Organisation de Coopération et de Développement Economiques
Organisation for Economic Co-operation and Development

OLIS : 12-Feb-1999
Dist. : 15-Feb-1999

Or. Eng.

ENVIRONMENT DIRECTORATE
TRADE DIRECTORATE

Joint Working Party on Trade and Environment

TRADE MEASURES IN MULTILATERAL ENVIRONMENTAL AGREEMENTS:

SYNTHESIS REPORT OF THREE CASE STUDIES

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PREFACE

This document was prepared for and presented to the Joint Session of Trade and Environment Experts, as part of the OECD work programme on trade and environment. Prepared by Jan Adams, the report is a synthesis of the studies on three individual multilateral environmental agreements -- CITES, the Montreal Protocol and the Basel Convention -- which themselves were prepared by Dale Andrew of the Trade Directorate (CITES) and Jan Adams of the Environment Directorate (Montreal Protocol and Basel Convention). The text is released as an unclassified document under the responsibilty of the Secretary General of the OECD with the aim of bringing information on this subject to the attention of a wider audience.

The document, as well as the three individual studies on CITES, the Montreal Protocol and the Basel Convention, can also be found on the world wide web at http://www.oecd.org/ech/docs/envi.htm . It is also available in French.

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The Joint Session of Trade and Environment Experts began its work programme on the use of trade measures in multilateral environmental agreements (MEAs) in mid-1996. Since that time, case studies have examined the experience with the use of trade measures in three separate MEAs, namely the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES); the Montreal Protocol on Substances that Deplete the Ozone Layer; and the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal. This present synthesis report is aimed at summarising the main issues raised in the case studies, at bringing together the main themes, and at drawing out lessons learned from the case study analyses.

When the trade provisions of individual MEAs are examined in detail, it becomes quite clear that there is a wide array of environmental contexts addressed, using many types of 'trade measures' and aimed at achieving a variety of objectives. As each set of environmental and economic factors is unique, so too the appropriate set of policy instruments for a particular MEA will be unique.

At the same time there are nevertheless some common policy approaches in use such as the precautionary principle, differentiated responsibilities, co-operative non-compliance mechanisms, and the principle of prior informed consent. There are also common implementation difficulties, particularly with respect to inadequate resources for effective implementation and enforcement, illegal trade, and common issues with respect to the multilateral trading system.

In CITES and the Basel Convention, the international community has tackled the narrower, international aspects (i.e. trade) of environmental problems that have a much larger scope than just the international set of causes. Establishing systems to regulate and restrict trade reduces harmful transactions and brings more information on environmental aspects into market decisions. It also focuses attention on the broader environmental problem, and helps attract additional resources from public and NGO sources. CITES is the leading example of a significant NGO infrastructure helping to implement the treaty and address the environmental problems on a broader basis at the international and national levels. The Montreal Protocol tackled a global problem with a comprehensive package of policy measures designed to reduce and eventually eliminate production of ozone depleting substances (ODS). Incorporating trade provisions allowed the regulatory system to address the economic structure of the industry world-wide – a pre-condition for a successful ozone regime.

MEAs have been shown to be dynamic instruments, with continuous improvement occurring through the regular meetings of the Parties. The use of trade measures has also evolved in the MEAs. In the case of the Montreal Protocol, the majority of the proposed far-reaching trade restrictions on products containing or made with ozone depleting substances never came into effect; partly because the regime overall sent such strong signals on the determination to phase out ODS that they have not been needed, and partly because prohibitively expensive testing would have been required. Trade measures have also been added over time to deal with problems of illegal trade, non-compliance and monitoring in the Montreal Protocol as they have in other MEAS.

Trade measures have tended to become more nuanced over time as environmental and economic contexts have been better understood, as confidence in international legal regimes has grown, and as sustainable development has come to be a more central guiding concept. CITES is the main example here, with considerable flexibility being built into trade controls through various instruments such as quotas, ranching etc. so that controlled trade can support sustainable development. The Basel Convention on the other hand is moving to restrict trade further through the banning of exports of hazardous waste from Annex VII (OECD, EC and Liechtenstein) to other countries.

There have also been some difficulties experienced with the use of trade measures. Controlling illegal trade is one of the largest. As long as the demand and the supply still remain, a trade ban will drive the trade underground. This means that, while trade bans may reduce trade flows and have a corresponding positive benefit, trade bans alone can not be expected to stop trade flows completely. Trade controls need to be effectively implemented and enforced. The analyses indicate that inadequate attention has generally been given to the need for human, financial and technical resources to make trade measures, such as bans or prior informed consent systems, work. Unclear definitions and complex administrative requirements make this a much bigger task. Trade measures will be more effective if the Parties, especially developing countries, have the financial and technical capacity to properly implement and enforce them.

This highlights an important point in the discussion of trade measures and MEAs. Trade measures should not be seen in isolation from other related policies. Often they are part of a broader package of reinforcing policy instruments. Sometimes trade provisions make other regulations more effective, and sometimes other instruments are needed to make trade-based regulation more effective. The effectiveness of trade measures in achieving environmental objectives should not therefore lose sight of the bigger policy picture.

Nevertheless, it seems that trade measures have been most effective when they have been directed at specific problems with specific objectives. They have been effective in increasing information about environmental aspects of some sensitive trade flows, in reducing some environmentally harmful trade flows, and in reducing the benefits to be had from free-riding and thereby encouraging participation in MEAs.

Another important role for trade measures in MEAs is that of increasing the comprehensiveness of a set of policy responses to complex problems. Preventing trans-shipment through non-participating countries, encouraging participation by increasing the costs of staying outside regulatory regimes, discouraging industrial relocation and hence discouraging free-riders, closing the loop on domestic production and consumption by monitoring trade – these are all policies which work towards making overall treaty regimes more comprehensive and therefore more effective.

In summary, emerging lessons include the following points:

- In general, trade measures can be an appropriate policy measure to use in multilateral environmental agreements, *inter alia*:

a) when the international community has agreed to tackle and manage collectively international trade as a part of the environmental problem;

b) when trade controls are required to make regulatory systems comprehensive in their coverage;

c) to discourage free-riding which can often be a barrier to effective international co-operation; and

d) to ensure compliance with the MEA.

The use of trade measures should of course be carefully designed and targeted to the environmental objective:

- As with all policy development, prior assessments should be made of the potential environmental and economic ramifications of trade measures, particularly those that are highly restrictive such as bans;
- Potential difficulties such as illegal trade and inadequate technical and institutional capacity in some countries should be taken into account from the beginning;
- The current dynamism and continuous improvement present in MEAs should continue, with policy instruments including trade measures being adjusted and made more flexible as appropriate;
- Trade measures which treat classes of countries in different ways should be based on clear environment-related criteria;
- Trade and environment policy officials should work in close co-ordination in national capitals, and the WTO, UNEP and MEA Secretariats should continue to develop their dialogue on these issues.

While not an exhaustive list, the case-studies have pointed to the following factors which have contributed to, and have limited, success:

Factors Contributing to Success:

- Genuine multilateral consensus on shared environmental problems paves the way for effective agreements to address them
- Comprehensive and balanced packages of policy instruments have more chance of addressing all aspects of an environmental problem than reliance on one form of policy instrument
- Strong scientific basis for policy action increases credibility and acceptance; at the same time the precautionary principle says that the absence of full scientific certainty should not prevent action in cases of threats of serious or irreversible damage

- Policy based on an understanding of the underlying economics will be more effective than attempting to cut across economic factors
- Funds, technical co-operation and information exchange to establish the technical and administrative capacity to implement treaty obligations may be essential, particularly for developing countries
- Multilateral funding may sometimes be needed to ensure wide membership
- Strong market signals about an end-point, combined with realistic transition periods, will provide a commercial context conducive to innovation and allow cost-effective ways of meeting targets to emerge
- Additional transition periods for developing countries can help lower adjustment costs
- Reducing the benefits to be gained from free-riding increases membership
- Flexibility in trade controls can maximise the environmental and economic benefits – e.g. ranching and national quotas in CITES, and Article 11 Agreements in the Basel Convention.
- Public and NGO support greatly increases the chances of success of an MEA
- Mechanisms within agreements to monitor and deal with non-compliance by Parties increases effectiveness.

Factors Limiting Success:

- Lack of funds for implementation and enforcement capacity
- Illegal trade
- Over-reliance on one type of control, such as a trade ban, in cases where the underlying environmental and economic context is very complex
- Inadequate recognition of underlying economic context
- Ambiguity and complexity in administering an MEA, particularly difficulty in determining whether particular shipments are covered by the relevant Agreement.
- Inadequate reporting of information by Parties
- Inadequate database for understanding environmental issues and subsequent policy development
- Insufficient incentives for participation and compliance
- General non-compliance

As regards the multilateral trading system, hypothetical situations can be envisaged where a State is unable to meet both its obligations under the WTO and some MEAs simultaneously. This has created uncertainty in the trade and the environmental policy communities, and is especially problematic for future MEA negotiations. So far however, trade measures in widely supported MEAs have not been challenged internationally. Several proposals have been made on how this current situation could be formalised in the WTO framework, but none has yet attracted consensus. Policy dialogue and co-ordination on the use of trade measures in MEAs has however improved significantly in recent years.

I. Introduction

The OECD Joint Session of Trade and Environment Experts began its work programme on the use of trade measures in multilateral environmental agreements (MEAs) in mid-1996. Since that time, three case studies have been undertaken and released as unclassified studies. The case studies have examined the experience with the use of trade measures in three separate MEAs, namely the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES); the Montreal Protocol on Substances that Deplete the Ozone Layer; and the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal.[1] This present report is aimed at summarising the main issues raised in the case studies, at bringing together the main themes, and at drawing out lessons learned from the case study analyses.

The aim of the Joint Session work program on trade measures in multilateral environmental agreements has been to deepen the factual and analytical understanding of how trade measures are working in practice in existing international environmental treaties. The Joint Session aimed to make a contribution to the international debate in the trade and the environmental policy communities on how trade measures should be used in MEAs by examining experience to date. The approach taken was to select three agreements for in-depth study. The three selected have wide international participation, they include trade measures to reach their objectives, and while they are different, they are each interesting examples of how MEAs are evolving.

The structure of this synthesis report mirrors to a large extent that of the three case studies. It begins with a discussion of the environmental contexts and objectives of the three MEAs. Section III then examines the role that different trade provisions play in the different agreements. Section IV looks at how effective these trade provisions have been in achieving the environmental objectives of the respective MEAs, and the difficulties confronted when trying to perform such an analysis. Section V looks at the relationships between the trade provisions of the three MEAs and the multilateral trading system. The latter sections conclude with a sub-section on the themes and lessons which can be drawn from the preceding analysis, and overall concluding remarks appear in Section VI.

II. Background: environmental context and objectives of agreements

Any analysis of the use of trade measures to achieve the objectives of an MEA must begin with an examination of what those environmental objectives actually are, and an understanding of the underlying environmental issues. The number of MEAs in existence is over 180, and important new agreements such as the Convention on Persistent Organic Pollutants are under negotiation. With such a body of international environmental law, it is stating the obvious to say that there are a huge variety of environmental issues addressed in MEAs. Some are very specific; some affect many of our current economic activities. It is therefore not meaningful to generalise about their objectives, beyond the objective of protection of the environment. The particular issues and objectives of each MEA need to be understood in their own right in order to understand the role of the trade measures used. This section summarises the environmental context of three particular MEAs studied by the Joint Session.

A. CITES

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), signed in Washington on 3 March 1973 and today numbering 144 Parties, establishes an

international legal framework for the regulation and restriction of trade in specimens of species of wild animals and plants.

The fundamental environmental problem addressed by CITES is the decline in biodiversity levels and an increase in the extinction of species. This MEA has the specific and limited objective of relieving one stress on biodiversity, namely consumer demand for endangered species transmitted through international trade. It does this by establishing an international legal framework for the regulation and restriction of trade in specimens of species of wild plants and animals.

The decline in biodiversity levels, and implications for the continued habitability of the planet, are widely recognised phenomena. As fundamental components of biodiversity, wild plant and animal species are subject to varying pressures including:

- loss of natural habitats, which is usually associated with the conversion of high diversity land, for instance natural forests, into land used for agriculture;
- introduction of new species into natural ecosystems, which may translate into new pests and diseases as well as increased competition between new and native species;
- over-exploitation of species, including through subsistence use, domestic commercial use and international trade; and
- pollution and global environmental change.

The direct role of international trade is generally less significant in species extinction relative to other factors, particularly habitat loss, introduction of alien species to ecosystems and domestic commercial use.[2] However even if globally international trade is not the most important cause of biodiversity decline, the pressure of international demand as transmitted through trade is vital for a number of individual species. This is the situation that CITES mechanisms are designed to address. Examples include the poaching and trade in parts and derivatives of rhinos and the Siberian tiger and illegal extraction and trade in many parrot and macaw species.

CITES constitutes an attempt to reconcile international trade and species conservation. It regulates international trade in species of conservation concern through a system of permits and certificates required for the export, re-export, or import of wildlife and wildlife products. The degree of regulation applying to trade in particular animal and plant species depends upon the Appendix in which a species is listed.

