



ODS IMPORT/EXPORT LICENSING SYSTEMS

RESOURCE MODULE

Phasing out ODS in Developing Countries

POLICY DESIGN AND SETTING UP OF LEGISLATION

United Nations Environment Programme
Industry and Environment



Multilateral Fund for the Implementation
of the Montreal Protocol



Stockholm Environment Institute



OzonAction Programme

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1998



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Foreword

Mounting scientific research has implicated chlorofluorocarbons (CFCs), halons, carbon tetrachloride, methyl chloroform, hydrochlorofluorocarbons (HCFCs) and methyl bromide in the depletion of the stratospheric ozone layer, the segment of the earth's atmosphere which protects animal and plant life from the damaging effects of ultraviolet radiation. In September 1987, nations concerned about this crisis signed the Montreal Protocol, a landmark agreement that identified the major ozone-depleting substances (ODS) and established a timetable for the reduction and eventual elimination of their use.

In July 1999, the first Montreal Protocol obligation applicable to developing countries will come into effect: developing countries need to freeze their consumption of the five main CFCs to the average consumption level during the years 1995 to 1997. During the following years further reductions will be required for the CFCs as well as for the other controlled substances. This poses a particular challenge to developing countries.

In meeting this challenge developing countries need to undertake a comprehensive national phase-out programme which will require the establishment of an appropriate policy and regulatory framework, as well as monitoring and control tools. Controls on the supply of the ozone depleting substances will play an important role in this context. The introduction of import and export licensing systems has become mandatory for all Parties to the Montreal Protocol. Such systems represent also a key measure for collection of data to monitor the ODS consumption.

The objective of this guidebook is to assist the developing country governments in the design and establishment of the import/export licensing systems. It is primarily written for government officers in charge of designing and implementing strategies to phase out the ODS and for their colleagues in authorities in charge of import and export controls in general. The intention is to provide practical help and step-by-step guidance for the design and implementation of ODS import and export controls. The main emphasis is on import controls.

The resource module is based on experience from various developed and developing countries where import and export licensing systems are already in place. It is hoped that this experience will be of value for those who will now set up new legislation as well as for those who would like to modify an existing system. With a wider application it is likely that more experience will emerge. UNEP IE welcomes comments and suggestions how this resource module could be improved and will consider them in future editions and activities.

The step-by-step methodology may also be useful when designing other policy and legislative measures to support the ODS phase-out programme.

This resource module is part of a series of documents produced by UNEP within its OzonAction Programme under the Multilateral Fund. For information on related documents, see Chapter 1.6. More information is available in the World Wide Web at <http://www.unepie.org/ozonaction.html>.

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Abbreviations, acronyms and definitions

Abbreviations and acronyms

ASHRAE	American Society of Heating, Refrigeration and Air-conditioning Engineers
CAS	Chemical Abstracts Registration Numbers
CCC	Customs Co-operation Council, also named the World Customs Organisation (WCO)
CFC	Chlorofluorocarbons
CP	Country Programme (a programme to phase out ozone depleting substances)
DIW	Department of Industrial Works, Thailand
DOE	Department of Environment, under the Ministry of Science, Technology & Environment, Malaysia
EPA	In this publication: the federal Environment Protection Agency in Australia
EU	European Union
HBFCs	Hydrobromofluorocarbons
HCFCs	Hydrochlorofluorocarbons
HFCs	Hydrofluorocarbons
HS	Harmonized Commodity Description and Coding System (known as the "Harmonized System", the international customs coding system)
MAC	Mobile air-conditioning
MF	Multilateral Fund Under the Montreal Protocol
MIDA	Malaysian Industrial Development Authority
MITI	Ministry of International Trade & Industry, Malaysia
MP	Montreal Protocol on Substances that Deplete the Ozone Layer
NSC	National Steering Committee on Ozone Layer Protection, Malaysia
ODS	Ozone Depleting Substances (= chemicals controlled under the Montreal Protocol)
ODP	Ozone Depleting Potential
ODSONET/SEAP	ODS Officers' Network for Southeast Asia & the Pacific
RMP	Refrigeration Management Plan (strategy to phase out the use of ozone depleting refrigerants)
SEI	Stockholm Environment Institute
STOC	Solvent Technical Options Committee (one of the technical assessment committees under the Montreal Protocol)
TDB	Trade Development Board, Singapore
UNEP	United Nations Environment Programme
UNEP IE	UNEP's Industry and Environment Centre in Paris
WCO	World Customs Organisation

Definitions

Montreal Protocol (MP)	"The Montreal Protocol on Substances that Deplete the Ozone Layer", international agreement, signed in 1987 and amended and/or adjusted in London (1990), Copenhagen (1992), Vienna (1995) and Montreal (1997).
Annex A substances	Ozone depleting substances listed in Annex A of the Montreal Protocol: Group I: CFC 11, 12, 113, 114 and 115 Group II: Halon 1211, 1301 and 2402
Annex B substances	Ozone depleting substances listed in Annex B of the Montreal Protocol: Group I: ten "Other CFCs" (most of them not in commercial use) Group II: carbon tetrachloride Group III: 1,1,1-trichloroethane
Annex C substances	Ozone depleting substances listed in Annex C of the Montreal Protocol: Group I: 38 HCFCs (some 5-10 in commercial use) Group II: 34 HBFCs (most of them not in commercial use)
Annex D products	List of products containing controlled substances specified in Annex A of the Montreal Protocol which may not be imported from countries which are not Parties to the Protocol
Annex E substance	Methyl bromide
	<i>For a full specification of Annex A, B, C and E substances, see the corresponding annexes in the Montreal Protocol.</i>
London Amendment	Refers to amendments decided by the Second Meeting of the Parties to the Montreal Protocol in London 1990 whereby controls on Annex B substances were added. At this meeting, the phase-out schedules for Annex A substances were also accelerated.
Copenhagen Amendment	Refers to amendments decided by the Fourth Meeting of the Parties to the Montreal Protocol in Copenhagen 1992 whereby controls on Annex C and E substances were added. At this meeting, the phase-out schedules for Annex A and B substances were also accelerated.
Montreal Amendment	Refers to amendments decided by the Ninth Meeting of the Parties to the Montreal Protocol in Montreal 1997 whereby, inter alia, requirements on import and export licensing systems were introduced. At the same meeting, phase-out schedules for methyl bromide were accelerated.

Article 5 (Art. 5) countries	Developing countries with a consumption of "Annex A substances" of less than 0.3 kg/capita; "Article 5 countries" are granted a grace period (for most substances ten years) to phase out the ozone depleting substances and are entitled to technical and financial support from the Multilateral Fund; <i>For a full definition see the Montreal Protocol, Art. 5, p.1</i>
Non-Article 5 countries	All other Parties to the Montreal Protocol (mainly developed countries)
Multilateral Fund (MF)	Multilateral Fund Under the Montreal Protocol: a fund set up to assist developing countries which are classified as Art.5 countries
ODP tonne	The calculated quantity in tonne of an ozone depleting substance when the metric tonnage is multiplied with the ozone depletion potential (ODP) of the substance in question
National Ozone Unit	Government unit in charge of preparing and coordinating strategies to phase-out ozone depleting substances
ODS Officers	Government officers in charge of ODS issues on a daily basis

Guide to the Reader

1. Purpose and Target Groups

All Parties to the Montreal Protocol must eliminate the production and consumption of ozone depleting substances (ODS) according to specified phase-out schedules. "Consumption" is in this context defined as "imports plus production minus exports". This resource module is intended to assist government officers in developing countries in their work to meet these commitments.

The focus is on how to design and implement a licensing system for ODS imports and exports. Such systems will soon be mandatory for all Parties. The resource module is primarily written for government officers in charge of coordinating and implementing strategies to phase out ODS and their colleagues at ministries in charge of controlling imports and exports in general.

The same general methodology as described in this resource module can also be used in developing other ODS laws and regulations, for instance to control ODS production or the use for specified applications (end use controls). The issues to be decided and the bodies and persons to become involved will, however, be different.

2. How to Use the Resource Module

The resource module is structured as shown in **Figure 1**.

Chapters 1-4 are intended to assist the ODS officers and their colleagues at ministries in charge of import/export controls to prepare a proposal for an ODS import and export licensing system, in consultation with their superiors. **Annex A** supplements the text in these chapters.

Chapter 5 is intended for the officers who draft the legal text. This can imply incorporating an ODS licensing systems in an existing legislation or designing new laws or regulations specifically for the ODS.

Many countries might find a national workshop a suitable tool to arrive at a political decision on these issues. **Chapter 6** contains suggestions on how such a workshop could be set up. **Chapter 1-5** could at this stage be used as a basis for preparing presentations at the workshop. Additional material that could be used for the workshop is included in **Annex B**.

Others might prefer to circulate documents for comments between the relevant government authorities and discuss the proposals informally. The options and implications with regard to various possible structures of an ODS licensing system must be considered early, regardless of whether a national workshop is desired or not. The substantive issues are therefore dealt with first, before discussing the design of a national workshop.

Chapter 4 is also intended for use during the *implementation* of a licensing system. This relates to issues such as drafting application forms and information to importers, recording data, training customs officers and collaboration with the customs officers in general. **Annex C** contains material which can be of use at this stage.

Import and *export* licensing requirements are dealt with separately to avoid mixing too many issues at the same time, as the relevant issues partly are of a different character. In the final implementation they are, however, likely to be part of the same system.

3. Comments on Terminology

Import/export licences

Countries which have introduced ODS import licensing systems have resorted to different terms for various types of official approvals during the process. These differences in terminology can cause confusion and misunderstanding when reviewing systems in other countries if not carefully noted. The difficulties can be illustrated by the following examples.

