide further incentives for corporations to adopt ISO 14000. The ISO standards are an indirect method to improve corporate environmental performance, and therefore cannot be used alone.

Two other alternate routes exist. First, many environmental activists view the transnational network of NGOs as the appropriate arena for standard setting. This controversial view is premised on the belief that NGOs are more representative than international organizations. For instance, other programs exist that set more ambitious goals for broad sustainable development, such as the Global Reporting Initiative of the Coalition for Responsible Economies (CERES). (Ranganathan and Willis 1999) Second, traditional negotiating fora in which governments, representing their citizens, bargain over the shape of standards also exist and may be a better alternative. This is particularly true for the kinds of public policy issues addressed by ISO 14000, but which are not really within the competence of the ISO. On the other hand, other bodies perhaps even less well equipped, such as the World Trade Organization, are now poised to address environmental issues in upcoming negotiations, despite the recent setback in Seattle. Many intergovernmental processes have lost their legitimacy in recent years. Governments represented in them are not democratically elected, and international organizations appear to pose a threat to the sovereignty of states. The issue of democratic participation in intergovernmental organizations, and the methods available to make them more representative and responsive, are key issues facing these organizations today.

Intergovernmental organizations have a number of roles to play in the effort to improve the environmental performance of corporations, and to protect our natural world from the degradations of an industrialized economy. First, IGOs need to take on the task of “meta-standards setting.” Given the plethora of different corporate codes, environmental policies, and EMS standards, IGOs can establish the bottom line for these multiple initiatives. Second, IGOs

clearly must facilitate wider participation of developing countries in negotiations, through subsidies and training. Third, IGOs must coordinate between the different environmental international organizations, the standards setting bodies, including ISO, and the WTO.<sup>20</sup> Fourth, the IGOs should consider developing standards for the certifiers and monitors, and work to develop common requirements for public environmental reporting.

The ISO 14000 standards remain controversial, but the ISO process is becoming more participatory. Because membership in ISO is by national standards associations, each country has an opportunity to be represented in negotiations. Because the ISO does not specify who should be delegates, the national associations have great leeway in choosing the interests to be represented. This preserves both some national sovereignty with the opportunity for subnational and international participation. ISO commitment to support more effective participation by NGOs and the developing countries could make this a model for consensus building in a trisectoral global public policy network.

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<sup>20</sup> ISO has recognized that it needs to reach coordinate better with intergovernmental organizations, especially the WTO. In 1997, it signed a partnership agreement with the UN-backed Climate Technology Initiative; it highlighted the potential contributions of ISO 14000 to climate change mitigation efforts and is declared itself ready to develop standards on reducing greenhouse gas emissions.(Frost n.a.)

## BIBLIOGRAPHY

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- Allen, Chris. 1999. *European Agreement on Environmental Certification* Globenet, 1998 [cited June 22, 1999 1999]. Available from [www.iso14000.net/viewnews...](http://www.iso14000.net/viewnews...)
- Anonymous. 1999. ISO 14000 Standards Gain Wider Acceptance as Companies Upgrade Their Operations According to Environmental Standards. *Chemical Market Reporter* 255 (20):12.
- Burdick, David. 1999. Benchmarking Perceptions of ISO 14001. [www.quality.org/ISO14000/article4.html](http://www.quality.org/ISO14000/article4.html).
- Business and the Environment's ISO 14000 Update. 1999. *EMS Guide for Small Business Now Available* (December 1996) 1996a [cited November 3, 1999 1999]. Available from [cutter.com/iso14000/isosamp.htm](http://cutter.com/iso14000/isosamp.htm).
- Business and the Environment's ISO 14000 Update. 1999. *Environmental Labeling Standard Fails to Move Forward* (December 1996) 1996b [cited November 3, 1999 1999]. Available from [cutter.com/iso14000/isosamp.htm](http://cutter.com/iso14000/isosamp.htm).
- Business and the Environment's ISO 14000 Update. 1999. *Indonesia Adopts ISO 14001 as National Standard* (December 1996) 1996c [cited November 3, 1999 1999]. Available from [cutter.com/iso14000/isosamp.htm](http://cutter.com/iso14000/isosamp.htm).
- Business and the Environment's ISO 14000 Update. 1999. *Large US Companies Debate Merits of ISO 14001 Certification* (December 1996) 1996d [cited November 3, 1999 1999]. Available from [cutter.com/iso14000/isosamp.htm](http://cutter.com/iso14000/isosamp.htm).
- Camarota, Anton G. 1999. Stakeholder Satisfaction: The Key to Understanding ISO 14001. [www.trst.com/art-ant-cam.htm](http://www.trst.com/art-ant-cam.htm).
- Cascio, Joseph, Gayle Woodside, and Philip Mitchell. 1996. *ISO 14000 Guide: The New International Environmental Management Standards*. Edited by N. York, McGraw-Hill.
- Chemical Market Reporter. 1999. ISO14000 Standards Gain Wider Acceptance as Companies Upgrade their Operations According to International Environmental Standards. *Chemical Market Reporter* 255 (20):12.
- Clapp, Jennifer. ISO 14000. *Global Governance*.