The successful operation of CITES rests upon an evaluation of the impacts of international trade on the present and future status of the traded species. This evaluation in turn requires the availability of detailed scientific information about, *inter alia*, the robustness of the traded species both locally and globally, the ecological significance of the traded species and its effect on other species, as well as the levels of exploitation and the effects of harvesting techniques on the traded species. At the 1994 Ninth Meeting of the Conference of the Parties in Fort Lauderdale, revised criteria based on objective scientific and biological indicators were adopted by the Parties to better assess the status, risk, and sustainability of individual species which are proposed for inclusion, change or removal from CITES appendices. These biological criteria mark an important advance in CITES in ensuring that decisions are science-based[3].

B. Montreal Protocol

The environmental objective of the Montreal Protocol is to arrest depletion of the ozone layer by eliminating ozone depleting substances (ODS). The ozone layer is one of the few examples of a truly global environmental resource. The ozone layer protects all life on earth. It is the classic example of a public good: no-one can be denied access to its benefits; and its use by one does not diminish its availability for use by others. The tragedy of the commons therefore applies - in the absence of international co-operation there will be inadequate market incentives to protect the resource which is however essential to the common good. Moreover, emissions of ozone depleting substances cause the same amount of damage to the ozone layer wherever on earth they are released. A comprehensive global response was therefore required, and the Montreal Protocol has now been ratified by 168 countries.

The thin layer of ozone in the stratosphere absorbs all but a small fraction of the harmful ultraviolet radiation (UV-B) emanating from the sun and protects all life on earth. In the early 1970s, scientists suspected that the presence of chlorine in the atmosphere, caused by the release of chlorofluorocarbons (CFCs), might cause damage to the ozone layer.

Observations of the atmosphere since then have proved that ozone was being depleted at the rate of about 5 per cent every decade over middle and higher latitudes of the Earth, and that an “ozone hole” appeared annually over the Antarctic. A 1 per cent decrease in stratospheric ozone results in a 1-2 per cent increase in UV-B radiation. This is equivalent to 100 000-150 000 additional cases of cataracts world-wide each year, or a 2 per cent increase in some forms of skin cancer.

Increased UV-B radiation also adversely affects immune systems in living organisms, inhibits plant growth and crop yields, kills aquatic organisms that are important part of the marine food chain (some 30 per cent of the world’s animal protein comes from the sea), and causes many materials used outdoors, such as plastics, paints and wood, to degrade more rapidly. In addition, changes in ozone levels in other altitudes could influence temperature structures and circulation patterns of the stratosphere, with major implications for the global climate.

The discovery of the hole in the ozone layer over the Antarctica helped mobilise public opinion, and industry began to accept the inevitability of controls on ozone depleting substances. Dupont, the major US CFC producer, announced in October 1986 that alternatives to the main CFCs could be on the market in volume within five years, given appropriate incentives. By September 1987 the Montreal Protocol had been agreed under its framework Convention, the Vienna Convention for the Protection of the Ozone Layer, providing for substantial cuts in CFC and other ODS production and consumption.

CFCs are extremely useful chemicals: they are cheap to produce, non-toxic, non-flammable and chemically stable. Consequently, the scientific findings were not welcome from the industrial and economic perspective. There was also initial scepticism and anxiety from politicians and some scientists concerning the science of ozone depletion. While in retrospect it may seem that phasing out ozone depleting chemicals was fairly straightforward, that was not the view at the time. Industries were able to eliminate the use of CFCs more quickly, at lower cost, or with greater environmental benefits than had initially been predicted. In the space of a decade, the world has substantially reduced its use of chemicals previously considered indispensable for a multitude of uses.

The Montreal Protocol commits signatories to make significant reductions in the production and consumption of certain chemicals, namely chlorofluorocarbons (CFCs), halons, carbon tetrachloride, methyl chloroform, hydrochlorofluorocarbons (HCFCs), hydrobromofluorocarbons (HBFCs) and methyl bromide. Over time, as scientific knowledge increased and substitutes became available, the initial

reduction schedules have been brought forward to accelerate phase-outs, and new ODS have been added to the schedules through various adjustments and amendments to the Protocol.

C. Basel Convention

The environmental issue addressed by the Basel Convention is damage to human health and the environment caused by the generation and disposal of hazardous wastes. As an international agreement, it focuses primarily on the international aspects of this problem, namely the transboundary movement of hazardous wastes.

International concern surrounding the environmental problems caused by transboundary movements of hazardous wastes existed already in the early 1980s, and was intensified by several high-profile cases of serious mismanagement and illegal movements of hazardous wastes later in the decade. One of the most notorious cases, which spurred OECD action on hazardous wastes, was the 1983 "Seveso affair", when 41 "missing" drums of topsoil contaminated with highly toxic dioxin from the 1976 explosion at the Seveso chemical plant in Italy were discovered in a barn in Northern France. Another publicised case, among many, concerned highly toxic and radioactive waste, including 150 tons of Polychlorinated Biphenyl-contaminated waste from an OECD country found on farmland in Koko, Nigeria. Cases such as this one received a great deal of publicity, and lent a strong 'North-South' dimension to the problem of environmentally sound management of hazardous and other wastes.

Serious health and environmental damage can result from improper management of hazardous wastes. Impacts can range from direct human exposure to poisons and carcinogens, to longer-term environmental damage from leaching of chemicals into soil and groundwater and concentration in food chains. Knowledge on the health and the ecological impacts of hazardous substances is incomplete, particularly as concerns longer-term effects. Specific case studies however have linked community exposure to hazardous waste with increases in leukaemia, kidney cancer and respiratory disorders. These health and ecological damages also represent high economic costs: the cost of cleaning up toxic and hazardous sites alone, ignoring health costs, seems to have reached over a billion dollars in several countries[4]. Incomplete information on the environmental damage caused by hazardous waste mismanagement, let alone those caused by transboundary movements, is an impediment to understanding the extent of the environmental problem being addressed by the Convention.

Given this imperfect knowledge and uncertainty about health and ecological impacts -- particularly over the long term and given ecological interdependence -- combined with the potential seriousness and irreversibility of damage to human health and environment mismanagement of hazardous waste can cause, the Convention can be said to rest on the precautionary principle. The international community has taken action through the Convention, in the absence of full documentation of the magnitude and impact of transboundary movements of hazardous wastes, as a precaution against potentially very serious and irreversible damage to human health and the environment.

III. Nature of trade measures and their role in achieving MEA objectives

The term 'trade measures' tends to be used in the trade policy context to mean any policy instrument which attaches requirements, conditions or restrictions on imported or exported products or services themselves, or the process of their importation or exportation. So trade measures can range from trade bans to product standards; from notification procedures to labelling requirements. It is sometimes argued from the environmental policy perspective that some of these policy instruments when used for

environmental reasons should not be considered to be trade measures, as the objective is not trade-related but environment-related. This underscores the fact that trade measures broadly defined can be and are used for a variety of policy objectives. The three MEAs studied show the variety and the different objectives of trade measures used in international environmental policy. This Section gives a brief description of the main trade measures they utilise and discusses their various objectives. A more complete discussion of the trade measures used, how they work and their objectives is contained in the three case studies themselves.

A. CITES

Since the objective of CITES is to control trade in endangered species, trade measures are intrinsic and essential to achieving that objective. CITES performs the regulation and restriction of international trade in wild fauna and flora through a system of trade controls on the taxa listed in three Appendices. For each Appendix different rules apply, representing varying degrees of strictness designed to be proportionate to the degree of danger arising from over-exploitation through international trade. The main trade controls are implemented through a system of export and import permits and other trade-related certificates.

1. Regulation of trade in listed species: Import and Export Permits; Quotas and marks of origin.

Appendix I contains species threatened with extinction and which are or may be affected by international trade. Appendix I includes approximately 600 animals and 300 plant species. Trade in Appendix I species for commercial purposes is basically prohibited, authorised only in exceptional circumstances. Exemptions are provided for in Article VII of the Convention and concern, for example, acquisition of the specimen before the Convention entered into effect for that species, personal effects, certain captive bred or artificially propagated specimens, and use for scientific institutions. For international trade to take place under these exceptions, both a CITES import permit and export permit must be granted -- each subject to various specific conditions. The key question -- required by the Convention to be satisfied by management authorities on both the importing and exporting side -- is whether the trade will be detrimental to the survival of the species. For an Appendix I species, the presumption is that this may well be the case, therefore the burden of proof is clearly to demonstrate that trade will not be detrimental to the survival of the species.

While not outlined in the Convention text, a new mechanism of national export quotas has evolved to allow limited amounts of trade in particular national populations of an Appendix I species. This allows for distinctions to be made between national populations of endangered species that are more sustainably managed than others. It introduces some flexibility into the Appendix I trade restriction at the national level while still maintaining high levels of trade controls globally. Similarly, limited flexibility has been introduced through an exception called ranching, whereby certain Appendix I species which had been taken from the wild but reared in a controlled environment are allowed to be traded. These specific categories of wildlife are required to be marked or identified as part of the agreed quota entering into international trade. As a result of successful sustainable use programs such as ranching, certain national populations have been down-listed from Appendix I to Appendix II.

Appendix II includes about 4 000 animals and more than 25 000 plant species which are not necessarily now threatened with extinction but may become so unless trade is subject to strict regulation in order to avoid utilisation incompatible with their survival, as well as the ‘look-alike’ species, the control of which is necessary in order to bring the first group of species under effective control. The vast

majority of CITES-listed species are on Appendix II. Appendix II listings are central to CITES in that they prevent the endangerment of a species before it gets caught in the downward spiral toward extinction and must be listed on Appendix I. Appendix II listings conserve animal and plant species in the wild and ensure their sustainable use. Trade in Appendix II species is governed by export permits (or re-export certificates), issuance of which is subject to both a finding of non-detriment and legal acquisition of the species. The granting of an import permit is not a condition under CITES for trading in Appendix II species, but is in fact required by most OECD countries under their domestic implementing legislation.

Appendix III currently covers some 200 animals and six plants, which are protected in a country that has requested the assistance of other CITES Parties in controlling illegal trade in a particular species. The permitting process differs according to whether exports originate in the listing country or in another Range State. In the former case an export permit must be granted by the Management Authority following a finding that the specimen was legally obtained. But in order to enforce these controls, the same specimens from other exporting States must also be recognisable: to this end CITES rules require the Management Authority of any other Party exporting an Appendix III species to issue certificates of origin.

2. Trade restrictions with non-Parties.

Trade with non-Parties is permitted only on the condition that these non-Parties provide documentation comparable to CITES permits and certificates. CITES Parties have come to define this requirement as formally designating a scientific and management authority with competence for CITES matters, and registering these with the CITES Secretariat. Since the eighth meeting of the Conference of the Parties (CoP), it has been decided that trade in Appendix I species with non-Parties should be limited to special cases which benefit the conservation of the species.

The purpose of this provision is two-fold. First, to attempt to control the role of non-Parties as transit countries for illegal trade. Second, to encourage countries to join the agreement. Both these objectives serve the overall goal of making the main trade restrictions effective on a global basis. If trade were not regulated with non-Parties then trans-shipment via non-Parties would provide a large loophole in the regulatory system. Similarly, the more countries that join the Agreement, the more comprehensive the controls can be on a global scale.

3. Withdrawal of trade rights from Parties for Non-Compliance.

Single or multi-species trade bans have on several occasions been recommended by the CITES Standing Committee as action against Parties for not implementing their CITES obligations. Other CITES Parties have implemented these bans as “stricter domestic measures”, i.e. measures that are not required by the Convention but are implemented on a national basis. This action effectively withdraws the right to trade in listed species which is normally accorded to Parties under CITES when a Party is not acting in accordance with its obligations as a Party. In other words, if a Party does not meet its obligations it can be treated as a non-Party by other CITES Parties. These trade bans have been lifted once the Parties concerned have been judged to have moved into compliance with their obligations. The purpose of these trade measures is to improve compliance with the provisions of the Agreement.

B. Montreal Protocol

The key feature of the Montreal Protocol is the phase-out schedules for the consumption and production of ozone depleting substances. Dates were set by which the production and consumption of listed substances were to be reduced by set increments. The trade measures are supplementary to the phase-out schedules, but are nevertheless a crucial component that allowed the Protocol to phase out ODS on a world-wide basis. The explicit restrictions on trade contained in the Montreal Protocol concern trade with non-Parties; a recently-agreed commitment to institute a licensing system for trade between Parties; and a recently-agreed export ban on used and recycled substances applying to Parties in non-compliance with phase-out schedules. In addition, Parties are addressing the question of trade among themselves in new and used products and equipment that require ODS for their functioning, such as refrigerators. The tenth Meeting of the Parties in Cairo in November 1998 recommended that each country identify such items it does not want to import, with a list to be maintained by the Ozone Secretariat and regularly communicated to all Parties.

1. Trade aspects of the phase-out schedules.

Production and consumption, in the context of globalised markets, necessarily includes trade. Thus net imports of ODS are added to domestic production amounts for purposes of calculating production and consumption limits as set by the phase-out schedules. Traded amounts needed to be covered by the production/consumption formulae so as to effectively phase out the use of ODS on a global basis.