One type of approval is the approval of a right to import a certain maximum quantity during a given year or other specified period. Various terms are used, such as "*allowance*" (e.g. Canada), "*quota*" (e.g. EU, Australia, New Zealand and Singapore) and "*permit*" (e.g. Thailand and Malaysia).

Another type of approval requiring a term of its own is the clearance of an individual shipment against the allowance/quota/permit referred to above. In some countries this is called "*clearance*" (e.g. Thailand, the Philippines), in others "*import licence*" (e.g. EU) or "*import permit*" (e.g. Canada).

Some countries use the term "*licence*" as a term indicating that the importer is registered and therefore, in general terms, qualified to import ODS (e.g. Australia, Singapore and Thailand).

The term "*import permit*" is also used by some for approval on a case-by-case basis without relation to the broader allowance (e.g. Canada).

There is finally also a need to describe the general concept that an approval from the appropriate authority is needed before a controlled substance can be imported or exported, without specifying how the legislation is structured in detail. The term "*import and export licensing systems*" is used in this sense in the new Article 4B of the Protocol.

Fig. 1. Structure of the Resource Module

Chapter 1. The role of an import/export licensing system in overall ODS controls	Short overview on the policy and regulatory framework to phase out ODS: <ul style="list-style-type: none"> - summarizes the phase-out schedules - outlines basic elements of an ODS control strategy - describes the role of import/export licences - highlights the links between import licences and user controls, in particular for ODS refrigerants (RMPs)
Chapter 2. Designing an Import Licensing System	Describes what basic decisions the government must take when designing an <i>import</i> licensing system and gives examples on decisions taken by some developed and developing countries.
Chapter 3. Implementing an Import Licensing System	Deals with the implementation of import controls. This covers issues such as: <ul style="list-style-type: none"> - information to importers - application and approval of import licences - collaboration with and training of customs officers - collection, recording and cross-checking of import data - tracking illegal imports
Chapter 4. Export Licensing Systems	Covers similar issues as Chapter 2-3 with regard to <i>export</i> licences. Gives suggestions for collaboration between exporting and importing countries.
Chapter 5. Drafting Legislation on Import/export Licensing Systems	Recalls issues to consider when transformation the substantive decisions on issues mentioned above into legal text. Provides a checklist for legal drafters.
Chapter 6. National Workshops as a Tool in Setting Up Licensing Systems	Describes how national workshops can be used as a tool to arrive at a government decision on all issues involved.
Annex A	Supplements text in the main chapters.
Annex B	Contains material for use in preparation and implementation of national workshops.
Annex C	Contains material for use during the implementation of an import/export licensing system.
Annex D Programme	Additional information on UNEP IE's OzonAction

In this guidebook we have tried to use the terms which could be spontaneously best understood, while following the Protocol terminology as closely as possible (see Figure 2). In the description of systems in place in various countries, the country's own terminology is, however, generally maintained.

Every country will ultimately have to find the terminology which is most suitable for its own conditions.

Officers and authorities in charge of ODS strategies

The responsibility to coordinate ODS strategies and the power to take decisions on ODS issues vary from country to country. In most countries, one ministry or agency is given the principal responsibility, even though other ministries or agencies are also involved within the limits of their competence. The choice varies widely. The task is in many countries assigned to the Ministry of Environment or an authority under that ministry, but it can also be assigned for instance to a Ministry of Industry, or a department or authority with competence on meteorological issues. This leading ministry or authority is here called the "*authority in charge of ODS strategies (issues)*".

The developing countries receive support from the Montreal Protocol's Multilateral Fund to enable them to set up small units of officers in charge of preparing and coordinating strategies to eliminate the ODS as a daily task, through so called Institutional Strengthening Projects. These officers are commonly called "ODS Officers". The units have different names in different countries, but a common name is "National Ozone Unit". This term is used here. The National Ozone Unit is naturally placed within the ministry or other authority with the main responsibility for ODS issues.

In most cases, the formal decisions are not taken by the ODS officers but on a higher level. Therefore, reference is here primarily made to "the authority in charge" when formal decisions are needed, while reference is made to the "National Ozone Unit" or the "ODS Officers" with regard to issues of a more preparatory or implementary character.

Some countries have a "*National Coordinating Committee on the Protection of the Ozone Layer*", with representatives from various ministries and sometimes also from the private sector and non-governmental organisations. These committees are normally chaired by the authority with the main responsibility for ozone issues. The function of these committees is generally to give advice and to guide but not to take formal decisions.

Fig. 2 Terminology

"import/export licensing system"	the general concept that ODS import and exports must be approved in advance
"import/export licence"	corresponding broad term with no specific denotation on its exact meaning
"allowance"	allowance to import a specified maximum quantity during a given period
"clearance"	clearance of a specific import shipment within the framework of a broader allowance
"import permit"	import licence valid for one specified import only
"authority in charge of ODS strategies"	ministry or agency with the main responsibility for ODS issues
"ODS Officers"	officers in charge of preparing and coordinating ODS strategies on a daily basis
"National Ozone Unit" (NOU)	the unit to which the ODS Officers belong
"legislation"	used in a general sense without indication on which body has the right to issue or amend it (unless otherwise apparent from the text)
"act", "law"	legislation issued by a parliament or corresponding body
"regulation"	legislation issued by the Government (Cabinet), a Minister or other authorized governmental authority

1. The role of Import & Export Licences in Overall ODS Legislation

1.1. Developing Country Obligations under the Montreal Protocol

The Montreal Protocol obliges developing countries to freeze their annual consumption and production of CFC 11, 12, 113, 114 and 115 at the average 1995-1997 level from 1 July, 1999. The consumption and production must then be reduced by 50 per cent by 2005, by 85 per cent by 2007 and completely eliminated by 2010. In parallel, similar reductions must be achieved for other ozone depleting substances (ODS), as summarized in Figure 3. The chemicals are combined in groups or "baskets", with the reduction requirements applicable to the group as a whole. For a full list of the controlled substances, see **Annex C-1**.

Fig. 3. ODS Phase-out Schedules for "Art. 5 Countries"

Applicable from	1999	2002	2003	2005	2007	2010	2015	2016...2040
Annex A¹⁾								
base level: 1995-1997								
Gr. I: the 5 main CFCs	freeze			-50%	-85%	0		
Gr. II: Halons		freeze		-50%		0		
Annex B²⁾								
base level: 1998-2000								
Gr. I: Other CFCs			-20%		-85%	0		
Gr. II: Carbon tetrachloride					-85%	0		
Gr. III: 1,1,1-trichloroethane			freeze	-30%		-70%	0	
Annex C³⁾								
base level: 2015								
Gr. I: HCFCs (consumption only)								freeze . . . 0
Annex E³⁾								
base level: 1995-1998								
Methyl bromide		freeze		-20%			0	
<i>(HBFCs, Annex C, Gr.II, shall have been phased out by all Parties already by 1 Jan. 1996)</i>								

1) Applicable to all developing countries which are classified as "Art.5 countries"								
2) Applicable to Art. 5 countries which have ratified the London Amendment								
3) Applicable to Art. 5 countries which have ratified the Copenhagen Amendment								
Per 15 November 1997, 117 Parties had ratified the London Amendment and 73 also the Copenhagen Amendment. It is expected that, over time, all Parties to the Montreal Protocol will ratify these amendments.								

ODS consumption = imports + production - exports The Montreal Protocol defines "consumption" as "import + production - export". Only a few developing countries produce ODS. The total amounts of ODS imports minus the ODS exports define therefore the total ODS consumption for most countries.

1.2. Control Strategy to Phase Out ODS

Each government must introduce a strategy with control measures which are extensive enough to ensure that the government will, as a minimum, meet the above obligations. Many countries may prefer to eliminate the use of ODS at an even faster rate, as in the case of Costa Rica, Ghana, Malaysia, Peru, Senegal and Vietnam.

Prevent growth! A first important step is to prevent growth in ODS consumption. This is important both from an environmental and a socio-economic point of view. It is more costly to change an already established installation or use pattern than to plan for an alternative technology from the start. From the government's perspective, it is therefore important to prevent the installation of new ODS equipment and the establishment of new uses of ODS as early as possible.

Comprehensive, long term planning and early action required! The overall strategy and the control measures must be comprehensive enough to phase out all types of ODS use. This includes not only the use by larger industries but also the dispersed, but collectively substantive use by many small enterprises and individual users. This small scale use accounts for a substantial - and in many countries the major - part of the ODS consumption. Typical small-scale use includes the utilization of ODS as refrigerants, as solvents and cleaning agent, for fire fighting, as a pesticide for fumigation and in production of aerosols by small enterprises. Long-term planning by the government and early action are required to achieve successful results with regard to these small scale uses.

Legislation must be reasonable, well known and properly enforced Laws and regulations remain the most reliable tool for achieving intended results. They must, however, be reasonable and properly implemented and enforced. The time allowed for the users to change over to alternative technology should be realistic. Ensuring public awareness and education, aimed at ensuring wide acceptance by the industry and the public in general at large, are also key components of any strategy.

Legislation can be supported by economic incentives and disincentives Regulatory controls can be supported by economic incentives and disincentives, such as differentiated duties and taxes, high fees for approved exemptions, etc. Some countries have for instance introduced taxes and/or higher duties on CFCs (e.g. Denmark and US), or reduced the duties on non-ODS chemicals. Other countries have decreased the duties for equipment designed for use of non-ODS-technology and equipment to recycle CFCs (e.g. Malaysia and Thailand). Exemptions from a ban on ODS

for certain applications can be subject to high fees which are progressively increased year by year (Sweden). Such taxes, duties and fees eliminate the economic advantage of using the relevant ODS, compared to the use of alternative technology. Financial assistance can be given to companies who convert to non-ODS technologies. A typical example is the assistance provided through the Multilateral Fund. Special reduced tax schemes and technical support for small and medium size enterprises have been introduced in some countries (e.g. Singapore).