- Dixon, Jim. 1999. *The Fourth Meeting of ISO/TC 207 (Environmental Management)* ANSI Online, 1997 [cited July 22, 1999 1999]. Available from [web.ansi.org/public/iso14000/news/iso1\\_12.html](http://web.ansi.org/public/iso14000/news/iso1_12.html).
- EPA Standards Network. 1998. *EPA Standards Network* December 20, 1995 1995 [cited July 27, 1998 1998]. Available from [es.epa.gov/partners/iso/iso.html#tc207](http://es.epa.gov/partners/iso/iso.html#tc207).
- EPA, U.S. 1998. EPA Standards Network Fact Sheet: ISO 14000: International Environmental Management Standards. Washington, D.C.: U.S. Environmental Protection Agency.
- Frost, Roger. 1998. *ISO pledges practical support in fight against global climate change* ISO, n.a. [cited June 9, 1998 1998]. Available from [www.iso.ch/presse/presse18.htm](http://www.iso.ch/presse/presse18.htm).
- Hale, Greg J. 1999. *ISO Committee Hears NGO Concerns* Globenet, 1998 [cited June 22, 1999 1999]. Available from [www.iso14000.net/viewnews...](http://www.iso14000.net/viewnews...)
- Hansen, Arthur. 1999. *Global Green Standards* International Institute for Sustainable Development, n.a. [cited July 22, 1999 1999]. Available from [iisd1.iisd.ca/greenstand/default.htm](http://iisd1.iisd.ca/greenstand/default.htm).
- Hogarth, Sharon. 1999. On the Horizon: ISO 14000. *Manufacturing Engineering* 122 (3):118-128.
- Horne, Jim. 1999. *EPA's Proposed Revisions to ISO 14001* Globenet, 1999 [cited June 22, 1999 1999]. Available from [ww.iso14000.net/viewnews...](http://ww.iso14000.net/viewnews...)
- ICF. 1997. The Role of National Standards Bodies and Key Stakeholder Groups in the ISO/TC.207 Environmental Management Systems Standards Development Activity. Washington, DC: U.S. EPA/ OPPT.
- ISO. 1997. *Introduction to ISO* ISO, n.a. [cited December 14, 1997 1997]. Available from [www.iso.ch/infoc/intro.html](http://www.iso.ch/infoc/intro.html).
- Krut, Riva, and Harris Gleckman. 1998. *ISO 14001: A Missed Opportunity for Sustainable Global Industrial Development*. Edited by London, *Earthscan Publications Ltd*.
- Lattanner, Alan. 1999. *ISO 14000 Overview* n.a. [cited July 22, 1999 1999]. Available from [www.emconinc.com/reporter/9610-oct/story-01.htm](http://www.emconinc.com/reporter/9610-oct/story-01.htm).
- McCloskey, Michael. 1996. ISO 14,000: An Environmentalist's Perspective. Paper read at "Exploring the Uses and Potential Benefits of ISO 14,000" Roundtable Meeting EPA Region III, April 26, 1996, at Philadelphia, PA.

- Morrill, Deborah Seifert. 1999. *U.S. NGOs See San Francisco Meeting as Step in the Right Direction* (June 30, 1999) globeNet, 1998 [cited July 22, 1999 1999]. Available from [www.iso14000.net/viewnews...](http://www.iso14000.net/viewnews...)
- Morris, Julian. 1997. *ISO 14000: Environmental Regulation by Any Other Name?* Washington, DC: The Competitive Enterprise Institute.
- NGO Initiative. 1999. *A Joint Project of the Community Nutrition Institute and Ecologia* [website]. ECOLOGIA, n.a. [cited 7/22/99 1999]. Available from [www.ecologia.org/iso14000/](http://www.ecologia.org/iso14000/).
- NGO Initiative: ISO 14000. 1999. *NGO Working Group* n.a. [cited July 22, 1999 1999]. Available from [www.ecologia.org/iso14000/ngowg](http://www.ecologia.org/iso14000/ngowg).
- Onitsuka, Tadato. 1999. *ISO 14001 Certificates Proving Popular, JSA Says* (March 8, 1998) globeNet, 1998 [cited July 22, 1999 1999]. Available from [www.iso14000.net/viewnews...](http://www.iso14000.net/viewnews...)
- Ranganathan, Janet, and Alan Willis. 1999. *The Global Reporting Initiative: An Emerging Tool for Corporate Accountability*. Washington, DC: World Resources Institute.
- Salter, Liora. 1993-94. *Journal of Political Economy*.
- Seifert, Deborah. 1998. *Bringing Public Interest into ISO 14000: A Perspective on ENGO Participation within the US Technical Advisory Group to ISO TC 207*. Paris?: OECD Special Session on ISO 14000 Environmental Management Standards, presentation by Seifert of Community Nutrition Institute.
- Subcommittee on Technology. 1996. *The Increasing Importance of International Standards to the U.S. Industrial Community and the Impact of ISO 14000*. Washington, DC: Subcommittee on Technology. Committee on Science. U.S. House of Representatives. 104th Congress. Second Session.

U.S. Environmental Protection Agency. 1998. EPA Standards Network Fact Sheet: ISO 14000: International Environmental Management Standards. Washington, DC: U.S. Environmental Protection Agency.

Vogel, David. 1986. *National Styles of Regulation : Environmental Policy in Great Britain and the United States*. Ithaca: Cornell University Press.

World Resources Institute. 1998. *In Search of Common Yardsticks* WRI, 1997 [cited September 18, 1998 1998]. Available from [www.wri.org/meb/measure/yard-mup.html](http://www.wri.org/meb/measure/yard-mup.html).