To strengthen the pressures on complete phase-out of ODS, after 1993, exports to non-Parties could no longer be deducted from production figures. This measure was also designed to encourage exporting Parties to encourage their non-Party customers to join the Agreement.

2. Party/non-Party trade ban

The Protocol includes a ban on imports and exports of the controlled substances between Parties and non-Parties, unless non-Parties are determined by the Parties to be in full compliance and have submitted data to that effect. The objectives of this trade measure were to encourage universal participation; to prevent industrial relocation; and to provide strong enough economic signals to assure producers they could develop alternatives without being undercut by ODS production occurring outside the Agreement.

The Party/non-Party trade measures were initially designed to deal comprehensively with Party/non-Party trade in all manifestations of ODS--the chemicals themselves; and potentially products containing them, products made with them, and technologies to produce or use them. The aim was to phase-out ODS altogether, so the regulations in the Protocol were written to cover each stage of the ODS product cycle, from production through final and intermediate uses, even covering products made with, but not actually containing, ODS. In the event, the signals to industry that these chemicals were doomed was strong enough to ensure phase-out, and the potential to use trade measures on products made with, but not containing, the chemicals was not made operational. Moreover, the Protocol's Technology and Economic Assessment Panel reported that it was not feasible to identify these products, except with prohibitively expensive testing procedures. As the number of non-Parties were few, and these were not very industrially developed, the Parties felt that any additional benefit to the ozone layer achieved by

restricting trade with non-Parties in products made with but not containing ODS would not therefore be worth the cost to trade.

Emissions of ozone depleting substances cause the same damage regardless of where on earth they occur. This environmental fact is one reason why universal participation in the Protocol came to be considered as essential. Although the original Montreal Protocol focused primarily on the need for developed countries to take action as the main producers and consumers of ODS, the Party/non-Party trade measures already sent a strong signal that the intent of the Protocol was to regulate these industries world-wide. A non-Party (unless acting in conformity with the control measures) would be in the situation of losing access to the controlled substances entirely, rather than phasing them out in a staged manner. Moreover, the provisions for potentially restricting trade with non-Parties in products containing ODS (e.g. refrigerators), or made with but not containing ODS (e.g. electronic goods) sent a strong economic signal to the effect that export-based industries using ODS could not survive in a country not adhering to the Montreal Protocol.

The Party/non-Party trade bans on controlled substances and potentially on ODS-dependent products thus removed the incentive for ODS importing and exporting countries (including embedded exports) staying outside the regime - or more accurately, for not complying with the regime's controls. Many commentators have pointed to the clear impact this had on inducing accession to the Protocol by several countries.

In addition, if ODS producers were able to simply move their production capacity to non-Party territory, this would exacerbate the problem of environmental 'leakage' arising from less than universal participation. In other words, the source of the environmental damage would escape from the regulatory net but still cause the same environmental harm. The efforts of Parties would thus be undermined in terms of slowing ozone depletion. In addition, non-Parties would reap economic advantages, at least in the short term. They would therefore be free riding, i.e. enjoying the benefits of others' actions to protect the ozone layer, while simultaneously enjoying the economic benefits of expanding their own ODS producing industries.

The series of trade restrictions against non-Parties was also aimed at these free rider or competitiveness arguments. Companies could not simply move offshore to non-Parties and export substances and products back. In fact industrial relocation for this purpose can only be attractive if there is less than universal participation, so the two objectives of securing universal participation and preventing industrial relocation are closely related. To the extent that other policy instruments such as the Multilateral Fund were significant contributors to encouraging broad membership, they have also therefore discouraged industrial relocation.

3. Trade measures concerning non-compliance

In response to persistent problems of non-compliance with the phase-out schedules in the Russian Federation and several other countries with economies in transition, a new trade restriction was adopted by the Parties at Montreal in September 1997. It prohibits a Party that is continuing to produce a controlled substance after its phase-out date from exporting used, recycled or reclaimed substances of that same substance. This measure is aimed at better controlling illegal trade, specifically that emanating from Parties not in compliance with the relevant control schedules. It is intended to help prevent the export of new substances under the guise of recycled substances, trade in which is exempt from the Protocol's controls on production and consumption. This measure is also intended to ensure that those countries which continue to produce a substance while in non-compliance with the phase-out schedules for that

substance, use their existing supplies of recycled, reclaimed or used substances for their domestic market needs rather than trading these supplies internationally.

A further trade measure requiring Parties to license each import and export of controlled substances was adopted in 1997. Many Parties already have licensing systems in place as a method of complying with the controls on consumption and production of ODS. Making such systems mandatory is aimed at improving the integrity of global information on trade in ODS and thereby helping uncover illegal trade.

C. Basel Convention

The core mechanism of the Basel Convention for controlling and managing transboundary movements of hazardous wastes is the notification and consent procedure, together with the obligation on the part of Parties to ensure that waste will be handled in an environmentally sound way. Regulating trade by requiring informed consent is clearly central to the Convention's objective of controlling transboundary movements of hazardous wastes to protect human health and the environment. The Convention also uses a limited Party/non-Party trade ban, and is in the process of implementing a ban on exports of hazardous wastes from 'Annex VII' countries to others. Annex VII countries are "members of the OECD, EC, Liechtenstein".

1. Notification and Consent Procedures

The Convention provides for an elaborate control system that is based on the principle of prior informed consent. The State of export has the duty to notify the competent authority of the States of import and of transit of any intended transboundary movement of hazardous wastes or other wastes[5]. The information provided must be sufficiently detailed to enable the authorities of the State of import and any States of transit to assess the nature and the risks of the intended movement.

The States of import and transit must respond to the notifier in writing, consenting to the movement with or without conditions, denying permission for the movement or requesting further information. The State of export may not allow the movement to commence until written consent has been given and confirmation of the existence of a contract between the exporter and the disposer, specifying the environmentally sound management of the wastes in question, has been received.

These provisions have created an international system which generates information about proposed hazardous waste shipments allowing importing countries to decide if they can manage them in an environmentally sound way. The system is necessary for controlling transboundary movements, and for environmentally sound management of hazardous wastes. However the system by itself is not sufficient for achieving the second part of objective, because significant legal, administrative and technical assistance is required at the national level to translate the information generated into effective decision-making and protection of human health and the environment.

2. Party/non-Party trade ban

The Convention requires Parties to not permit exports or imports of hazardous or other wastes from a non-Party, unless they have concluded a bilateral or regional agreement pursuant to Article 11 with provisions not less environmentally sound than the Basel Convention. In effect, the Party/non-Party trade

ban operates only with respect to States with which no agreements on environmentally sound management of transboundary movements of hazardous wastes have been concluded.

It seems clear that these provisions would contribute to the objective of controlling and reducing transboundary movements of hazardous and other wastes. The restriction on Party/non-Party trade also aims to prevent non-Parties being used as trans-shipment points which could allow trade to occur outside the Convention's obligations, even among Parties. This latter objective is also addressed in the Convention by allowing trade to occur between Parties via a non-Party transit state only when notification is given and the non-Party consents (i.e. it is in effect treated as a Party).

3. Export Ban from Annex VII to non-Annex VII Countries.

An amendment to the Convention is currently in the process of being ratified and implemented which will prohibit countries listed in Annex VII exporting hazardous wastes to countries not listed in that Annex. Annex VII countries are "members of the OECD, EC, Liechtenstein". Applications of Israel and Monaco to join Annex VII were considered but not accepted by the 1998 Fourth meeting of the Conference of the Parties, and a similar application from Slovenia was not considered due to procedural deficiencies. In Decision IV/8, Parties decided to leave Annex VII unchanged until the amendment contained in Decision III/1 enters into force – that is the amendment which would introduce a ban on exports of hazardous wastes as defined in the Convention from Annex VII countries to non-Annex VII countries. Sixty-three ratifications are required for the ban amendment to come into force. The possibility of opening up Annex VII through the adoption of specific environmental criteria may be considered, subsequent to entry into force of the amendment.

The classification of Annex VII countries is based on the presumption that transboundary movements, especially to developing countries, have a high risk of not constituting environmentally sound management of hazardous wastes as required by the Convention. Annex VII therefore excludes developing countries, and there is currently no mechanism for the presumption to be rebutted or for non-Annex VII countries to argue they are not 'developing countries' for the purposes of the Basel Convention. The distinction is based explicitly on geopolitical groupings.

This particular trade measure is aimed at achieving the objective of the Convention of controlling hazardous waste trade in a more direct way, but only in a sub-set of cases. It effectively rejects the notification and consent procedure for those shipments going from Annex VII countries to others, and instead bans that class of movements (provided the wastes fall under the Convention's Article 1.1(a) definition of hazardous waste). It does not similarly ban movements between non-Annex VII countries, which appears to be the fastest growing, but not the largest area of hazardous waste trade.

D. Themes and lessons

As the above discussion demonstrates, the term 'trade measures' covers a variety of tools which will operate differently in different situations. The role of trade measures in achieving the MEA objectives includes being the core regulatory system, encouraging universality of membership, preventing opportunities for trans-shipment; bolstering compliance with other requirements, and action against non-compliance – see table below. Each of these roles can be important components of making an international treaty work.

Not surprisingly, the two Conventions which are explicitly aimed at regulating trade rely on trade measures as their main policy instrument. CITES restricts trade according to how endangered the species is, and uses export and import permits and notification and consent procedures. The Basel Convention built a system of notification and consent requirements to bring some control to international trade in hazardous waste. The common policy approach is one of making sure that trade which occurs is undertaken in full knowledge of the environmental factors associated with it. This approach has been extended to the Convention on the Prior Informed Consent Procedure, currently in the ratification phase, and is being proposed for the Convention on Persistent Organic Pollutants, currently under negotiation. The respective systems aim to incorporate environmental information into international commercial transactions. Even if trade is not the sole cause of the broader environmental issues at stake, the international community can address limited aspects of the problems by bringing environmental considerations to bear on one of the points at which domestic-based issues have an international aspect, namely when trade occurs.

An important role for trade measures in MEAs is that of increasing the comprehensiveness of a set of policy responses to complex problems. Preventing trans-shipment through non-participating countries, encouraging participation by increasing the costs of staying outside regulatory regimes, discouraging industrial relocation and hence discouraging free-riders, facilitating domestic compliance and enforcement of domestic production and consumption controls by monitoring trade – these are all policies which work towards making overall treaty regimes more comprehensive and therefore more effective.

Trade measures have played a limited role as sanctions for non-compliance by members in the MEAs analysed. In the Montreal Protocol, withdrawal of Parties' rights to trade under the agreement (in the items covered by the MEA) is one of the suite of possible options for dealing with non-compliance. Similarly, in extreme cases, CITES has on occasion recommended that Parties refuse any import from and export or re-export to, particular non-complying countries. Unlike in the WTO, the use of trade sanctions is limited in these MEAs to trade in the same product areas, i.e. there is no scope for cross-sectoral application of punitive trade sanctions.

The following table attempts to capture in matrix form the main trade measures in use in the three studied MEAs and the various objectives[6] which can be attributed to them. The categorisations are approximate – for example the notification and consent procedures in the Basel Convention are not identical to the CITES procedures. Some explanations are given below, but for further specific details on how the trade measures work in each agreement, see the case studies.

Main trade measures in use in the MEAs studied and their objectives

Trade Measure Objective	*Labelling*	*Reporting*	*Notification and PIC*	*Export Permit or licence*	*Import Permit or licence*	*Selective intra-Party export ban*	*Selective intra-Party import ban*	*Party/non-Party trade ban*
Monitoring and data collection		**Basel CITES MP**	**Basel**	**CITES MP**	**CITES MP**			
Promote participation in regime								**Basel CITES MP**
Promote environmental control of trade or compliance with treaty		**Basel CITES MP**	**Basel CITES**	**CITES MP**	**CITES MP**	**MP**		
Punish non-compliance						**CITES MP**	**CITES MP**	
Assist others enforcement	**Basel CITES MP**		**Basel CITES**	**MP**	**CITES MP**	**Basel MP**		
Generate environmental information	**Basel CITES MP**		**Basel CITES**	**CITES**				
Prevent trade diversion								**Basel CITES MP**
Prevent free-riding								**CITES MP**
Prevent industrial relocation								**Basel MP**

Explanatory Notes:

Basel = Basel Convention; MP = Montreal Protocol.

Labelling: each of the three MEAs requires exported products to bear markings, labels or certificates of origin in certain circumstances.

Reporting: each of the three MEAs requires data on export and import flows to be reported to its secretariat.

Notification and Prior Informed Consent (PIC): The Basel Convention and CITES use regulatory systems where exporters must notify certain information to importers' authorities, and under some circumstances importers must give prior written or implied consent to receive shipments before exportation is allowed.

Export and Import Permits or Licences: Each of the three MEAs use permitting and licensing systems to regulate trade in various situations.

Selective intra-party trade bans: imports or export bans are used among Parties for specific situations, e.g. the Basel Convention requires Parties to ban exports to other Parties which have import bans; CITES and the Montreal Protocol allow for eventual suspension of right to trade when Parties are found to be in non-compliance; an amendment to the Basel Convention would ban exports from 'Annex VII" countries to other Parties when ratified.

Party/non-Party trade bans: each of the three MEAs bans trade with non-Parties unless the non-Parties are effectively adhering to the treaty obligations.