ODS legislation can target the supply of ODS, or the demand for these chemicals, but preferably both. The ODS supply always tends to find its way to the users as long as there is a demand for it - be it through illegal imports or by pressure on the government to allow enough supply to cover the demand. Many developed countries have experienced this. Most well known is the smuggling of CFC 12 refrigerants into US and the European Union. On the other hand, with no control on supply, suppliers are likely to market their products strongly. Users will then be less aware that their needs can be met with alternatives to ODS, or will be resistant to try such alternatives.

Preferably, target both supply and demand!

Examples of possible options for legal controls on ODS are indicated in Figure 4.

Fig 4. Examples of ODS Legislation

Controls on supply

- bans on import, production and/or sale of specified ODS by specified dates
- gradual limitation on rights to import and produce specified ODS
- bans on import and/or sale of certain products/equipment (e.g. aerosols, MAC equipment designed for CFC 12, disposable CFC refrigerant containers, second hand equipment designed for use of CFCs)
- labelling requirements
- import notification requirements

End use controls

- bans on use of specified ODS for defined applications, by specified dates
- controls on ODS emissions
- restrictions on the right to handle certain ODS (to persons with suitable training and equipment)

UNEP/SEI's guidebook "*Regulations to Control Ozone Depleting Substances*" summarizes laws and regulations introduced in some developed and developing countries, with reference to applicable legal text and to the authorities and officers involved in their implementation. The choice and combination of laws and regulations are, and will always be, highly country specific. The choice depends on many different factors such as the time when the decisions are (were) taken, the prevailing ODS use pattern, the political situation, the legal traditions, etc.

1.3. The Importance of Import and Export Licensing Systems

The ODS supply can be controlled through the introduction of an import and export licensing system. The objective of an import and export licensing system is to ensure that import and export of ODS does not take place unless the potential importer or exporter first applies for and obtains an import or export licence. Such systems serve several purposes (as summarized in **Figure 5**).

Fig. 5. Five Good Reasons for an Import/Export Licensing System

- ❑ Import/export licensing systems control the ODS supply
- ❑ Import and export licences make collecting information on imported and exported ODS quantities, by chemical, easier and more reliable (**Read Annex A-1!**)
- ❑ Import licences provide a gateway to controls on end uses
- ❑ Import licences facilitate control on illegal imports
- ❑ Import and export licensing systems become mandatory under the Montreal Protocol, per 1 January 2000.

Controls on supply make users aware

First, it makes it possible for the government gradually to limit and eventually to eliminate the supply in line with the country's obligations under the Protocol (this assumes that corresponding controls are also placed on ODS production in countries where this is relevant). Creating a scarcity of ODS supply before it is totally eliminated sends signals to the users to start looking for alternatives. It may drive the prices up and make the alternatives more competitive. This will also help the government to enforce other ODS laws and regulations.

Secondly, controls on imports and exports make it possible for the government to monitor the total ODS consumption in the country. The

government needs information on the imported and exported quantities of each controlled ODS in order to plan and structure its controls on ODS and to follow up their effectiveness. This information is also required to enable the government to report the country's imports and exports to the Ozone Secretariat as required under the Montreal Protocol.

Every country must monitor the imports and exports of each chemical annually. Many countries try to monitor the ODS consumption through customs statistics. It has, however proven difficult or even impossible to obtain reliable figures based on customs statistics. A basic and fundamental problem is that the customs statistics are built on the function of the goods, while the Montreal Protocol is primarily interested in their chemical composition. This is especially a problem with regard to mixtures containing ODS. Some ODS, e.g. CFC 115, are almost entirely traded as mixtures. These problems are summarized in **Annex A-1**, and described in more detail in UNEP's publication "*Monitoring Imports of Ozone Depleting Substances*". Import and export licences offer an easier and more adequate tool to monitor the ODS consumption. Under a licensing system, all importers and exporters can be required to report on imported or exported quantities directly to the authority in charge.

Identifying the importers through an import licensing system provides also a good starting point to identify the end users.

At the Ninth Meeting of the Parties (Montreal, September 1997), it was agreed that all Parties must introduce an import and export licensing system for ODS (see new Article 4B of the Montreal Protocol, reproduced in **Annex C-2**). This new obligation will be effective January 1, 2000 or three months after the amendment enters into force for the country, whichever is the latest.

Countries are free to structure their systems in the way they find most appropriate. The system should, however, be designed to help countries to prevent illegal trade in ODS and to facilitate data collection and reporting to the Ozone Secretariat. This includes also exchange of information between importing and exporting countries.

The system must apply to all ODS, whether virgin, used, recycled and reclaimed. Countries which find themselves unable to introduce import and export licensing systems immediately for HCFCs and methyl bromide may delay the application with regard to these chemicals, until 1 January, 2002 for methyl bromide and to 1 January, 2005 for HCFCs. It is, however, not advisable to do so, given that monitoring the consumption of both substances, but in particular of HCFCs, is difficult without an import licensing system. Many HCFCs are sold as blends. The quantities of each HCFCs can therefore not be monitored by customs statistics. This is difficult even with regard to the HCFCs when traded as

ODS data from customs statistics is not a good source

Should prevent illegal trade and facilitate good reporting

Should cover all ODS (new and used)

pure chemicals, as it is unlikely that the customs authorities will accept separate customs codes for more than, at best, the most common HCFCs.

Report on structure to the Ozone Secretariat!

Each Party should report to the Ozone Secretariat on the establishment and operation of its licensing system within three months of its introduction.

1.4. Refrigerant Management Plans and Links to Import Controls

The link between import licensing systems and end use controls is particularly strong with regard to the use of ODS refrigerant.

In many countries the most important application of CFCs and HCFCs is the use as refrigerants for various types of refrigeration and air-conditioning equipment - sometimes accounting for 75 per cent or more of the total ODS consumption. Refrigeration and air-conditioning equipments are designed for a specific type of refrigerant, have a long lifetime and are used everywhere. The major part of the consumption is caused by leakage and venting of the refrigerant gas during service and maintenance. Installations, servicing and maintenance are often handled by numerous small enterprises, partly belonging to the informal sector.

Substantial reductions of the consumption can be achieved through recovery, better maintenance and leak repairs. Ultimately, a transition to other non-ODS refrigerants must also be achieved. This cannot be achieved without changing the habits of the contractors and users involved.

Conditions in import licences can facilitate control on ODS refrigerants

An important element in reducing the use of ODS refrigerants is the establishment of a Refrigerants Management Plan (RMP) which includes training of service technicians, recovery and recycling systems, public awareness and suitable policy and regulatory framework. A part of such a strategy may be to limit the access to ODS refrigerants to enterprises which have proper training and equipment for recovery, repair, etc. An import licensing system can facilitate the controls in this context. Import licences can be coupled with conditions that the importer must keep records on his sales and that ODS refrigerants may be sold only to authorised enterprises. Such legislation is in place e.g. in Australia, Sweden and USA (see UNEP's publications *"Monitoring Imports of Ozone Depleting Substances"* and *"Regulations to Control Ozone Depleting Substances"*).

It is likely that the consumption of CFC refrigerants presently is growing in countries with a positive economic development, in particular if the tourism industry is expanding. Even the first Montreal Protocol requirement, to

freeze the CFC consumption at the average 1995-1997 level, by 1 July 1999 may then be difficult and in reality require a reduction of the current consumption level.

The CFCs mainly used as refrigerants are CFC 12, CFC 115 (as part of the mixture R 502) and CFC 11 (for large chillers). A more limited use exists with regard to CFC 114, for specialised applications in the military, and of CFC 13 (pure or as part of a mixture called R 503) for ultra low temperature refrigeration, used e.g. in hospitals and for freeze drying. Halon 1211 and 1301 are also occasionally used as refrigerants and are then called R 12B1 and R 13B1, respectively.

1.5. Controls on Import of Used ODS Equipment

Used equipment which is designed for use of CFCs and which therefore has become obsolete in developed countries is now often exported to developing countries at low prices. This can create problems for the authorities in charge of phasing out ODS as it maintains a sustained dependence on CFCs and makes the conversion to non-ODS technology uncompetitive.

The Ninth Meeting of the Parties therefore recommended developed countries to adopt appropriate measures, in co-operation with relevant developing countries, to control the export to developing countries of used products and equipment which rely on the supply of CFCs, halons, carbon tetrachloride or 1,1,1-trichloroethane for their continued functioning. This decision may be used as a basis for making contacts with the authority in charge of ozone issues in countries from which such used products are found to be exported. It is also important that developing countries themselves ban or restrict imports of such used products and equipment which they no longer wish to import.

Consider need for controls on used products

1.6. How to Find More Information on ODS controls

Several of UNEP IE's publications (as well as publications by some other international and bilateral agencies) contain information how ODS controls can be set up. Some of these are listed below (**Figure 6**). For a full list of documents and other resource material which is available from UNEP IE, see UNEP IE's leaflet "Stratospheric Ozone Protection Publications".