IV. Effectiveness of trade measures in advancing objectives

A. Causality, measurement and data problems

Analysing the effectiveness of trade measures in advancing the objectives of MEAs is a multi-faceted exercise covering legal, economic, political and scientific aspects. The meaning of 'effectiveness' can range in scope from a broad cost/benefit analysis to specific measurements of scientific factors or legislative implementation. The more precise the environmental objective, the easier it will be to analyse the effectiveness of the MEA in reaching it. Also, the more comprehensively an MEA covers the environmental problem, the easier it will be to attribute success in addressing the problem to the MEA itself. The degree to which the effectiveness of an MEA can be aligned with effectiveness of the trade provisions therein depends on how many other policy instruments and other factors are working toward the same environmental objectives.

The first issue then is what 'effectiveness' means in the context of each MEA. The measure of effectiveness should relate to the environmental objective of the MEA. This approach is most readily applied to the Montreal Protocol, where the objective of eliminating the release of ODS into the atmosphere and repairing the ozone layer is measurable scientifically. Furthermore the Protocol purports to deal with the whole problem of ozone layer destruction, not just one part of it. So there is a close concordance between the effectiveness of the Protocol and the resolution of the environmental problem. In this situation, it is simpler to analyse effectiveness than in the case of CITES or the Basel Convention where the international agreements only address some aspects of a larger environmental problem.

1. Montreal Protocol

Several measures of effectiveness of the Montreal Protocol have been discussed in the Joint Session case study, and are summarised here. Production and consumption of ODS have declined significantly, but have not yet been eliminated. Because of the longer adjustment period (a ten year lag) available to developing countries, production of ODS is still allowed in developing countries while it is prohibited, except for several closely regulated essential uses, in developed countries. In many developed countries, phase-out deadlines were met earlier than specified in the schedules. This is because alternatives became available sooner than initially predicted. This is also occurring in developing countries where phase-out dates are still well into the future. HCFCs present a particular case where proposals to accelerate the agreed phase-out have not been accepted because they have lower ozone depletion potential than the CFCs which they replace in many uses, and so make a positive net contribution to reducing ozone depletion. (A separate issue concerns several gases that are being used as ozone-safe replacements for CFCs, notably hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs), which contribute to global warming and so are targeted for reduction under the 1997 Kyoto Protocol. For the first time, the November 1998 MoP agreed on a process for the scientific and technology and economic assessment panels on ozone to co-ordinate work with similar panels and committees linked to the Climate Change Convention.[7])

Mirroring the decline in the production and consumption of ODS, current estimations expect the ozone layer to stop deteriorating in a few years and to reach pre-ozone hole levels by the year 2050. It has been estimated that the incidence of skin cancers would have increased four fold without the Montreal Protocol. Studies estimating the cost-benefit of the phase-out of the Montreal Protocol measures have found a net benefit.

The difficulty with assessing the effectiveness of the trade measures in the Montreal Protocol however is that the trade measures are only one part of the overall package of policy instruments applied by the Protocol, let alone in domestic laws. It is impossible to separate out the effect of the trade measures from the effect of other measures, particularly the provision of multilateral funding. As noted above, the success of the Protocol depended on reducing scope for environmental and economic leakage by ensuring universal participation. The Party/non-Party trade restrictions acted as a strong disincentive for remaining outside the regime because they cut off supplies of ODS and markets for ODS-based exporting industries. Many commentators have pointed to the strong impact this had on inducing accession to the Protocol by several important countries.

This trade-based leverage was not the only factor encouraging countries to join the regime however. Several other strong motives existed. First, there was the common need to protect the ozone layer, and public awareness of this issue had soared. Second, for developing countries there was the prospect of gaining access to financial assistance with adaptation costs through the Multilateral Fund. Third, there was technical co-operation on substitute technologies. Fourth, the ten-year grace period was a form of preferential treatment for developing countries. Fifth, the fact that, after 1993, exports of ODS were to be counted as domestic production provided an incentive for exporters to encourage their customer countries to join the Protocol. Sixth, major multinational companies producing and using ODS had given unambiguous signals that ODS would be phased out, and that new leading-edge technologies would replace them. Each of these factors contributed to the overall decisions of particular countries to join.

While the ten-year grace period for compliance by developing countries was aimed at reducing the adjustment burden and therefore encouraging participation, it was clearly insufficient to attract widespread participation, even in conjunction with the trade restrictions against non-Parties. Apart from Mexico, few developing countries joined the Protocol until after the 1990 London Meeting of the Parties. Some countries, notably India and China, made it clear that their participation was contingent on adequate financial assistance being forthcoming, and the Multilateral Fund was the result. Participation increased rapidly after that, and is now effectively universal.

While it is impossible to disaggregate the relative importance of the various factors, the combination of the trade restrictions and the financial assistance created a strong incentive to join. The trade measures build in an accelerator factor, that is the more countries become Parties, the bigger the incentive to join, as the aggregate size of the non-Party markets diminish. The Fund was crucial in achieving critical mass in terms of India's and China's accession, and then the trade restrictions meant it was in the best interests of practically all other countries to also become Parties. Once membership becomes near universal, the non-Party trade restrictions have done their job and are of no operational importance. Participation in the most recent amendments to the Protocol however is not yet universal.

2. CITES

While assessments of effectiveness in CITES and the Basel Convention also face this problem of how to attribute results to particular policy instruments, they also face larger problems of defining and measuring their specific environmental results.

Looking first at CITES, as noted above, the treaty only purports to deal with alleviating stress on threatened and endangered species arising from one source, namely demand pressures transmitted through international trade. Therefore the link between the effectiveness of CITES and species survival is generally not a direct causal link. This factor, combined with the immense difficulties of bringing hard

data to bear on the conservation status of the over 30,000 CITES-listed species, means precise quantified assessments of the role of CITES in species conservation are generally unavailable. The overall assessment of specialists is that CITES has been effective in promoting the conservation status of some species but indifferent for others.

For example, some high profile 'mega' species whose parts/derivatives are heavily traded (albeit illegally among Parties since their Appendix I listing) – such as rhino species and the tiger – continued to dwindle in numbers after the CITES listing and in some quarters a future extension of their past losses would point to their potential disappearance from the wild. According to the CITES Secretariat, the decline in rhino and tiger populations has been halted, with the white rhino having significantly increased its population numbers since placement on Appendix I, and even the black rhino now being well managed in southern Africa, where some populations are increasing. Even in cases of continued declining populations however, this does not necessarily mean that CITES trade controls are 'ineffective'. In fact for both the rhino and the tiger, specialists feel that the 'endangered' status of Appendix I listing has helped to mobilise campaigns to address the factors other than trade which have been contributing to their declines. Also the measures recommended at the ninth CoP meeting show that Parties have realised that the trade controls alone have not been sufficient in halting the decline of the tiger and the rhinoceros, but that, *inter alia*, demand side factors also have to be addressed. While these are important species of particularly high profile for the international community, they remain two out of some total 35 000 CITES-listed species, or approximately 5 000 animals.

It should also be noted that CITES has had clear success stories -- in particular the crocodilians. Prior to CITES, uncontrolled trade in crocodilian skins had resulted in depletion of most populations of alligators, crocodiles, and many caiman that were important in the trade. Thanks to the innovative measures of ranching, quotas and detailed technical work on tagging hides from such sources, illegal trade in the larger alligator and crocodilian skins has all but disappeared (although problems still remain in the smaller caiman hides).[8] Today, 70 per cent of crocodilians have escaped the threat of extinction and trade in crocodilian skins is expected to grow from 1.3 million units in 1993 to more than 2 million by the year 2000. Several species and/or populations have been subsequently down-listed from Appendix I to Appendix II.

As noted above, CITES is practically synonymous with trade measures; it does not combine other policy instruments like more recent MEAs dealing with biodiversity issues. However the above examples show that it is not just the banning or restriction of trade *per se* that generates the effects on conservation of species. CITES listing draws attention to problems, raising public awareness and generating broader public and NGO responses. The contribution made by NGOs in implementing CITES and enforcing it has been significant. So it is not simply the trade restrictions for Appendix I species, or the trade regulation of Appendix II species, *per se* that has necessarily been the key to conservation successes in particular cases, but the total response they have generated.

Also, refinement of the simple trade bans to allow more flexible mechanisms such as ranching and quotas has allowed more holistic approaches to sustainable development of the species in question which has proven effective in conservation terms in most cases. This issue of sustainable utilisation is increasingly important to CITES Parties. CITES predates the 1992 UNCED Conference and its emphasis on sustainable development but is moving to reflect this approach in certain cases – see Box 1 below. The new mechanisms of flexibility that have been introduced over the past twenty years, while still founded on the key operational precept of only allowing trade pursuant to a non-detriment finding, can permit limited trade to take place in otherwise strictly regulated conditions, according to species and/or geographic population, and subject to quota, ranching practices, registration of commercial breeding/propagation operations etc. Allowing Range states to take full advantage of such trade facilitating mechanisms usually

means bringing to bear additional resources to carry out population studies and devise and implement sound management plans. External funding, a fair share of which now goes to such work, increased over the past biennium.

Box 1: CITES and Sustainable Use

"Three African nations won a hard-fought victory for their concept of sustainable use of wildlife resources when the Parties to the Convention on International Trade in Endangered Species (CITES) lifted a seven year-old ban on international ivory trade at their biannual conference held in Harare, Zimbabwe from 9-20 June 1997. Zimbabwe, Namibia, and Botswana had requested that their elephant populations be moved from CITES Appendix I, which prohibits trade, to Appendix II, which allows regulated and monitored trade. Two rounds of secret ballot voting were necessary before the proposals were accepted, with some modifications and an 18-month trade moratorium to allow the exporter countries to strengthen controls over ivory stocks and trade. After that, strictly monitored and quota-bound experimental ivory sales may resume, with Japan as the only international trading partner. Income from the sales is to go to conservation programmes and people who share their habitats with elephants. An expert commission set up by CITES in 1994 had earlier concluded that the elephant populations of Zimbabwe, Namibia, and Botswana were healthy and did not fulfil Appendix I listing criteria. Those opposing international ivory sales said that the lucrative trade would result in vast increases in poaching throughout African elephant range states. They also cited difficulties in tracking the origin of ivory, as well as insufficient control of stocks and trade."
Source: "International Trade in Endangered Species – CITES Struggles with Sustainable Use Issues" in *Bridges Between Trade and Sustainable Development*, P.1 Vol.1 No.2, July 1997, International Centre for Trade and Sustainable Development, Geneva.

An Appendix II example is the Tegu Lizard. The governments of Paraguay and Argentina annually harvest this species under a sustainable utilisation program. The skins of the Tegu lizard are then tanned and exported to the United States, Canada, Mexico, Hong Kong, Japan, and several European countries to produce leather goods. The CITES listing and the regulation of this species ensures that the trade in this species is sustainable and provides for a legal harvest and control system, allowing the exporting countries to monitor the effects of their wildlife management practices, including their highly successful quota system.

3. The Basel Convention

The main operational provisions of the Basel Convention are, like in CITES, the trade control system, even though attention is paid in the Convention to other means for achieving environmentally sound management of hazardous wastes such as technical assistance and capacity building. Therefore assessing the effectiveness of the trade measures in the Basel Convention is close, but not tantamount to assessing the effectiveness of the Convention. To the extent that the Basel Convention involves other policy approaches as well as the trade controls, isolating the effectiveness of the trade measures faces the same difficulties as in the Montreal Protocol. Finding causality between the trade measures and the environmental objective is made even harder in the case of the Basel Convention by the existence of other complementary international regulatory systems. The OECD, the EU and many other regional agreements tackle the same issues as the Basel Convention.

Perhaps even more than is the case for CITES, data inadequacies make quantification of the environmental problems being addressed by the Basel Convention extremely difficult. In addition, the

broadness of the objective of reducing damage to human health and the environment due to the generation and disposal of hazardous waste makes the question of which indicators to use to assess environmental effectiveness, or overall effectiveness in terms of costs and benefits, of the trade measures particularly difficult. It is not possible to state precisely the coverage of the Convention because of the margin for interpretation in the definitions of waste and hazardous waste (although this has been improved by the recent addition of Annexes VIII and IX to the Convention); data at a waste-specific level is largely unavailable; several policy regimes operate in this area simultaneously, and the Convention is so young.

Ideally, an evaluation of overall effectiveness of the Convention would involve an estimate of the total economic, health and environmental costs and benefits arising from transboundary movements of hazardous wastes for each country, taking into account the serious risks mismanagement entails, and how that welfare cost/benefit calculus has moved over time. However the physical quantities of transboundary movements are not precisely known, let alone the valuation of their total economic and environmental costs and benefits.

After full cost/benefit analysis, the next best proxy indicator of effectiveness might be to assess whether physical transboundary movements of hazardous wastes have declined in volume over the life of the Convention. Data is not generally available on even legal shipments of hazardous waste as a discrete category. Moreover, quantities of materials traded would of course give no indication of hazard and environmental costs in themselves, as smaller volumes could be more concentrated and hazardous than large ones. Also, some movements are acknowledged to yield environmentally preferable outcomes, e.g. when transportation is to environmentally preferable disposal or recycling facilities. Without data disaggregated according to final use (recycling or disposal), to type of waste, and to destination country, it is practically impossible to assess the "environmental loading" caused by waste flows, and the effectiveness of the Basel Convention in reducing those effects.