Fig. 6. Publications on Government Strategies to Phase Out ODS

UNEP: "Elements for Establishing Policies, Strategies and Institutional Framework for Ozone Layer Protection" (1995)	Gives a broad description of issues involved in establishing and implementing an ODS phase-out programme.
UNEP/SEI: "Monitoring Imports of Ozone Depleting Substances" - a Guidebook (1996)	Describes and analyzes ODS import controls and monitoring systems in countries belonging to the ODS Officers' Network for Southeast Asia and the Pacific (ODSONET/SEAP).
USEPA/UNIDO: "Reducing CFC Use in Refrigeration: Strategic Options for Countries with Low CFC Consumption" (1996)	Manual to assist ODS officers to collect data and develop cost-effective strategies to reduce the use of CFC Refrigerants.
UNEP/SEI: "Regulations to Control Ozone Depleting Substances - a Guidebook" (1996)	Contains summaries of ODS legislation in 36 developed and developing countries, with references to applicable laws and regulations, and to the authorities and officers involved in their implementation.
UNEP: Preliminary List of Trade Names of Chemical Products Containing Substances Under the Montreal Protocol and Trade Names of HFC Alternatives (1996)	Lists commercial trade names by producing company with information of content of controlled ODS and/or HFCs. Percentage of weight is given for some of the chemicals only. Contact information is included.
UNEP/SEI: "Government Strategies to Phase Out Ozone-Depleting Refrigerants - Four Case Studies from the Nordic Countries" (1997)	Compares government strategies to phase out ODS refrigerants in Denmark, Finland, Norway and Sweden.

2. Designing an Import Licensing System

This chapter presents the decisions that must be taken when designing an import licensing system. The crucial part in setting up legislation on an import licensing system is the "thinking process" - that is, what decisions to take on substantive issues. The law or regulation itself can be considered as the tip of the iceberg, representing a summary statement of all the decisions taken. Once the decisions on the substantive issues are taken, it is reasonably straightforward to draft the legal text.

It is important to note that import licensing systems can vary considerably, both in terms of their legal structure and in the way they can be implemented. The description of the principal decision steps outlined in this chapter should hopefully facilitate discussions between various stakeholders on the nature of the import licensing system and make it possible to decide on a system which takes into account all relevant aspects and suits the needs of the country.

The decision-making process can be divided into four principal steps as illustrated in **Figure 7** ("the decision tree"). Please, note that the decision tree takes its starting point in the design of an import licensing system. Underlying, but not covered here more than as far as it affects the licensing system, is the bigger issue of the country's total strategy to phase out all ODS.

The great variety in import licensing systems already in place in various countries illustrates the need to take decisions on the issues referred to above. Short summaries of the systems in place in Australia, Malaysia, New Zealand, the Philippines, Singapore, Sweden (EU) and Thailand are included in **Annex A-2**. A more detailed description can be found in UNEP's guidebook "*Monitoring Imports of Ozone Depleting Substances*", section 11.3, 8 and 10-14.

2.1. Defining objectives

The obvious starting point in designing an import licensing system is to consider its ultimate objectives. An import licensing system can either serve solely as a surveillance instrument to track the total quantity of ODS imported, or it can be used to control and limit the ODS supply in the country.

The crucial part is the decisions on substance

Import licensing systems can vary considerably

For examples, see Annex A-2

Step 1

When used to monitor ODS imports only In a system designed to serve as a *surveillance instrument*, requests for an import licence are generally approved once the requested information is submitted. An exception relates to cases where imports cannot be allowed under the terms and conditions of the Montreal Protocol, e.g. because the exporting country is not a Party to the Protocol. A surveillance type of licensing system is an effective tool to monitor the total import quantities but does not provide an opportunity to control and reduce the market availability of the ODS. In the past, Thailand used its licensing system this way. The present system in Mauritius also keeps track of the imports without real restrictions.

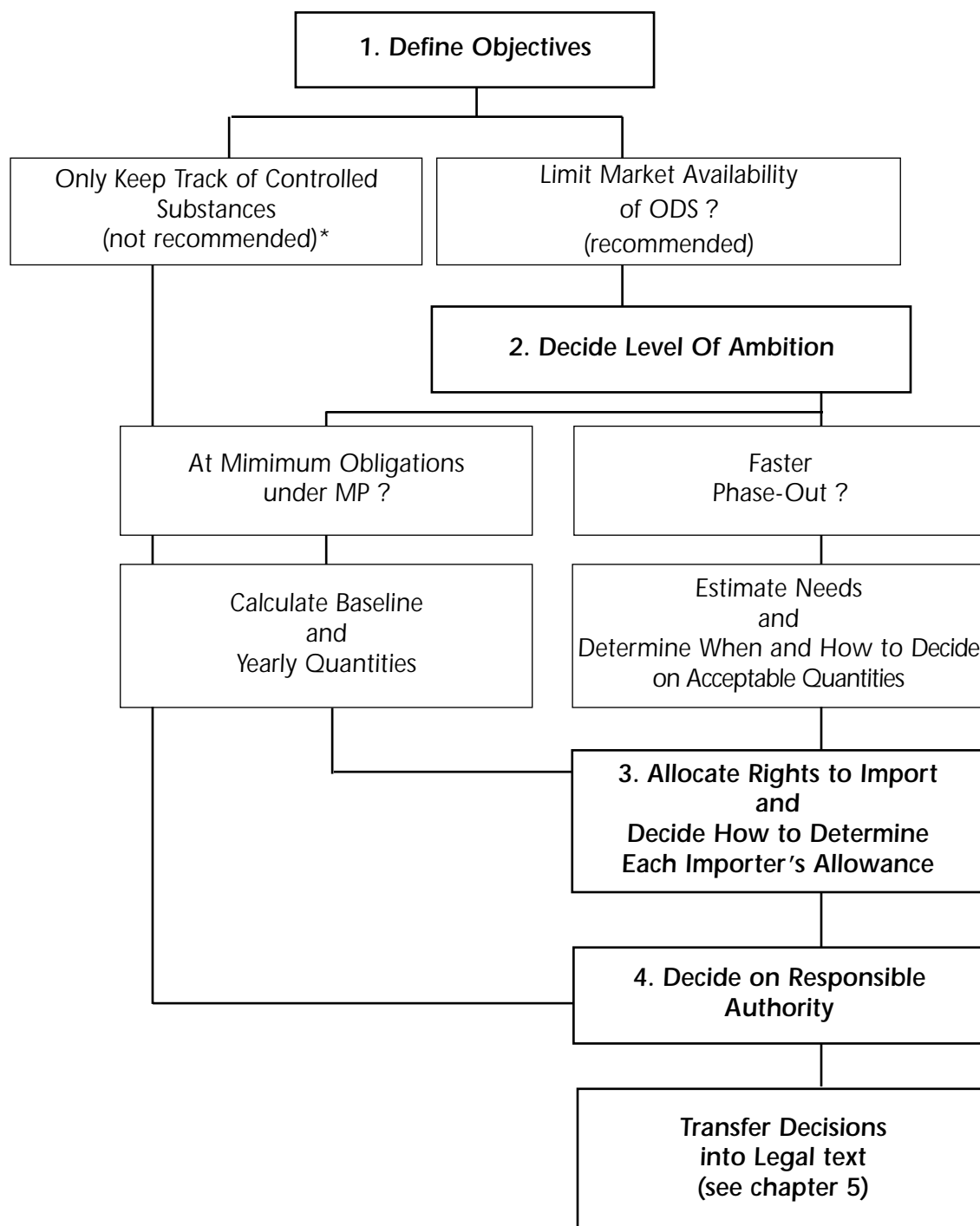
If the import licensing system will be used solely to track imported quantities of ODS, then the next decision required is only to designate the authority who will issue the licence (see the decision tree, Figure 7, Step 4).

Benefits compared to notification A licensing system designed as a surveillance instrument works very similar to plain notification requirements, however, with the following important differences. It gives the authority in charge greater possibilities to request information and it allows the possibility to attach conditions, e.g. on subsequent reporting. Compared to a notification system, a licensing system of surveillance type has also the advantage of providing the authority in charge the legal power to deny approval; as a consequence, it can be turned into a tool to limit and control the ODS import without further legislation. The requirement to have a licence has in itself some initial psychological effects on the imported quantities, in particular if coupled with information to the industry and the public at large on the dangers of ozone layer depletion. In Mauritius, the imported quantities decreased smoothly without formally required restrictions from 1992 to 1995, largely due to the implementation of three projects under the Country programme and the impact on market forces of ozone friendly ozone labelling.

Monitoring must be combined with other control measures *However*, all Parties to the Montreal Protocol are obliged to gradually reduce and finally totally eliminate the import of the controlled substances according to the established time schedules. A surveillance type of import licensing system, will not achieve this. Mauritius for instance experienced that the earlier decreasing import increased again between 1995 and 1996 (perhaps due to stock piling). *A surveillance type of licensing system therefore presumes that the required reductions are achieved by other means*, for instance by efficient controls on the end users of ODS.

Import licences can be used to control supply But, as mentioned, *an import licensing system can also be used to control the supply of ODS*. The total quantity allowed can gradually be reduced over the years. The market supply of the various ODS can hereby be limited in line with each country's obligations and policy decisions taken (see Step 2). Nowadays, Thailand is using its licensing

Fig. 7 Decision tree to design an import control system



* Assumes that compliance with the MP limits are ensured through other means, e.g. reliable controls on all end users.

system to limit gradually the imports of ODS. Mauritius is also considering measures to restrict the ODS import by imposing decreasing quotas based on the average 1995-1997 imports.