OECD figures on total exports within the OECD area show that both the total measure of exports of "hazardous wastes" (as defined by the national authorities reporting data to OECD) and the share going to final disposal have decreased over 1990-1993[9]. It is not possible to distinguish the effect of the Basel Convention (which entered into force in 1992) from the effect of other control systems operating in the OECD countries, such as the OECD System, the EU regulations and national policies which have been implemented progressively since the mid-1980s. However, to the extent a trend can be identified here, it would seem to be a downward one.

In qualitative terms, the notification and consent procedure yields information which improves the likelihood of transboundary movements being managed properly. It creates a legal structure which facilitates disclosure of information about proposed shipments of hazardous wastes, and informed consent. The operational difficulties arising from problems in applying the broad definitional mechanism of the Convention to specific shipments have already been acknowledged by the Parties. They have to a large extent been eased by adoption of the lists of hazardous and non-hazardous wastes elaborated by the Technical Working Group (now Convention Annexes VIII and IX). Another set of operational difficulties arises from problems in marshalling the required technical and administrative expertise, and in preventing illegal movements. These problems have been most acutely felt in developing countries and have constituted a basic rationale for the call upon the industrialised world to impose and enforce a general ban on the export of hazardous wastes to developing countries.

Most contentious from the economic, environmental and trade policy points of view is the proposed ban on exports of hazardous wastes from Annex VII to non-Annex VII Parties adopted by the fourth Meeting of the Conference of the Parties. This trade restriction would, after entering into force, promote the stated objective of eliminating these particular movements, although it remains to be seen

how the inevitable problems of enforcement and illegal trade are dealt with (in practical terms primarily by the OECD Parties). The ban amendment explicitly reflects the view that transboundary movements of hazardous wastes, especially to developing countries, have a high risk of not being managed in an environmentally sound manner as required by the Convention. The positive argument behind the ban is that removing the option of disposing of hazardous wastes in non-Annex VII countries would increase the incentive for Annex VII countries to minimise the generation of such wastes at the source, including through greater use of cleaner production technologies.

The main concern over the effect of the ban amendment raised by some lies in the overall economic and environmental impact of splitting the world market in two as concerns certain recyclable hazardous wastes which are sources of secondary raw materials for some industries. It has also been claimed that perverse effects may include an increase in South/South trade; increased final disposal in Annex VII countries rather than recovery; increased demand for (often energy- and pollution-intensive) extraction and processing of raw materials; increased costs to user industries in non-Annex VII countries; and, importantly, a reduction in flows of environmentally sound recycling technology and technical assistance to non-Annex VII countries.

The broader goal of avoiding damage to health and environment may not be unambiguously well served once these ramifications are included in the calculus. Finally it has been argued that loss of business for the recycling industries in some developing countries, due to the fact that they can not import hazardous wastes from OECD countries, could be detrimental for sustainable development. While it is not possible to estimate the magnitude of these effects, they will be limited by the fact that most major trade flows of recyclable wastes will be excluded from the scope of the export ban. Further empirical analysis at the country level on all of these factors would yield better information on which to analyse the economic and environmental impacts and the overall effectiveness of the Convention in reaching its environmental aims.

All three MEAs examined contain requirements for submitting data to the Secretariat to enable the measurement, monitoring and enforcement of their controls. All three have had some problems in obtaining the data on time and in the required format. CITES and the Basel Convention in particular have suffered from lack of good quality data being submitted by the Parties. Efforts are underway in each case to improve the information base, which is necessary for understanding the extent of the trade they are trying to control, for formulating further policy and for monitoring compliance with the control systems.

B. Compliance, illegal trade and technical assistance.

No agreement can be effective if the Parties do not comply with its obligations. Ensuring compliance with multilateral agreements is particularly difficult because of the relative lack of international enforcement mechanisms and sanctions. Multilateral environmental agreements have been subject to criticism from some quarters for not building binding and enforceable compliance mechanisms into their regimes. From another perspective however, MEAs rely on more co-operative approaches and are developing innovative mechanisms for promoting compliance which emphasise encouragement more than punishment.

It seems fair to say that each of the MEAs examined faces problems to some degree in terms of compliance with its provisions. This includes particular examples of inadequate implementing legislation, the absence of required implementing institutions, inadequate technical capacity to make the informed judgements required by trade controls, inadequate national enforcement of the obligations, inadequate

punishment domestically for breaches of obligations, to inadequate reporting of data. These shortcomings have been recognised by the Parties, and progress is being made in improving compliance in each case.

1. CITES and the Basel Convention

The cause of a great many of these problems is a lack of technical and financial resources to actually implement the control systems required. This is particularly the case with CITES and the Basel Convention. To effectively run sophisticated regulatory regimes for controlling trade in endangered species and in hazardous wastes requires substantial administrative, technical and enforcement expertise. People in management authorities and customs agencies need to be trained to be able to discern the difference between types of shipments to know what is and what is not covered by the MEAs, and which category they fall in. They need to be trained to understand the obligations and procedures required by the agreements, and to be able to make informed judgements about particular proposed shipments. Administrative systems are needed. These trade control systems can only work effectively with the human and financial capacity in place to administer strong laws, together with a commitment to enforce them.

For example, according to a 1993 report by IUCN--The World Conservation Union[10], around 85 per cent of CITES Parties have incomplete or otherwise inadequate legislation for implementing the Convention. Countries without appropriate legislation have no framework to verify the validity of the import, export and re-export permits and certificates essential for regulating trade in CITES-listed species or interdict or seize illegal shipments or prosecute violators. This situation gives rise to a number of instances of non-compliance, identified in a recent report[11], including:

- issuance of export permits for Appendix I species before an import permit is obtained;
- issuance of permits for wild Appendix I species for commercial purposes;
- issuance of permits for species whose export is prohibited by national legislation;
- issuance of export permits for species with zero quotas;
- issuance of re-export certificates for illegally obtained specimens;
- retroactive issuance of permits; and
- issuance of pre-Convention certificates without date of acquisition or country of origin.

The need for capacity building was officially addressed in 1981. The third meeting of the CoP in New Delhi recognised that two-thirds of CITES membership, being developing countries, encountered special difficulties in implementing CITES and called on Parties to ensure including technical assistance in bilateral and multilateral programmes of development aid.

Requests for training began to be met through the organisation and implementation of training seminars by the Secretariat, funded by bilateral aid from several governments and NGOs, as well as bilateral training seminars offered by key donor countries. Examples of activities concerning enforcement and capacity-building include: enforcement seminars, technical assistance for the development of national legislation to implement the convention, the creation of customs training packages, as well as the creation and translation of identification manuals. Between 1994 and 1996, around half of the US$ 4 million

received by the Secretariat in external contributions was allocated to activities concerning enforcement and capacity building. Principal donors to these activities include the European Commission, and several individual EU members, the US, Hong Kong, Japan and Australia as well as several NGOs.

As noted by the Secretariat of the Basel Convention, "effective implementation of the Basel Convention and of the decisions taken by the Conference of the Parties and the achievement of the environmentally sound management of hazardous wastes rely upon developing the adequate capacity and capability at the national or regional levels and upon the active co-operation among Parties..."[12]. The Secretariat co-operates with national authorities in developing national legislation, setting up inventories of hazardous wastes, strengthening national institutions and preparing hazardous waste management plans. National and regional seminars have been held on the legal, institutional and technical implementation of the Convention. Capacity building and technical assistance efforts however have been seriously constrained by limited staff and financial resources.

For example, the total budget of the technical co-operation trust fund to assist developing countries for 1997-98 was around $1.5m per year. Almost half of this fund is allocated to contributing to the costs of Parties' participation in the meetings and Conferences of the Convention. This has however been supplemented by some bilateral contributions and in-kind support by Parties.

An obvious consequence of creating trade bans and trade controls without ensuring adequate capacity to implement and enforce them is the emergence of illegal trade. Illegal trade will generally be a problem in any situation where an attempt is made to outlaw trade if the underlying demand and supply remain. This is the experience with commodities ranging from illicit drugs to endangered species. As concerns wildlife for example, a large black market exists as some consumers are still willing and able to pay a price that covers the supplier's premium for the risks involved in illegal trade.

Policy responses to illegal trade involve relevant interventions therefore on both the supply and demand sides. Interdiction and seizure of prohibited goods at the point of international transfer is one, but not the only possible point of intervention. Beyond interdicting shipments at the point of international exchange, interventions may occur both by lowering demand -- through changing consumer tastes through public education or by raising the risk of detection for illegal "consumption" -- and by reducing supplies through increasing the risk of detection for illegal supply and the fear of the penalty. [13]

Emphasis in CITES meetings on strengthening enforcement has been heavy. At the national level this usually involves instituting close working relations amongst the national Management Authority and enforcement agencies, such as customs officials, wildlife inspectors and police authorities. Internationally co-operation has also been strengthened. Although moves to establish a separate CITES committee on enforcement have been resisted, certain Members have seconded staff to assist the Secretariat in its role of assisting enforcement efforts. The parallel network of TRAFFIC (Trade Records Analysis of Flora and Fauna in Commerce) offices also co-operate closely with national enforcement authorities and the Secretariat. Information and pressure from non-governmental sources are often instrumental in getting Parties' enforcement agencies to act in the face of resource constraints and less than top priority for environmental crime on enforcement policy agendas. In the light of the magnitude of illegal wildlife trade -- amongst the top illegally traded commodities along with drugs and weapons -- the International Criminal Police Organisation (INTERPOL) recently established a Sub-committee on Wildlife Crimes. The CITES Secretariat has a Memorandum of Understanding with INTERPOL, as it does with the World Customs Organisation. Recently signed, this latter provides, *inter alia*, for jointly devising measures to improve detection of consignments of wildlife subject to trade controls, setting up of a database on CITES offences; produce joint publications and participate in each other's training sessions.

The problem of preventing illegal trade is exacerbated when the trade controls are hard for authorities to implement at the border because of excessive ambiguity or complexity. In the Basel Convention for example, the definitions of which substances are and are not covered by the notification system or the proposed Annex VII/non-Annex VII ban are technically quite difficult to apply in many cases. The illegal trade problem is also exacerbated by inadequate enforcement capacity at the domestic level. Once again, this is related to the level of human and financial resources available for the implementation and enforcement tasks.

2. Montreal Protocol

Experience with the Montreal Protocol also demonstrates that illegal trade can seriously undermine the environmental objectives of an MEA, and shows that further trade controls can be part of a response to illegal trade. While the control schedules of the Montreal Protocol have progressively reduced the range of production and trade of ODS that can legally occur, illegal trade has correspondingly emerged as a significant weakness in the overall regulation of ODS world-wide. Illegal trade occurs because there is still demand for CFCs, there is still supply, and because there are still various forms of legally valid transactions which complicate the enforcement task. Demand exists in large part for servicing old CFC-dependent equipment, such as air conditioners and refrigerators. Alternatives exist, but are more expensive than CFCs, especially black market CFCs. Supply still exists both illegally (i.e. in non-compliance situations), and legally in the form of stockpiles of new and recycled CFCs, and in new production capacity in developing countries.

Consumption and production in developing countries of CFCs and other ODS is still allowed, with the total phase-out of production and consumption of CFCs scheduled for 2010. Developed countries can still export up to 15 per cent of their production in the baseline year to meet the basic domestic needs of developing countries. Even in developed countries there are still essential use exemptions and use of ODS for chemical feedstock is allowed. In addition, recycled substances are not subject to the controls, apart from a requirement to report the quantities traded. All of these circumstances mean that there is ample opportunity and means for illegal trade to be hidden in amongst various legal trade flows. New CFCs can be disguised as recycled, transhipments may not actually be transhipped, and other mislabelling and fraud can occur.

The Parties, both collectively and individually, have certainly recognised illegal trade as a serious threat to compliance with the Protocol and hence to the ozone layer. Illegal trade is estimated to amount to 20,000 tonnes per year: it has been said also that “in Miami for a time, only cocaine had more street value than CFCs”[14]. The Ninth Meeting of the Parties took several measures attempting to improve the Parties’ ability to reduce illegal trade.

First, an Amendment to the Protocol was adopted requiring all Parties to implement an import and export licensing system. The Parties stated that export and import licensing systems would:

a) assist collection of sufficient information to facilitate Parties’ compliance with relevant reporting requirements; and

b) assist Parties in the prevention of illegal traffic of controlled substances, including, as appropriate, through notification and/or regular reporting by exporting countries to importing countries and/or by allowing cross-checking of information between exporting and importing countries.

Contact officers are to be established for the licensing systems, and Article 5 Parties (developing countries) are eligible for assistance in the development, establishment and operation of licensing systems. The licensing system has stopped short of a prior notification and consent system. Neither does it deem trade occurring outside a licensing system illegal.

Second, an Amendment was agreed whereby a Party still producing ODS in non-compliance with the control schedules, shall ban the export of used, recycled and reclaimed quantities of that substance, other than for destruction. This new Article 4A is designed to reduce the amount of ODS exported from countries with economies in transition mislabelled as recycled substances, given that production of new ODS is still occurring in some Parties in violation of the Montreal Protocol control schedules.