Objectives can vary depending on type of ODS

The phase-out schedules are not the same for all ODS and, thus, the choice of import licensing objectives can vary. For instance, HCFCs have a substantially longer phase-out schedule than the other ODS due to the lower ozone depleting potential and because they partly serve as interim alternatives to CFCs. The government might find it appropriate initially to use its import licensing system to collect accurate data only with regard to HCFC imports, while at the same time use the system actively to limit the supply of CFCs and the other ODS with a shorter phase-out schedule. The risk of accelerated phase-out schedules for HCFCs should however be taken into account. This could justify actively controlling also the HCFC supply from the beginning.

Step 2

2.2. Deciding level of ambition and total import quantities

When the licensing system is actively used to reduce the ODS supply, the next decision required is that on the level of ambition *vis-à-vis* the phase-out schedule under the Protocol. The government can either choose to adhere only to the minimum obligations under the Protocol, or decide to aim at a faster phase-out schedule.

Calculate minimum requirements

Adhering to the *minimum requirements* under the Protocol makes this decision step fairly straightforward. It only entails deciding the country's baseline tonnage for each ODS under the Protocol (see *Figure 3*) and calculating the quantities allowed each year for each controlled substance.

The next step will then be to decide who will be allowed to import ODS (see the decision tree, *Figure 7, Step 3*).

Benefits of accelerated phase-out

Many countries have, however, chosen to aim at an *accelerated phase-out schedule*. Some benefits of such a decision include the following:

- It gives the government more flexibility to adjust its decisions, if necessary, and provides a margin of error, if it turns out to be more difficult than expected to keep the ODS consumption under full control.
- Continued use of phased-out chemicals increases dependence on obsolete technology and will hamper the country's economic development. It will become increasingly difficult to find spare parts, and exporting industries will encounter difficulties on the export market.

- The Montreal Protocol phase-out schedules could be accelerated if the effects of ozone depletion in the future became even more visible than today. In such a situation, it is advantageous to have planned for an accelerated phase-out from the start.
- An accelerated phase-out increases the exposure of the domestic industry and service sector to the latest technology.
- An accelerated phase-out schedule demonstrates environmental leadership within the Montreal Protocol framework, which in turn creates political goodwill and could even translate into economic benefits. A pro-active government approach will provide the necessary enabling environment for the socio-economic development of the country.
- Most importantly, an accelerated phase-out helps in minimizing the negative effects of the ozone layer depletion. Developing countries are especially vulnerable to the effect of ozone depletion on health and food supply.

With this choice, the next task is to estimate the ODS needs and decide what levels of phase-out are feasible and reasonable to achieve for each type of ODS.

The demand for ODS in each sector of application will have to be estimated. The country programme and its updates can provide a starting point. Although the country programme often is written at a time when there was not enough information available, it can still provide a broad overview of the situation.

It is important to consider not only the existing needs but also to account for potential growth in the demand. It is important to make a realistic evaluation to avoid damaging the economy of the country. Unrealistic and over-ambitious phase-out schedules might also create a market for illegal trade.

But it is equally important to consider what can be achieved without negative effects on the socio-economic development if all aspects and possibilities are taken into account. To prevent new installations, which use out-dated technology, and reduce emissions are in the longer term beneficial both for the country and the individuals involved.

In this context, it should be noted that the available possibilities should be evaluated from a broader perspective than just that of replacing one chemical with another chemical. This increases the scope of alternatives

Estimating realistic phase-out schedules

considerably, in particular if considered at the country level. For instance, there are other packing materials available for fast food products than CFC blown foam products, although not necessarily produced by the same enterprises. "Not-in-kind-technologies" should also be taken into account on the enterprise level. Acceptable fire protection is, for instance, as much dependent on how the buildings are planned and used, how the alarm systems are designed, etc., as on the chemical chosen to extinguish fires. Refrigeration systems can be designed so that the amount of refrigerants is substantially reduced and so that leakage is minimized. The need for air-conditioning can be reduced significantly by designing buildings to better suit the local environment. The cleaning step can sometimes be abolished altogether in the production of printed circuit boards.

The evaluation at this stage can only be a qualified guess on what can be achieved. The experience from Denmark and Sweden of the methodology chosen could be of interest here (see UNEP's publication *"Government Strategies to Phase out Ozone-Depleting Refrigerants - Four Case Studies from the Nordic Countries"*, see Key Features under Denmark and Sweden).

Based on this evaluation, a reasonable annual phase-out schedule should be drawn up and compared to the Montreal Protocol requirements. This evaluation will provide a general picture. This picture can, however, change by time with growing knowledge, increased availability of alternative technologies and the general development in the various sectors.

The importance of the legal structure

At this point, it becomes important to consider the legal nature and structure of the decision. The legal form of the decision therefore becomes relevant. The legal structure decides the flexibility allowed and the procedures needed to change the assessment with growing knowledge. The challenge here is to find the right balance between the need for stability with regard to the legal framework and the need for flexibility to take into account new knowledge and changing circumstances. The private sector, as well as state owned industries, need to know with a reasonable degree of certainty how much ODS of various kinds it can use in coming years, in order to plan its operations. Constantly changing targets might even cause users to continue using ODS as long as possible, rather than start investigating alternatives.

The way some developed and developing countries have dealt with these issues can be illustrated by the following examples (the examples from developed countries relate to earlier legislation on Annex A and B substances, which now are phased out in accordance with the phase-out schedule for developed countries):

- Australia decided *each year* on the quantity to be allowed for imports of CFCs and the other Annex A and B substances. The decision was made public through the official gazette.
- New Zealand announced a reduction schedule in its Ozone Layer Protection Act for the *entire period until the phase-out*, but stated in the act that this timetable should be *subject to review every second year*. To avoid changing targets in the future, the government adopted a faster reduction than required by the Montreal Protocol.
- The European Union announced a full reduction schedule in the legislation without any specific period of revision. To change the legislation, the same process must be used as when it was initially decided.
- In Malaysia, the decisions are taken by a specific *Advisory Committee* with representatives from several ministries in connection with the *individual applications* but *based on fairly detailed reduction schedules* as decided in an up-dated Country Programme.
- In Thailand and the Philippines, the authority in charge has an even greater freedom. The decisions are taken in relation to *individual applications by the authority in charge* of ozone issues without formal involvement of any other ministry or authority.

2.3. Allocating rights to import and determining import allowances

Step 3

Rights to import

The previous step determines the total quantities allowed for import during a given year. The next step is then to decide who should be allowed to import ODS. In principle, the choice is between limiting the right to import to those importers who are presently importing ODS, and allowing also new importers to enter the market.

Limiting the right to the present importers creates a protected market for these importers and might be considered unfair by others. On the other hand, as the ODS should be phased out as soon as possible, the equity aspects might not weigh so heavily. A general problem with a protected market is that it allows enterprises to increase the price. In this specific case, an increased price would not necessarily be negative as it helps the phase-out process, while price competition will make it more difficult to eliminate the use of ODS.

Who should be allowed to import?

In particular some small countries do not have any general importers of chemicals who act as wholesalers. Instead, all or a major part of the ODS are imported directly by the users. Similarly, there might be a tradition of direct import in some sectors, e.g. in the agricultural or refrigeration servicing sector even in countries with major importing wholesalers. This might be considered a reason for not limiting the right to import to those who have a previous record of importing, with regard to certain ODS.

These are political decisions, and the choice will differ from country to country. The decisions should take into account that the objective is to reduce the use as efficiently as possible without negatively impacting the economic development of the country.

The choice could depend on the type of ODS Such considerations could justify limiting, in principle, the right to import to existing importers with regard to Annex A and B substances which should be phased out as quickly as possible, while allowing more room for new importers with regard to the HCFCs which will be used for a longer period.

Allow a «safety valve» Regardless of which decision is taken in principle about allocating the right to import, it might be useful to ensure that the mechanism allows, as a safety valve, a possibility to cater for new importers. One example is the need to cover unknown critical needs on a case by case basis. Another examples is the need to deal with situations such as the one experienced in Mexico where all old importers decided to stop importing certain ODS while the Government still saw a need for some continued import.

Determining Import allowances

The previous decision is closely interlinked with the decision on how to determine the import allowance for each importer.

The total quantities for each year and chemical, as decided in Step 2, give the outer limits.

Quotas based on historical records One option - when only existing importers are allowed to import - is to distribute the total quantities in proportion to each importer's historical imports (the total quantity allocated would not include the amount set aside for case-by-case decisions). The base year(s) must be specified. For Article 5 countries, the Montreal Protocol defines the country's base level as the average of three or four years (1995-1997 for CFCs and halons, 1998-2000 for "Other CFCs", carbon tetrachloride and 1,1,1-trichloroethane and 1995-1998 for methyl bromide). Only HCFCs have a one year base level (2015). It is likely that many countries will choose to use the same method of calculating the base year for the individual

enterprises. But the base year need not necessarily be the same as under the Montreal Protocol, provided that the total amount imported under each group of controlled substances during the chosen year is not more than the amounts applicable under the Montreal Protocol requirements. A country can for instance decide to choose an earlier base year than the one applicable under the Protocol.

The government may also choose to take into account the needs for continued import of ODS within each sector of application. For instance, the need for CFC 12 imports for servicing existing refrigeration and air-conditioning equipment might be considered more important than the import of CFC 113 which is used as a solvent. This is possible as the Montreal Protocol obligations do not relate to the individual CFCs but to the aggregated "basket", in this example of the five Annex A CFCs (see *Figure 7*). Within the thus chosen total quantities for each chemical it is still possible to distribute the allowances in proportion to earlier records.

Previous records give a clear, unambiguous base for the decision. "First come, first served" can be an alternative, but might not be considered fair. Another alternative is a system such as the one applied in Singapore, where half of the allowed quantity is auctioned out to the highest bidder, while the remaining half is distributed according to previous records.

One issue to consider is whether the importers should have the right to sell or transfer the allowed quantities to another company. Some countries (e.g. Australia and New Zealand) allow importers to trade freely parts of their allowances in order to make it possible for new enterprises to enter the market. A transfer must be notified to the responsible authority, which then records the transfer and issues a new allowance to the parties involved. Other countries, e.g. Malaysia, permits allowances to be transferred only upon request and for specified reasons.

UNEP's publication "*Monitoring Imports of Ozone Depleting Substances*" shows how different countries have addressed these issues (see in particular Australia, Malaysia, New Zealand, the Philippines, Singapore, Sweden (EU) and Thailand). As can be seen from that publication, there is a wide variety of solutions and combinations of alternatives.

2.4. Deciding on responsible authority

The next step is to consider which authority should be responsible for issuing the ODS import licences. The decision is bound to be country specific, but is also depending on the degree of collaboration that can be established among the relevant government agencies.

Needs in each sector can be taken into account

Other alternatives

Transfer of allowances

Examples from other countries

Step 4

Options The options are likely to include primarily the authority with the overall responsibility for ODS strategies, an agency in charge of general border controls, or an agency that already issues other types of import permits or allowances.

One factor to take into account is obviously whether the licensing system will be based on an already existing legislation with established procedures or on a new act or new regulations. It should, however, also be considered what the objectives are of the controls already in place and to what extent those are in line with the objectives of the control on ODS imports or easily could be expanded to cover these objectives

ODS authority must be involved The decision on the responsible agency depends partly on the decisions taken on how to define the total quantities and the allocations, as discussed in *Step 2 and 3 above*. If the individual decisions on import licences are actively used to reduce and finally eliminate ODS, then the authority in charge of ODS strategies must be involved in setting the policy on total quantities and allocations. It must also be able to obtain information on the actual level of imports of each company, even if it is not physically issuing the licences.

Export licences can influence the choice (see 4.3) The considerations on the choice of authority for export licences should also be taken into account. These considerations could influence the decision on the appropriate authority for *import* licences as well (see *further 4.3 below*).

Must also apply to free trade zones It should further be taken into account that import of ODS for use in free trade zones also requires an import licence. Such import is included in the country's ODS consumption under the Montreal Protocol. Ordinary border control might be more relaxed with respect to the free trade zones and, hence, the established control system less well adapted to the necessary ODS control.

Two-step decisions? Some countries might like to choose a two-step system where the National Ozone Unit issues recommendations for import licences, while the final decision is taken at a higher level, whether by the Minister in charge of ODS strategies, by a National Committee or by some other ministry or authority.

Examples from other countries Examples of various solutions already adopted are indicated in Annex A-2 and described in more detail in UNEP's guidebook "*Monitoring Imports of Ozone Depleting Substances*" (refer in particular to Australia, Malaysia, New Zealand, the Philippines and Thailand, section II.3, 8 and 10-14).

3. Implementing an Import Licensing System

Decisions about the nature of an import licensing system must be followed by considerations related to its implementation. This includes approval procedures and means of collaboration with central and local customs authorities to ensure compliance. These considerations will also have implications when drafting the legal text.

The design of the application forms and the instructions to the importers determine the information which will eventually be collected. This, in turn, determines how effectively the ODS imports can be controlled and monitored. It is therefore important to consider carefully the design of the application forms and the content of instructions to importers.

The design of application forms is important

It should be noted that the number of ODS importers in most countries is very small (except in countries or sectors where there are no wholesalers). As an example, Thailand - with an ODS consumption of about 10,000 ODP tonnes - had in 1995 some 25 registered importers and only some 15 actually active. The administrative burden of keeping the imports under control through a licensing system is therefore not so great as it might appear.

An example of how the import licensing process can be set up is shown in **Figure 8**. Some examples on how application forms and decisions can be set up are included in **Annex B-3**. It should be noted that these examples are illustrative and intended as "food for thoughts" only. Each country will have to choose the model which suits its own purposes best.

3.1. Registration of Importers

It is advisable to require that all importers register with the authority in charge of issuing import licences - regardless of whether only old importers or also new enterprises will be allowed to import ODS. Registration of importers will make it easier for customs officers to identify legitimate importers and will provide a channel for dissemination of relevant information.

Request all ODS importers to register

Information to request All importers should be asked to provide information on previous imports of each ODS during previous years, with supporting documentation, even if the right to import is not restricted to the old importers. This includes information on imports during the years which the government decides to use as base years for annual reductions, when relevant. The government might also choose to ask for information on a series of previous years and on the applications for which the ODS are sold or used. One example is the information requested in Malaysia (see UNEP's guidebook "Monitoring Imports of ODS", sec. 8.2.2). What information to request depends on what will eventually be taken into account when approving the import licences.

Make a data base The registration can be used to build up a file for each importer. The file will contain names, contact data, data on previous years' ODS imports, etc. and can be used as the basis for future decisions, so that detailed information on previous records and supporting documentation need not be requested each year.

3.2. Applications and Decisions on Import Licences

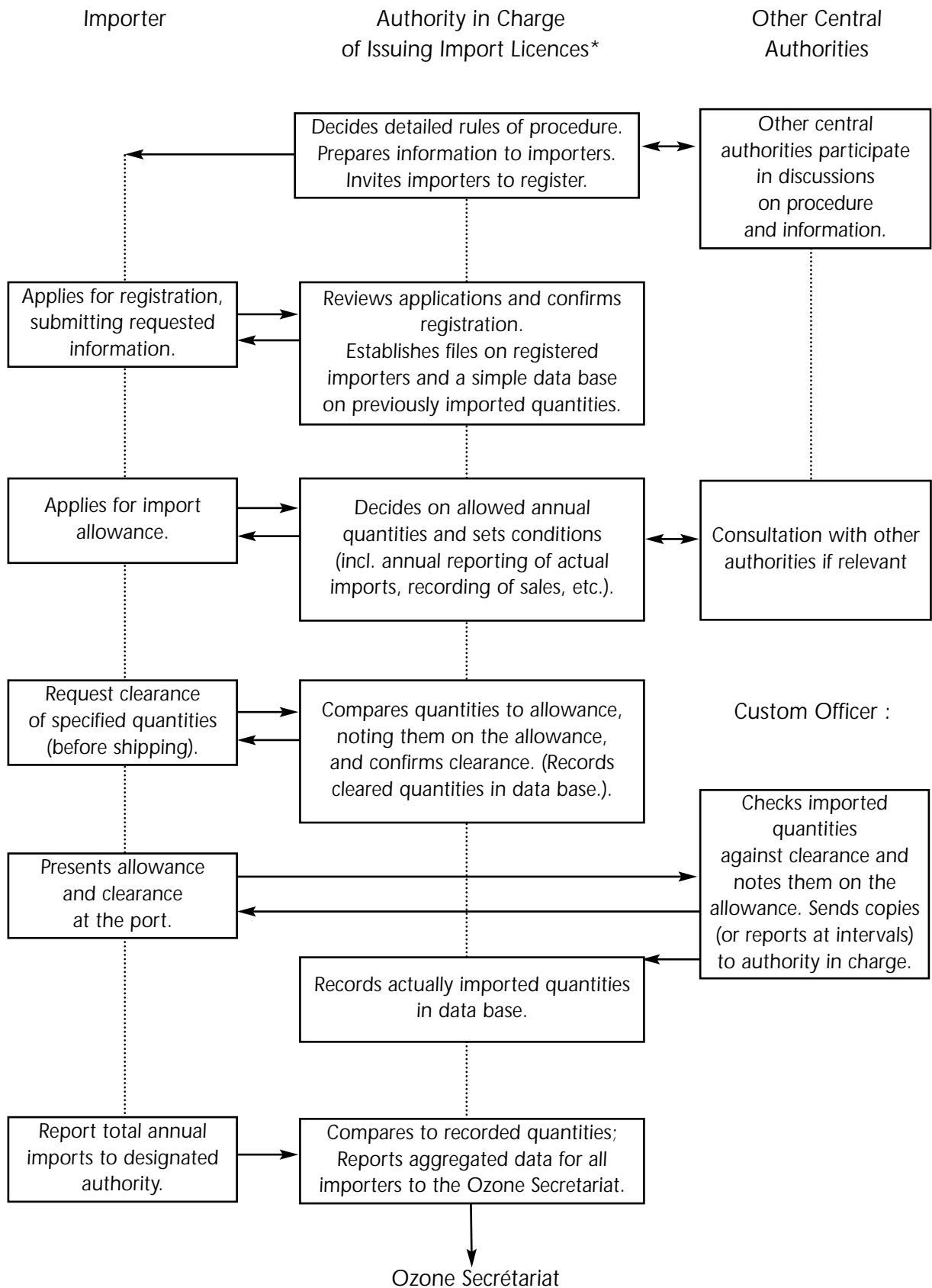
Import Allowances and Permits

Allowances for a longer period The importers and users need to be able to plan their activities. It is therefore reasonable to decide the importers' *allowance* for a longer period. Annual allowances are most common, at least in developed countries.

In some cases, a shorter period might be preferred. One reason could be that the government, in an introductory stage, may want to try out criteria for distribution of ODS allowances among importers and review such practice within the first year. Another could be that the government may need to keep a closer watch on a specific chemical to avoid entering into conflict with the Montreal Protocol requirements. A third reason could be the need to put extra pressure on the users of a certain chemical to make them look for alternatives. As an example, Thailand has decided to make the allowance for CFC 11 and CFC 12 valid only for six months in order to keep a tighter control on these substances.