Third, in order to facilitate co-operation between customs authorities and authorities in charge of ODS control and ensure compliance with licensing requirements", UNEP and the World Customs Organisation (WCO) will co-operate to improve the use of customs codes for tracking movements of ODS. Separate customs codes for each kind of HCFC will be introduced, and a list of customs codes for ODS commonly marketed as mixtures will be developed. The Basel Convention has similar co-operative alliances with the WCO to combat illegal trade by improving trade data, and like CITES, co-operates with INTERPOL.

Each of these new measures are trade measures, as they are designed to help deal with the problem of illegal trade. They could probably be described as necessary but not sufficient in themselves, to deal with the problem overall. Stringent enforcement of national laws is also necessary. As long as there are differential phase-out periods, with some trade occurring legally, the problem of controlling illegal trade will be even more difficult to manage than it is in cases of total bans.

This means that MEAs that ban or restrict the use or trade of environmentally sensitive, but still valuable commodities, also need to construct mechanisms and provide resources to deal with the inevitable problems of illegal trade.

The Montreal Protocol has tackled the issue of compliance and enforcement in an innovative way, which may well provide a model for future MEAs. The non-compliance procedure recognises that non-compliance is frequently the consequence of technical, administrative or economic problems, and so it seeks to work constructively with Parties rather than as a judicial-type process. There is an Implementation Committee which hears any submissions made regarding a Party's performance under the Protocol. It seeks to secure an amicable solution to a non-compliance situation: it makes recommendations to the meeting of the Parties on actions such as encouraging a Party to seek assistance from the Global Environmental Facility, seeking guidance from the Protocol's Technical and Economic Assessment panel, issuing a caution to a non-complying Party, or imposing a suspension of rights under the Protocol.

So far the particular cases of non-compliance have concerned several countries with economies in transition. They have triggered the non-compliance procedure themselves. The 1997 Meeting of the Parties dealt with non-compliance by Latvia, Lithuania, the Russian Federation, (and the Czech Republic with respect to methyl bromide). The main conclusion concerning the three countries in a situation of general non-compliance was that international assistance, particularly through the Global Environmental Facility, should be considered favourably to help the phase out of ODS.

C. Themes and lessons

The above discussion demonstrates the multi-faceted nature of the 'effectiveness' of trade measures in MEAs. It is a complex issue, dependent on the particular environmental problem addressed and the nature and role of the trade provisions in particular MEAs. While not an exhaustive list, the case studies have pointed to the following factors which have contributed to, and have limited, success:

Factors Contributing to Success:

- Genuine multilateral consensus on shared environmental problems paves the way for effective agreements to address them.
- Comprehensive and balanced packages of policy instruments have more chance of addressing all aspects of an environmental problem than reliance on one form of policy instrument.
- Strong scientific basis for policy action increases credibility and acceptance; at the same time the precautionary principle says that the absence of full scientific certainty should not prevent action in cases of threats of serious or irreversible damage;
- Policy based on an understanding of the underlying economics will be more effective than attempting to cut across economic factors;
- Funds, technical co-operation and information exchange to establish the technical and administrative capacity to implement treaty obligations may be essential, particularly for developing countries;
- Multilateral funding may sometimes be needed to ensure wide membership;
- Strong market signals about an end-point, combined with realistic transition periods, will provide a commercial context conducive to innovation and allow cost-effective ways of meeting targets to emerge;
- Additional transition periods for developing countries can help lower adjustment costs;
- Reducing the benefits to be gained from free-riding increases membership;
- Flexibility in trade controls can maximise the environmental and economic benefits – e.g. ranching and national quotas in CITES, and Article 11 Agreements in the Basel Convention;
- Public and NGO support greatly increases the chances of success of an MEA; and
- Mechanisms within agreements to monitor and deal with non-compliance by Parties increases effectiveness.

Factors Limiting Success:

- Lack of funds for implementation and enforcement capacity;
- Illegal trade;
- Over-reliance on one type of control, such as a trade ban, in cases where the underlying environmental and economic context is very complex;
- Inadequate recognition of underlying economic context;
- Ambiguity and complexity in administering an MEA, particularly difficulty in determining whether particular shipments are covered by the relevant Agreement ;
- Inadequate database for understanding environmental issues and subsequent policy development;
- Inadequate reporting of information by Parties;
- Insufficient incentives for participation and compliance; and
- General non-compliance.

V. MEAs and the multilateral trading system

The purpose of this Section is to raise some of the issues associated with the relationship between the rights and obligations of the MEAs examined and those of the WTO. As the MEAs use various trade measures to attain their environmental objectives, the issue of the relationship with the international legal regime governing trade is an important one within the trade and environment debate. However, no attempt will be made here to come to conclusions on how any hypothetical legal dispute would be argued or decided.

It should be recalled at the outset that so far there have been no cases of conflict between the obligations with respect to trade provisions in a multilateral environmental agreement and rights under the WTO which have led to formal dispute settlement in any forum, including the WTO dispute settlement system. There are clear political reasons explaining that situation, including the undesirability of calling into question a multilateral treaty signed by many national Governments. As noted in a recent WTO Appellate Body Report[15], WTO Members have endorsed and supported:

> "…*multilateral solutions based on international co-operation and consensus as the best and most effective way for governments to tackle environmental problems of a transboundary or global nature.* WTO Agreements and multilateral environmental agreements (MEAs) are representative of efforts of the international community to pursue *shared goals*, and in the development of a mutually supportive relationship between them, *due respect must be afforded to both."* (emphasis in original)

As the MEAs studied enjoy broad and growing membership, this signifies their widespread international acceptance and reduces the likelihood of a conflict arising. The Basel Convention has 121 Parties, CITES 144, and the Montreal Protocol 168. In comparison, WTO membership stands at 132. Some forms of later modifications to the Montreal Protocol and the Basel Convention are in the nature of separate legal agreements (see below), and they have lower membership than the original agreements.

In analysing the situations in which inconsistencies may arise, it is useful to distinguish between the possible classes of countries. A majority of countries are Parties to both the WTO and the three MEAs. Some countries are WTO members but not party to one of the MEAs, e.g. the US is not a Party to the Basel Convention. Some countries such as China are Parties to the MEAs, but not WTO members. (The Table in the Annex compares membership in the three MEAs and the WTO for all countries which are Parties to at least one of the four treaties.) Subsequent amendments raise further possible categories of countries. Parties would only be legally bound by subsequent amendments (such as the incorporation of additional ODS in the Montreal Protocol and the amendment introducing the Basel Convention's Annex VII/non-Annex VII export ban) if they ratify them. Therefore some countries will be Party to the main Agreements including later amendments, and some, at least transitionally, will be Party to the MEAs excluding the amendments.

In cases where both countries are Party to the MEA and the WTO, it is quite unlikely as a practical matter that one would challenge in the WTO a measure authorised under the MEA. As Parties to the MEA, it would be difficult, not least politically, to object to other Parties implementing their obligations under the MEA. There is room for ambiguity concerning measures taken pursuant to, but not required by, an MEA. CITES for example stipulates that nothing in the Convention shall affect the right of Parties to adopt "stricter domestic measures" than the minimum measures required by the Convention to meet its objectives. Similarly the Montreal Protocol contains a provision explicitly stating that Parties may take more stringent measures than those in the Protocol. Parties could therefore potentially differ on whether a 'stricter domestic measure' that restricts trade is appropriate.

The case where two countries are both members of the WTO but only one is an MEA Party is a hypothetical situation where an inconsistency may arise. In implementing the obligations of the MEA, a country may find itself unable to respect certain obligations to another WTO member, not Party to the MEA.

The case where two countries are WTO members and party to the MEA, but only one of them is a party to a subsequent amendment is analogous to the preceding case. Under ordinary principles of international law, a state is only bound by an amendment to a treaty if it accepts the amendment. Therefore a Party which has accepted the amendment may find itself unable to simultaneously implement the amendment trade restrictions and respect its WTO obligations to a fellow WTO member which has not accepted the amendment. However, in political, rather than strictly legal, terms it may be more difficult for an MEA Party to pursue any incompatibility in the WTO than it would be for a non-Party, non-acceptance of the amendment notwithstanding.

A. Where would a dispute be heard?

The preliminary issue of where a dispute would be heard that is justiciable under both the WTO and an MEA has potentially significant implications for which legal regime is applied to settle it. For example, Parties to the Basel Convention are required to seek a peaceful resolution of any disputes that may arise either through negotiation or other peaceful means of their choice. If the Parties fail to reach a resolution of a dispute informally, the Convention provides that, where Parties agree, such disputes be submitted to the International Court of Justice (ICJ) or to arbitration. A dispute before the ICJ would be settled according to the rules and principles of international law.

Within the section on Conclusions and Recommendations of the December 1996 Report of the WTO Committee on Trade and Environment WTO Members have stated their view that "if a dispute arises between WTO members, Parties to an MEA, over the use of trade measures they are applying

between themselves pursuant to the MEA, they should consider trying to resolve it through the dispute settlement mechanisms available under the MEA"[16].

In the event that a dispute were in fact to proceed under the WTO dispute settlement procedure, the Dispute Settlement Panel would be charged with deciding the issue in the context of the GATT and the relevant WTO Agreements, using "customary rules of interpretation of public international law" where appropriate to clarify WTO provisions (Article 3(2) of the Dispute Settlement Understanding).

B. Some relevant WTO principles

1. Article I - General Most Favoured Nation Treatment.

Article I of *GATT, 1994* requires that with respect to (*inter alia*) all rules and formalities in connection with importation and exportation, any advantage, favour, privilege or immunity granted by any WTO member to any product originating in or destined for any other country shall be accorded immediately and unconditionally to the like product originating in or destined for the territories of all other WTO members.

The question would therefore arise as to whether a country, in implementing its obligations under an MEA, could find itself denying another WTO member Most Favoured Nation treatment. Restriction on trade with non-Parties in each of the three MEAs could theoretically give rise to this situation. So could the proposed Annex VII/non-Annex VII export ban in the Basel Convention.

For example, country A, a Party to the Basel Convention and a member of the WTO, would be obliged to implement an export and an import ban on hazardous or other wastes to and from country B, not a Party to the Basel Convention, but a WTO member. In the context of Article I of the GATT, country B could claim that country A is conferring an advantage or privilege on the product going to or coming from other countries which are party to the Basel Convention, that is being denied to a like product going to or coming from country B. The nature of the advantage would be the right to import or export the hazardous or other wastes. This "advantage" could be significant where the hazardous or other waste in question is also a secondary source of a needed raw material.

As a practical matter, at least as regards the Party/non-Party trade ban, a bilateral or regional agreement under Article 11 of the Basel Convention which would allow such trade to be conducted (with similar controls as required in the Basel Convention), would probably be a preferred route for a country not party to the Convention to pursue. In the case of the amendment ban, the European Union and Norway have already decided to disallow the conclusion of such bilateral or regional agreements (permitting exports from Annex VII to non-Annex VII countries otherwise prohibited by the proposed amendment), whereas some countries hold the view that the Convention allows for such bilateral or regional agreements.

Article I of the GATT could be relevant also to measures taken to implement CITES. Article I requires WTO members to treat "like" products in the same way, no matter what their country of origin. The question of whether fauna or flora taken from the wild are "like" their captive bred, ranched or propagated counterparts could be of potential relevance in any situation where a country applied trade restrictions on imports of wild specimens where it permitted imports of propagated or ranched specimens from other suppliers.[17] This may also be an issue that is relevant in the case of split listings. In these

situations, there can be different Appendix listings, and different trade treatment of geographically separate populations of the same species.

However, this is not a matter that can be settled in the abstract. The criteria for determining when products are "like" products have been subject to extensive deliberation and adjudication in past GATT/WTO dispute settlement cases, but in specific circumstances. The “like product” concept appears in a number of WTO provisions which have been scrutinised under Dispute Settlement proceedings and it is not feasible to attempt to summarise here the relevant jurisprudence.

If a measure taken under an MEA was considered to be inconsistent with the MFN principle, the question would then arise as to whether the trade restriction would nevertheless be justified in the WTO under a relevant exception (see discussion of Article XX below).

2. Article III - National Treatment

Once imported products have crossed the border, Article III of the GATT requires imported and domestic ‘like products’ to be treated the same with respect to internal regulations and taxes. Various forms of regulations and taxes have, for example, been used by Parties to help meet the consumption and production phase-out commitments of the Montreal Protocol. If they applied differently to imported than to domestic products, there could be a violation of Article III. There is no evidence that this has been the case so far. Again, as with Article I, even if this was the case, Article XX would then need to be considered (see below).

3. Article XI - General Elimination of Quantitative Restrictions

GATT Article XI states that no prohibitions or restrictions other than duties, taxes or other charges shall be applied to imported or exported products (with some exceptions not relevant here, such as agricultural products). In effect, export and import bans are prohibited.

Therefore, the question could arise as to whether the provisions in the MEAs that concern an export or an import ban would be consistent with GATT Article XI. It is essential that this Article, as others, be considered in conjunction with the General Exceptions to the basic principles (see (5) below).