Permits for individual shipments Some countries might prefer to issue an *import permit* for each individual shipment. Permits for individual shipment can also be needed in countries where allowances for a certain period are issued, for instance for import of methyl bromide for emergency reasons. The criteria and procedures for such permits need to be decided to ensure consistency in the implementation of the legislation.

Fig. 8 Example of an Import Licensing Process



* Here = Authority in charge of ODS issues.

Information to collect

The importer should be asked for all the information needed for approval of an allowance or a permit to import ODS. The type of information depends on the choice referred to in 2.3 above ("Determining import allowances"). The importers can also be asked for the other information which would help the National Ozone Unit in eliminating the use of ODS, as well as for information needed when reporting to the Ozone Secretariat.

Information on ODS in mixtures important

This includes *first of all* information on imported quantity in kilograms and information on the chemical composition of the imported chemicals. It is important for the National Ozone Unit to know the chemical composition of mixtures in percentage by weight, at least with regard to the ODS content. This is necessary for calculating the quantity of each controlled substance, for internal use as well as for reporting to the Ozone Secretariat.

Some common mixtures have been given a standard number by the American Society of Heating, Refrigeration and Air-conditioning Engineers, ASHRAE (e.g. R 401a, an HCFC refrigerant blend). Specification by ASHRAE number might be considered satisfactory, provided that the National Ozone Unit has information available on the composition corresponding to these standard numbers.

Exporting country

It is also crucial to get information on the exporting country, as imports from a country which is not a Party to the Protocol is not allowed under the Protocol. This information can also be useful for establishing cooperation between importing and exporting countries to curtail the risks of illegal imports (see *Chapter 4*).

Specific information

More detailed information is necessary in specific cases. For instance, the Montreal Protocol exempts import of methyl bromide for quarantine and pre-shipment uses. Information on the intended use of imported methyl bromide is therefore necessary, to distinguish between non-exempted and exempted imports, if the government intends to claim such exemptions (information from users will also be needed to support such a statement). The situation is similar with regard to the import of used, recycled, reclaimed ODS, for destruction or for use as feedstock.

Trade names

Information on trade names will help the government in its work to phase-out the ODS. Many small users know the chemicals they use only by trade names. This is especially the case for solvents and refrigerant mixtures. It will help considerably in the work to increase awareness among small enterprises and users if they can be given a list of the trade names on the market. Information on trade names on the market will also make it easier to track illegal imports. A global list of trade names is

Fig. 9. Checklist on Information to Request

- quantities of each ODS
- composition in percentage by weight (for mixtures)
- other facts of relevance for the approval
- exporting country
- special information as required for reporting to Ozone Secretariat
- trade names
- scheduled place and date of arrival
- expected use by application

Signed with declaration of accuracy by the importer.

For some examples of application and decision forms, see Annex B-3.

available from UNEP IE, see *Figure 6* in Chapter 1. A reference document specially on solvents is also being prepared by the Solvents Technical Options Committee, STOC.

Other information which the National Ozone Unit needs for its national ODS controls and to monitor compliance with the import licence requirements may also be requested. This can include information on scheduled place and date for clearance by customs, expected use by sector of application, etc.

Conditions linked to approval of allowances and permits

Each allowance and permit should specify the conditions linked to the approval. Assigning a unique number to each allowance and permit can be a useful tool in combatting illegal trade, e.g. to facilitate random controls on the market.

The conditions should cover at least some of the following points.

The *period* for which an allowance or permit is valid should always be stated. In case of allowances, it should be stated that the allowance can be used for

Other useful information

Allowance/permit number

Period of validity

multiple shipments within the limits stated with regard to time and quantity. In case of a permit, it should be made clear that the allowance is valid for one shipment only.

Annual reports The importer should be required to *report* at least annually on the quantities which have actually been imported during the previous year (or shorter period if desired). The approval should state the authority - preferably the authority in charge of ozone issues - and the date(s) for submission of the report(s).

Clearance in advance The conditions should also preferably state that clearance of each shipment should be requested before the shipment leaves the exporting country. This makes it easier to send back a shipment which arrives without an import licence and avoids putting the authorities and customs under pressure to approve a licence because it has already arrived.

Labelling It could be required that imported containers be *labelled* with name and address of the importer and the licence number. This will clarify who is responsible for the import and facilitate random controls at customs and on the market. The content of ODS, by chemical name and/or with chemical code number, should also be labelled on each container (standard labels can be used provided that they clearly indicate the controlled chemicals). End users have a right to know that they are using a controlled substance.

Records The conditions can include a requirement to keep *records* of quantities sold, indicating the names and addresses of the purchasers and intended use area (specified as indicated in a given code list). An example of such requirements is illustrated in **Figure 11**. Records should be kept for a specified period of time, e.g. five years, and made available to the authorities upon request for inspections. Alternatively, it can be requested that summarized records be

Fig. 10. Checklist on Useful Conditions

- period of validity
- requirement to report on actually imported quantities
- requirement to seek clearance before shipping
- requirement to label imported containers
- requirement to keep records on sold quantities

Fig. 11. Requirement on Record Keeping in Victoria State, Australia

Each importer and other wholesalers must record their sales of ODS with specification of:

- name and address of purchaser
- sold quantities of each ODS
- intended application by category:
 - aerosols
 - vehicle air-conditioning
 - commercial and industrial air-conditioning and refrigeration
 - domestic refrigeration
 - domestic air-conditioning
 - foam production
 - solvent use
 - dry cleaning
 - portable fire extinguishers
 - halon fire suppression systems
 - miscellaneous (to be specified)

submitted annually, or upon request, to facilitate following up the ODS use by sector of application.

Clearance of shipments

Each shipment will have to be cleared on the basis of the approved allowance. This implies checking the ODS content against the allowance, including ensuring that the ODS contents in mixtures are taken into account and are correctly calculated. The clearance should therefore preferably be done by officers at the authority which has been given the responsibility to issue import allowances (see 2.4 above). This will also ensure a good overview on what is actually imported and allow a centralized successive recording. This would cause no problem if clearance is to be requested before the shipment leaves the exporting country. The clearance should be noted on the allowance and presented by the importer at the port of entry.

Some of the information mentioned above, in particular the information on scheduled place and date for clearance by customs, but in some cases also the trade names and the expected use by sector of

Check against allowance

Note clearance on allowance

application, can be difficult for the importers to specify at the time of application for an allowance and can then instead be requested in connection with the application for clearance of the individual shipment (provided this information is not needed for the decision on the allowance).

Declaration certifying accuracy The application for clearance of the shipment - as well as the registration form and the application for allowances and permits - should include a declaration certifying the accuracy of the information, signed by an authorized representative of the importer. It should be stated on the forms that false or misleading information is subject to sanctions as stated in the relevant Act.

3.3. Instructions to Importers

Information leaflet The importers need more information and instructions than the plain application forms. Such information can be included in a leaflet which is distributed together with the application form. It can also be distributed in advance to make the importers aware of the requirements. The text below provides a checklist for information to include. The extent to which these suggestions are adequate for a given country depends of course on the decisions taken on each relevant issue.

It can be practicable to include copies of the application forms for registration, approval of allowances and clearance of individual shipments in the leaflet.

Why import licences are required

Explain reasons The information leaflet should contain a short description on why requirements on import licences have been introduced. This should mention briefly how the ozone depleting substances affect the environment and the decisions taken internationally and nationally to eliminate the use of these substances. It should also summarize the government's decision on import licences, with reference to the applicable legislation and information on entry into force.

How the requirements will be implemented

Describe basic structure of implementation The leaflet should further explain how the import licence requirements will be implemented. This includes information on registration requirements, how, when and where such registration should be done, and which importers will be eligible for registration (e.g. only those with a previous record of ODS imports, or also new importers).

It should also be explained what kind of licences will be issued. Will each importer be assigned an allowance which specifies the amount that can be imported during a specific period? If so, generally how long? Will it also be possible to obtain a permit for a specific shipment, for instance in emergency cases, or for users who wish to import ODS for their own use?

How allowance applications should be made

It should be made clear that the application must be made *by the importer* and signed by a person with authority to sign for that company. This is important as the importer will be held responsible for that the information provided - in the application as well as at later stages - is not false or misleading. The question of who is the importer is primarily a legal question. The importer is the person or body who will be given the right to import the goods in question and who by the same token will carry the legal responsibility for fulfilling the conditions. Any person acting on his behalf should show a written man-date to do so. The importer's role in the trade can vary. Most commonly the import is carried out by wholesalers, but import licences can also be given directly to end users (compare *section 2.3* above).

It should be made clear to *which authority* the application should be sent and who can give more information (name of authority and officer, address, telephone and fax number, etc.).

Importers will need to know *when* they should apply. Can applications be made at any time of the year, or only by specific dates?

For which chemicals

The importers and their import agents must be given adequate information on which chemicals they need an import licence for.

Many of the chemicals which are now controlled under the Montreal Protocol are not in commercial use. This is particularly the case with most of the "Other CFCs", many HCFCs and all HBFCs. *Annex C-1* contains a list of all substances which are presently controlled under the Protocol, with those commonly used indicated in italic.

All the controlled chemicals must be referred to in some way in the instructions to the importers. It could be done by mentioning the most commonly used individually and then refer either to an annex or to the relevant legislation for a full list.

Importers, and in particular their import agents, are often not chemists. It is therefore useful to include information on the chemical name, the chemical formula and the commonly used code name in the leaflet (see *Annex C-1*).

How to apply

To which authority

When to apply

For which chemicals?

This will help the importer and his agent to link their own information on the goods with the requirements for an import licence.