For example, it would appear that import and export permits and re-export certificates to regulate trade in Appendix I-III species, including the prohibition or restriction of trade for "primarily commercial purposes" in Appendix I species, as required by relevant CITES Articles, are measures for which the obligations of GATT Article XI.1 concerning quantitative restrictions may be relevant. The same would appear to be the case for measures considered to be enforcement measures taken pursuant to CITES Article VIII.1 or "stricter domestic measures" referred to in CITES Article XIV, irrespective of whether the measures were applied to Parties or non-Parties.

Similarly, the question could arise as to whether the Montreal Protocol Article 4 import and export bans, or import or export bans instituted by national Governments as part of their policy measures to meet the consumption and production limits, would be consistent with GATT Article XI.

4. Article XIII - Non-discriminatory Administration of Quantitative Restrictions

This Article concerns import and export licensing, prohibitions and quotas, and requires that like products coming from, or going to, all countries be treated in the same way. Would prior informed consent procedures be considered as import and export licensing under this Article? Similar issues concerning non-discrimination could arise under this Article as arise under Article I with respect to the distinctions made between classes of countries such as the Basel Convention's Annex VII and non-Annex VII countries, and distinctions made between Parties and non-Parties. The issue of 'like products' is also relevant to this Article.

5. Article XX - General Exceptions

The GATT provisions accommodate trade restrictions in the pursuit of environmental protection under certain circumstances. Article XX states (in part) that:

> *Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures:*
>
> *...(b) necessary to protect human, animal or plant life or health;*
>
> *...(d) necessary to secure compliance with laws or regulations which are not inconsistent with the provisions of this Agreement*
>
> *...(g) relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption;...*

To fall under Article XX, an action taken needs to satisfy the conditions laid down in the chapeau and one of the paragraphs of Article XX. Paragraphs (b), (d) and (g) above would seem to be the most relevant with respect to the MEAs in question.

A preliminary question of approach however would arise. Given that the MEAs are also a reflection of the views of the international community, it is not clear how far a WTO Panel would inquire into the specific requirements of Article XX in the case of a trade measure taken under an Agreement. It is possible, for example, that a (rebuttable) presumption would be made that an international consensus exists on the validity and necessity of the instruments chosen to meet an MEA objective. It could also, for example, decide to solicit the views of the Convention or associated experts on the specific matters raised by Article XX.

Where appropriate, e.g. in a situation of ambiguity regarding the interpretation of a WTO provision, or regarding a WTO provision and the provision of another international agreement, the WTO dispute settlement system provides for recourse to customary rules of interpretation of public international law, including the Vienna Convention on Treaty Law. To date, the WTO dispute settlement system has made reference only to some of the rules of interpretation of the Vienna Convention in clarifying WTO provisions. Article 31(3)(c) of the Vienna Convention on the Law of Treaties provides that when interpreting a Treaty provision, one may take into account "any relevant rules of international law in the

relations between the Parties". Nevertheless, the role of WTO dispute settlement is to determine existing rights and obligations under the WTO Agreements.

If the text of an MEA were examined when applying the "arbitrary and unjustifiable discrimination", and the "disguised restriction on trade" tests of the chapeau of Article XX, the "necessity" test in Article XX (b), and the specific requirements of Article XX (g), the following aspects could be relevant:

- CITES and the Basel Convention make it clear that controlling and restricting trade is their very purpose.

- Each MEA exempts non-Parties from the Party/non-Party trade restrictions if they are acting in compliance with the relevant MEA and have submitted data or entered a bilateral or regional agreement to demonstrate as much. This means that any discrimination here is not based on membership of a treaty *per se*.

- Of specific relevance to the amendment to the Basel Convention proposing the Annex VII/non-Annex VII export ban, the preamble of the Convention recognises "the increasing desire for the prohibition of transboundary movements of hazardous wastes and their disposal in other States, especially developing countries".

- Furthermore, the amendment when ratified would insert a new paragraph in the preamble of the Convention: "recognising that transboundary movements of hazardous wastes, especially to developing countries, have a high risk of not constituting an environmentally sound management of hazardous wastes as required by this Convention". On the other hand, it could be argued that the decision to close Annex VII until the amendment enters into force could render the distinction between groups of countries somewhat 'arbitrary and unjustifiable' because it is not based on environmentally-related criteria. Some Parties consider that Article 11 would nevertheless allow for Annex VII/non-Annex VII trade to occur under bilateral or regional agreements, which could reduce the scope of the trade restrictions in certain circumstances.

- Concerning the Montreal Protocol, measures have been based on international scientific, economic and technological assessments of what was necessary to protect the ozone layer. Trade measures are only one part of an integrated set of policy instruments.

In terms of the application of Article XX (b), previous WTO panels, none of which have concerned trade measures taken pursuant to *multilateral* environmental agreements, have considered trade measures not to be "necessary" if "alternative measures either consistent or less inconsistent with the *General Agreement* were reasonably available to (a member) for achieving its aim of protecting human, animal or plant life."[18] Therefore the argument might be put that various other measures such as technology transfer would be less trade-restrictive ways of meeting some MEA objectives than would certain trade restrictions. Some would argue however that such measures function as complements, not alternatives, to the trade measures.

While the points raised here could be relevant, among others, in applying the necessity test and the chapeau requirements in specific circumstances, no attempt is made here to develop further such hypothetical arguments.

C. Themes and lessons

Discussion of the relationship between MEAs and the multilateral trading system is by its nature quite technical and context-specific. This makes it difficult to generalise. However we know that there are situations where theoretically a state may find itself unable to meet both sets of international obligations simultaneously (depending on how GATT Article XX would be applied in a dispute settlement situation). We know also that so far no such direct conflict between WTO and MEA obligations has led to a formal dispute in an international forum including the WTO. Policy dialogue and co-ordination on the use of trade measures in MEAs has also improved significantly in recent years. Nevertheless, given the undesirable uncertainty that this potential for systems friction causes for current, but more importantly for future, MEAs the question arises as to whether it is feasible to codify at least the situation that currently exists, namely co-existence of widely-supported MEAs with trade provisions and the trading rules.

The difficulty lies with attempting to codify precisely the conditions under which trade provisions in MEAs and the multilateral trading system can comfortably co-exist. When we attempt to write this down, we run the risk of unnecessarily and inappropriately confining the ground rules for negotiation of future MEAs. As has been seen, MEAs are very dynamic, are finding innovative solutions to complex problems, and are having to deal with increasingly broad and inter-related subject areas. It is in no-one's interest to stifle the dynamism and innovation in international environmental law.

In the CTE, much thought and debate has been given to this dilemma in the recent past. Several proposals have been put for how the relationships may be clarified. While no proposal has yet attracted consensus, the issue remains an important one for the environmental community. Ministerial-level statements from the EU have urged further progress and clarification on this issue. UNEP has approached the WTO Director General with a view to following up the idea raised by him of the need for a 'framework' to clarify the relationship between MEAs and the WTO.

VI. Concluding remarks

When trade provisions of individual MEAs are examined in detail, it becomes quite clear that there is a wide array of environmental contexts addressed, with many types of 'trade measures' used for a variety of purposes. As each set of environmental and economic factors is unique, so too the appropriate set of policy instruments for a particular MEA will be unique.

At the same time there are nevertheless some common policy approaches in use such as the precautionary principle, differentiated responsibilities, co-operative non-compliance mechanisms, and the principle of prior informed consent. There are also common implementation difficulties, particularly with respect to inadequate resources for effective implementation and enforcement, illegal trade, and common issues with respect to the multilateral trading system. As new MEAs such as the Kyoto Protocol, the Biosafety Protocol, the Convention on Prior Informed Consent, and the draft Convention on Persistent Organic Pollutants use and build on these emerging principles of international environmental agreements, they will also benefit from recognising and mitigating potential problems from the outset.

In principle, MEA negotiators have a wide array of policy instruments at their disposal when crafting international environmental agreements. While this exercise has not assessed the effectiveness of trade measures relative to other policy instruments, it has examined the experience to date with trade measures used in three widely-subscribed MEAs. Consequently, emerging lessons include the following points:

- In general, trade measures can be an appropriate policy measure to use in multilateral environmental agreements, *inter alia*:

  a) when the international community agrees to tackle and manage collectively international trade as a part of the environmental problem;

  b) when trade controls are required to make regulatory systems comprehensive in their coverage;

  c) to discourage free-riding which can often be a barrier to effective international co-operation; and

  d) to ensure compliance with the MEA.

- The use of trade measures should of course be carefully designed and targeted to the environmental objective:
- As with all policy development, prior assessments should be made of the potential environmental and economic ramifications of trade measures, particularly those that are highly restrictive such as bans;
- Potential difficulties such as illegal trade and inadequate technical and institutional capacity in some countries should be taken into account from the beginning;
- The current dynamism and continuous improvement present in MEAs should continue, with policy instruments including trade measures being adjusted and made more flexible as appropriate;
- Trade measures which treat classes of countries in different ways should be based on clear environment-related criteria;
- Trade officials and environment policy officials should work in close co-ordination in national capitals, and the WTO, UNEP and MEA Secretariats should continue to develop their dialogue on these issues.

The individual case studies, and the summary in Section IV above, demonstrate the multi-faceted nature of the 'effectiveness' of trade measures in MEAs. It is a complex issue, dependent on the particular environmental problem addressed and the nature and role of the trade provisions in particular MEAs. While not an exhaustive list, the case studies have pointed to the following factors which have contributed to, and have limited, success:

Factors Contributing to Success:

- Genuine multilateral consensus on shared environmental problems paves the way for effective agreements to address them;
- Comprehensive and balanced packages of policy instruments have more chance of addressing all aspects of an environmental problem than reliance on one form of policy instrument;
- Strong scientific basis for policy action increases credibility and acceptance; at the same time the precautionary principle says that the absence of full scientific certainty should not prevent action in cases of threats of serious or irreversible damage;

- Policy based on an understanding of the underlying economics will be more effective than attempting to cut across economic factors;
- Funds, technical co-operation and information exchange to establish the technical and administrative capacity to implement treaty obligations may be essential, particularly for developing countries;
- Multilateral funding may sometimes be needed to ensure wide membership;
- Strong market signals about an end-point, combined with realistic transition periods, will provide a commercial context conducive to innovation and allow cost-effective ways of meeting targets to emerge;
- Additional transition periods for developing countries can help lower adjustment costs;
- Reducing the benefits to be gained from free-riding increases membership of treaties;
- Flexibility in trade controls can maximise the environmental and economic benefits – e.g. ranching and national quotas in CITES, and Article 11 Agreements in the Basel Convention.
- Public and NGO support greatly increases the chances of success of an MEA;
- Mechanisms within agreements to monitor and deal with non-compliance by Parties increases effectiveness;

Factors Limiting Success:

- Lack of funds for implementation and enforcement capacity;
- Illegal trade;
- Over-reliance on one type of control, such as a trade ban, in cases where the underlying environmental and economic context is very complex;
- Inadequate recognition of underlying economic context;
- Ambiguity and complexity in administering an MEA, particularly difficulty in determining whether particular shipments are covered by the relevant Agreement ;
- Inadequate database for understanding environmental issues and subsequent policy development;
- Inadequate reporting of information by Parties;
- Insufficient incentives for participation and compliance; and
- General non-compliance.

As regards the relationship between MEAs and the multilateral trading system, hypothetical situations can be envisaged where a State is unable to meet both its obligations under the WTO and some MEAs simultaneously. This has created dissatisfaction and uncertainty, and is especially problematic for future MEA negotiations. So far however, trade measures in widely-supported MEAs have not been challenged internationally. Several proposals have been made on how this current situation could be formalised in the WTO framework, but none has yet attracted consensus. Policy dialogue and co-ordination on the use of trade measures in MEAs has however improved significantly in recent years.

ANNEX:
MEMBERSHIP IN THREE MEAS AND THE WTO

Organisation / *Member*	***CITES***	***Basel Convention***	***Montreal Protocol***	***WTO***
Afghanistan	*P*	*NP*	*NP*	*NP*
Algeria	*P*	*NP*	*P*	*NP*
Angola	*NP*	*NP*	*NP*	*P*
Antigua & Barbuda	*P*	*P*	*P*	*P*
Argentina	*P*	*P*	*P*	*P*
Australia	*P*	*P*	*P*	*P*
Austria	*P*	*P*	*P*	*P*
Azerbaijan	*NP*	*NP*	*P*	*NP*
Bahamas	*P*	*P*	*P*	*NP*
Bahrain	*NP*	*P*	*P*	*P*
Bangladesh	*P*	*P*	*P*	*P*
Barbados	*P*	*P*	*P*	*P*
Belarus	*P*	*NP*	*P*	*NP*
Belgium	*P*	*P*	*P*	*P*
Belize	*P*	*P*	*P*	*P*
Benin	*P*	*P*	*P*	*P*
Bolivia	*P*	*P*	*P*	*P*
Bosnia and Herzegovina	*NP*	*NP*	*P*	*NP*
Botswana	*P*	*P*	*P*	*P*
Brazil	*P*	*P*	*P*	*P*
Brunei Darussalam	*P*	*NP*	*P*	*P*
Bulgaria	*P*	*P*	*P*	*P*
Burkina Faso	*P*	*NP*	*P*	*P*
Burundi	*P*	*P*	*P*	*P*
Cambodia	*P*	*NP*	*NP*	*NP*
Cameroon	*P*	*NP*	*P*	*P*
Canada	*P*	*P*	*P*	*P*
Central African Republic	*P*	*NP*	*P*	*P*
Chad	*P*	*NP*	*P*	*P*
Chile	*P*	*P*	*P*	*P*
China	*P*	*P*	*P*	*NP*
Colombia	*P*	*P*	*P*	*P*
Comoros	*P*	*P*	*P*	*NP*
Congo, Democratic Republic of	*P*	*P*	*P*	*P*
Congo	*P*	*NP*	*P*	*P*
Costa Rica	*P*	*P*	*P*	*P*
Cote d'Ivoire	*P*	*P*	*P*	*P*
Croatia	*NP*	*P*	*P*	*NP*
Cuba	*P*	*P*	*P*	*P*
Cyprus	*P*	*P*	*P*	*P*
Czech Republic	*P*	*P*	*P*	*P*

Organisation / ***Member***	***CITES***	***Basel Convention***	***Montreal Protocol***	***WTO***
Denmark	*P*	*P*	*P*	*P*
Djibouti	*P*	*NP*	*NP*	*P*
Dominica	*P*	*P*	*P*	*P*
Dominican Republic	*P*	*NP*	*P*	*P*
Ecuador	*P*	*P*	*P*	*P*
Egypt	*P*	*P*	*P*	*P*
El Salvador	*P*	*P*	*P*	*P*
Equatorial Guinea	*P*	*NP*	*NP*	*NP*
Eritrea	*P*	*NP*	*NP*	*NP*
Estonia	*P*	*P*	*P*	*NP*
Ethiopia	*P*	*NP*	*P*	*NP*
Fiji	*P*	*NP*	*P*	*P*
Finland	*P*	*P*	*P*	*P*
France	*P*	*P*	*P*	*P*
Gabon	*P*	*NP*	*P*	*P*
Gambia	*P*	*P*	*P*	*P*
Georgia	*P*	*NP*	*P*	*NP*
Germany	*P*	*P*	*P*	*P*
Ghana	*P*	*NP*	*P*	*P*
Greece	*P*	*P*	*P*	*P*
Grenada	*NP*	*NP*	*P*	*P*
Guatemala	*P*	*P*	*P*	*P*
Guinea	*P*	*P*	*P*	*P*
Guinea-Bissau	*P*	*NP*	*NP*	*P*
Guyana	*P*	*NP*	*P*	*P*
Haiti	*NP*	*NP*	*NP*	*P*
Honduras	*P*	*P*	*P*	*P*
Hong Kong, China	*NP*	*NP*	*NP*	*P*
Hungary	*P*	*P*	*P*	*P*
Iceland	*NP*	*P*	*P*	*P*
India	*P*	*P*	*P*	*P*
Indonesia	*P*	*P*	*P*	*P*
Iran, Islamic Republic of	*P*	*P*	*P*	*NP*
Ireland	*NP*	*P*	*P*	*P*
Israel	*P*	*P*	*P*	*P*
Italy	*P*	*P*	*P*	*P*
Jamaica	*P*	*NP*	*P*	*P*
Japan	*P*	*P*	*P*	*P*
Jordan	*P*	*P*	*P*	*NP*
Kazakhstan	*NP*	*NP*	*P*	*NP*
Kenya	*P*	*NP*	*P*	*P*
Kiribati	*NP*	*NP*	*P*	*NP*

Organisation / ***Member***	***CITES***	***Basel Convention***	***Montreal Protocol***	***WTO***
Korea, Dem. People's Republic of	*NP*	*NP*	*P*	*NP*
Korea, Republic of	*P*	*P*	*P*	*P*
Kuwait	*NP*	*P*	*P*	*P*
Kyrgyzstan	*NP*	*P*	*NP*	*P*
Lao People's Democratic Republic	*NP*	*NP*	*P*	*NP*
Latvia	*P*	*P*	*P*	*P*
Lebanon	*NP*	*P*	*P*	*NP*
Lesotho	*NP*	*NP*	*P*	*P*
Liberia	*P*	*NP*	*P*	*NP*
Libyan Arab Jamahiriya	*NP*	*NP*	*P*	*NP*
Liechtenstein	*P*	*P*	*P*	*P*
Lithuania	*NP*	*NP*	*P*	*NP*
Luxembourg	*P*	*P*	*P*	*P*
Macau	*NP*	*NP*	*NP*	*P*
Madagascar	*P*	*NP*	*P*	*P*
Malawi	*P*	*P*	*P*	*P*
Malaysia	*P*	*P*	*P*	*P*
Maldives	*NP*	*P*	*P*	*P*
Mali	*P*	*NP*	*P*	*P*
Malta	*P*	*NP*	*P*	*P*
Marshall Islands	*NP*	*NP*	*P*	*NP*
Mauritania	*P*	*P*	*P*	*P*
Mauritius	*P*	*P*	*P*	*P*
Mexico	*P*	*P*	*P*	*P*
Micronesia, Federal States of	*NP*	*P*	*P*	*NP*
Moldova	*NP*	*NP*	*P*	*NP*
Monaco	*P*	*P*	*P*	*NP*
Mongolia	*P*	*P*	*P*	*P*
Morocco	*P*	*P*	*P*	*P*
Mozambique	*P*	*P*	*P*	*P*
Myanmar	*P*	*NP*	*P*	*P*
Namibia	*P*	*P*	*P*	*P*
Nepal	*P*	*P*	*P*	*NP*
Netherlands	*P*	*P*	*P*	*P*
New Zealand	*P*	*P*	*P*	*P*
Nicaragua	*P*	*P*	*P*	*P*
Niger	*P*	*P*	*P*	*P*
Nigeria	*P*	*P*	*P*	*P*
Norway	*P*	*P*	*P*	*P*
Oman	*NP*	*P*	*NP*	*NP*

Organisation ***Member***	***CITES***	***Basel Convention***	***Montreal Protocol***	***WTO***
Pakistan	*P*	*P*	*P*	*P*
Panama	*P*	*P*	*P*	*P*
Papua New Guinea	*P*	*P*	*P*	*P*
Paraguay	*P*	*P*	*P*	*P*
Peru	*P*	*P*	*P*	*P*
Philippines	*P*	*P*	*P*	*P*
Poland	*P*	*P*	*P*	*P*
Portugal	*P*	*P*	*P*	*P*
Qatar	*NP*	*P*	*P*	*P*
Romania	*P*	*P*	*P*	*P*
Russian Federation	*P*	*P*	*P*	*NP*
Rwanda	*P*	*NP*	*NP*	*P*
Saint Kitts & Nevis	*P*	*P*	*P*	*P*
Saint Lucia	*P*	*P*	*P*	*P*
Saint Vincent and the Grenadines	*P*	*P*	*P*	*P*
Samoa	*NP*	*NP*	*P*	*NP*
Saudi Arabia	*P*	*P*	*P*	*NP*
Senegal	*P*	*P*	*P*	*P*
Seychelles	*P*	*P*	*P*	*NP*
Sierra Leone	*P*	*NP*	*NP*	*P*
Singapore	*P*	*P*	*P*	*P*
Slovak Republic	*P*	*P*	*P*	*P*
Slovenia	*NP*	*P*	*P*	*P*
Solomon Islands	*NP*	*NP*	*P*	*P*
Somalia	*P*	*NP*	*NP*	*NP*
South Africa	*P*	*P*	*P*	*P*
Spain	*P*	*P*	*P*	*P*
Sri Lanka	*P*	*P*	*P*	*P*
Sudan	*P*	*NP*	*P*	*NP*
Suriname	*P*	*NP*	*P*	*P*
Swaziland	*P*	*NP*	*P*	*P*
Sweden	*P*	*P*	*P*	*P*
Switzerland	*P*	*P*	*P*	*P*
Syrian Arab Republic	*NP*	*P*	*P*	*NP*
Tajikistan	*NP*	*NP*	*P*	*NP*
Tanzania, United Republic of	*P*	*P*	*P*	*P*
Thailand	*P*	*P*	*P*	*P*
The Former Yugoslav Republic of Macedonia	*NP*	*P*	*P*	*NP*
Togo	*P*	*NP*	*P*	*P*
Tonga	*NP*	*NP*	*P*	*NP*
Trinidad and Tobago	*P*	*P*	*P*	*P*
Tunisia	*P*	*P*	*P*	*P*
Turkey	*P*	*P*	*P*	*P*
Turkmenistan	*NP*	*P*	*P*	*NP*

Organisation ***Member***	***CITES***	***Basel Convention***	***Montreal Protocol***	***WTO***
Tuvalu	*NP*	*NP*	*P*	*NP*
Uganda	*P*	*NP*	*P*	*P*
Ukraine	*NP*	*NP*	*P*	*NP*
United Arab Emirates	*P*	*P*	*P*	*P*
United Kingdom	*P*	*P*	*P*	*P*
USA	*P*	*NP*	*P*	*P*
Uruguay	*P*	*P*	*P*	*P*
Uzbekistan	*P*	*P*	*P*	*NP*
Vanuatu	*P*	*NP*	*P*	*NP*
Venezuela	*P*	*P*	*P*	*P*
Viet Nam	*P*	*P*	*P*	*NP*
Yemen	*P*	*P*	*P*	*NP*
Yugoslavia	*NP*	*NP*	*P*	*NP*
Zambia	*P*	*P*	*P*	*P*
Zimbabwe	*P*	*NP*	*P*	*P*
European Community	*NP*	*P*	*P*	*P*
TOTAL (183)	*144*	*121*	*168*	*134*

P = Party
NP = non-Party

Source:
CITES: http://www.wcmc.org.uk:80/CITES/english/parties1.htm
Basel Convention: http://www.unep.ch/basel
Montreal Protocol: http://www.unep.ch/ozone/ratif.htm
WTO: http://www.wto.org/wto/about/organsn6.htm

NOTES AND REFERENCES

1. The three case studies on CITES, the Montreal Protocol and the Basel Convention are available, respectively, as unclassified OECD documents OCDE/GD(97)106; OCDE/GD(97)230; and COM/ENV/TD(97)41/FINAL. On-line they can be found at: http://www.oecd.org/ech/index_2.htm.

2. Peter H. Sand (1997), "Commodity or Taboo? International Regulation of Trade in Endangered Species", *Green Globe Yearbook 1997*, Fridtjof Nansen Institute, Oslo (advance draft). The author was Secretary General of CITES from 1978 to 1981.

3. UNEP statement to the WTO Committee on Trade and Environment, 23 July 1998, p.9.

4. P. Hagen and R. Housman, "The Basel Convention", p.132. in Robert Housman et al.(1995*), The Use of Trade Measures in Select Multilateral Environmental Agreements*, No. 10, UNEP Environment and Trade Series.

5. This description is taken from Iwona Rummel-Bulska "The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal and the Trade and Environment Issue", paper presented January 19, 1996 at New York University Law School at a Conference "Trade and Environment: Challenges for 1996" sponsored by the Global Environment and Trade Study.

6. The objectives of trade measures in MEAs listed here draw in large part on the typology created by Steve Charnovitz in "The Role of Trade Measures in Treaties" Chapter 7, *Trade and the Environment: Bridging the Gap*, (Agata Fijalkowski and James Cameron, eds), Cameron May, London 1998.

7. "Cairo Ministerial meeting Links Climate Change and Ozone Solutions", UNEP News Release 1998/122.

8. World Trade in Crocodilian Skins, 1992-1993, prepared under contract to the International Alligator and Crocodile Trade Study, World Conservation Monitoring Centre, April 1996.

9. See OECD Publications *Transfrontier Movements of Hazardous Wastes, 1989-90 statistics; 1991 statistics and 1992-93 statistics,* and the Joint Session report "Trade Measures in the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal", COM/ENV/TD(97)41/Final.

10. C. de Klemm, *Guidelines for Legislation to Implement CITES*, IUCN Environmental Policy and Law Paper No. 26, 1993.

11. S. Nash, *Making CITES Work*, a WWF Report, WWF (UK), 1994.

12. Secretariat of the Basel Convention, *The Basel Convention: A Global Solution for Controlling Hazardous Wastes*, United Nations, New York and Geneva, May 1997.

13. UK Department of the Environment, "Why is there Environmental Crime? the financial incentives", Working paper prepared for Combating Environmental Crime Workshop, October 1996.

14. *The Economist*, 19 September 1997.

15. *United States – Import prohibition of certain shrimp and Shrimp products,* report of the Appellate Body, WT/DS58/AB/R, quoting the Report of the Committee on Trade and Environment, forming part of the Report of the General Council to Ministers on the occasion of the Singapore Ministerial Conference.

16. NAFTA parties explicitly addressed this issue, stating in Article 104 that insofar as specified environmental agreements, including the Basel Convention, contain their own dispute settlement processes, they will take precedence over the applicable dispute settlement processes of the NAFTA.

17. The question of "likeness" could, of course, also be relevant under other provisions of the General Agreement.

18. *United States - Standards for Reformulated and Conventional Gasoline*, Report of the Appellate Body, WTO document WT/DS2/AB/R, p. 16.