Both pure and mixed! It should be stated explicitly that a licence is required both for *pure* chemicals and for *mixtures* which contain any of the controlled chemicals. Many ozone depleting sub-stances are traded as mixed chemicals. In particular, solvents often contain a small percentage of another chemical to improve their performance for the intended application. Refrigerants are common in mixtures, especially the new generation of HCFC blends. Some of the CFCs appear also primarily as mixtures, for instance CFC 115 in the mixture R 502 (containing 51% CFC 115 and 49% HCFC 22) and CFC 13 in the mixture R 503 (containing 60% CFC 13 and 40% HFC 23). R 500 contains 74 % CFC 12 and 26% HFC 152a. Similarly, methyl bromide is frequently shipped as a chemical mixed with 2, 33 or occasionally 50 % chloropicrin.

Chemicals shipped together with equipment

Shipped with - but not contained in - equipment The information should make it clear that a licence is required even if the chemical is packed along with other products or equipment, e.g. an air-conditioning or refrigeration unit or a fire protection system. *Note ! This does not refer to ODS contained in the equipment*, only to what is shipped in separate containers along with the equipment.

Quantities

Specify composition! It should be emphasized that the *chemical composition* of mixtures must be specified with information on *percentage of each chemical by weight*, at least with regard to the ODS content. The importer might not have this information directly available and will then have to ask the exporter in advance. If specification by ASHRAE number is considered satisfactory, this could be indicated.

Quantities in kilograms! It is advisable to emphasize strongly that the imported quantities should be given in *kilograms*, not in litres, drums, pounds, etc. Applications and subsequent reports in mixed units can cause the officer in charge considerable unnecessary work and make the collected data unreliable. It would be useful to include some information on how to convert litres of commonly used liquid chemicals to kilograms.

Do not adjust by ODP! It is important to mention specifically that the quantities should *not* be adjusted by *ozone depleting potential (ODP)*. Some importers might otherwise give data in adjusted quantities. These will then be adjusted a second time by the ODP factor by the Ozone Secretariat. Information adjusted by ODP tonnes makes it also impossible to crosscheck with other sources of information (e.g. customs statistics).

Information of relevance for approval

The information needed for approval of the application should of course be indicated. This can include information on imports during previous years, intended use, etc. What information is needed and when it should be submitted depends on which facts the government has decided to take into account for approval of allowances (see 2.3 above) and on the procedural questions referred to under 3.1 and 3.2 above.

Information of relevance for approval

Fig. 12. Checklist for Instructions to Importers

- Explain why import licences are required
- Specify requirements to register, who is eligible and what kind of licences will be issued
- Specify how applications should be made - by whom, to which authority, by what date
- Indicate all applicable ODS. Refer to chemical name, formula and code name
- Request information on quantities in kilograms, without ODP-adjustment
- State clearly that both pure and mixed chemicals are covered
- State that, for mixtures, each ODS must be specified in percentage by weight
- Specify other information needed for a decision on the application
- Ask for information required for reporting to the Ozone Secretariat
- Request information on trade names
- Describe standard conditions (clearance before shipping, record keeping, reporting, etc.)
- Describe the procedure at customs
- State what actions can be taken in case of imports without licence or misleading or false information

Clearance and procedures at port of entry

Seek clearance in advance! The importers should be made well aware that clearance should be requested before the shipment leaves the exporting country (provided that this is the option chosen by the government). It should also be emphasized that the goods can be detained in harbour if it arrives without proper paper awaiting licence procedure, and/or returned to the exporting country at the cost of the importer (provided that the legal power to do so exists, see *Chapter 5*).

Sanctions

Be aware of sanctions! The leaflet should inform the importers about the possible consequences if controlled substances are imported without a licence, or false or misleading information is given in the application. This includes information on applicable fines and other sanctions.

3.4. Disseminating information

Spread information widely! It is important that all known importers be aware of the import licence requirements, including the requirements to register as an ODS importer. Information on these requirements should be distributed through all applicable channels. The instruction leaflet and application forms can be distributed to all known ODS importers and to brokers and import agents who are known to handle the import of chemicals. Chambers of Commerce and other relevant trade associations might be requested to disseminate information to their members. Information could also be sent to relevant technical newspapers, TV and other mass media.

Fig. 13. Dissemination of Information to Importers

Distribute information to

- all known ODS importers
- importation agents and brokers known to handle chemicals
- Chamber of Commerce and other trade associations
- technical magazines and mass media (TV, radio, newspapers)

3.5. Training Customs Officers

All imports have to pass through customs. The challenge is to ensure, as far as possible, that the shipment is not cleared by customs unless the importer or his agent can show the required licence.

Customs officers at the ports of entry into the country must be informed about the requirements. Training of the local customs officers should therefore be organized as soon as the legal requirements are finally adopted and the information to importers, including application forms, have been finalized. This should be done in collaboration with the ministry or authority in charge of customs to secure its full support. A workshop for local customs officers might be useful.

When and how to train customs officers

General information

The customs officers will need information on the *reasons for the import licence requirements*. The descriptions of the effects on the environment need to be somewhat more detailed than in the instruction leaflet to the importers as the customs officers are unlikely to be knowledgeable on this subject. This information can make them more committed to implement the requirements and help them to answer questions from importers. UNEP's video "Saving the Ozone Layer - Every Action Counts" could be used.

What do customs officers need to know?

The customs officers should know and have access to *the approved laws and regulations* in case an importer challenges the request for an import licence.

The customs officers should also be familiar with the *procedure to apply for import licences* and know where to refer someone for further information. The information on this subject can be approximately the same as what should be included in the information to the importers.

How to identify the controlled substances

Information on the chemicals covered, common applications and appearance of these chemicals, as traded, are important elements in the training. Customs officers should have a list of the chemicals which are covered by the Montreal Protocol with chemical code names, chemical formula and name and CAS-number (see *Annex C-1 and Chapter 5*) to assist them in identifying the controlled substances.

As mentioned, the importers should preferably come to the ports with their allowance and clearance of the actual shipment against this allowance. The challenge is to identify those who do not. The problem is that customs officers work with customs codes as their main working tool.

For efficient collaboration between the ODS officers and the customs, it is therefore important that the ODS officers have some general understanding of the international customs coding system (HS). This is described in *UNEP IE's publication "Monitoring Imports of Ozone Depleting Substances", section II.*

How can customs officers identify ODS imports?

The possibility of customs officers recognizing that an import licence is required is greater when the controlled chemicals have specific customs codes. Since 1 January, 1996 the common international HS codes contain specific codes for CFC 11, 12 and 113 and joint specific codes for CFC 114-115 (2903.41-44) and the three controlled halons (2903.46) *but only when traded as pure chemicals*. Carbon tetrachloride, as pure substance, has also a separate customs code (2903.14). Customs officers should always react and contact the authority in charge if an importer tries to import chemicals under these code numbers without a proper licence. Customs code numbers 2903.19 (where 1,1,1-trichloroethane belongs), 2903.30 (which includes methyl bromide), 2903.45 (which cover "other CFCs") and 2903.47-49 (which include, among other chemicals, the HCFCs and HBFCs) should also trigger a closer control on which chemicals are actually imported.

The recording and control systems used by customs should be provided with special indications which flag the need for an import licence under these customs code numbers.

The government can also assign additional specific, national codes, as explained further in the publication mentioned above. The Ninth Meeting of the Parties to the Montreal Protocol has requested UNEP to ask the World Customs Organisation (WCO) to recommend a special national code for each one of the most commonly used HCFCs (now included under 2903.49). The most important HCFCs are HCFC 22, 123, 124, 141b, 142b and 225. HCFC 31 and 133 are also commercially available but not as common as the ones just mentioned.

Separate national codes can be introduced without waiting for a recommendation from WCO. This can also include separate national codes for methyl bromide, 1,1,1-trichloroethane and for substances with joint international codes such as CFC 114 and CFC 115 and the halons. There is already a recommendation for a national code for 1,1,1-trichloroethane from the Customs Co-operation Council (CCC), WCO's predecessor. The CCC has also recommended separate national codes for each one of the "Other CFCs" (under 29.03.45); but this is actually justified only for a few of them (primarily CFC 13 and CFC 112).

However, this does not help in identifying the controlled ODS *when they are traded as mixtures*. The mixtures are, as described in *Chapter 1 and Annex A-1*, coded according to their function which makes it more difficult to recognize them at the ports. For instance, methyl bromide which is

frequently traded as a mixture, would be coded under pesticide codes. ODS officers should advise customs officers on the use of various types of ODS, including which ones are likely to appear as mixtures. The Ninth Meeting of the Parties has also requested UNEP to initiate collaboration between WCO and major ODS suppliers to develop a checkless on relevant customs codes for commonly marketed mixtures.

Customs officers should also be made aware that ODS chemicals shipped *along with a related equipment*, e.g. an air-conditioning unit or fire protection system are also covered by the legislation on ODS licences. Such a shipment would normally be coded under the code applicable to the air-conditioning unit or fire protection system. Even if not shipped with other equipment, it is possible that the chemicals are classified for instance as "refrigerant components" and not under the chemical codes (this is e.g. the case in the Pacific Island states).

It should, however, be highlighted to the customs officers that *the licence requirements do not apply to ODS contained in an equipment (e.g. a domestic refrigerator)*, only to the containers jointly packed with the equipment.

Pictures of containers for various types of ODS which are known to be imported could be taken and distributed among customs officers to facilitate proper identification of the products.

The Thai model could be used when the import licence requirements are based on a general Act on Hazardous Substances, or equivalent, and where import licences are also required for many other chemicals. In Thailand, customs officers refer everyone who imports chemicals to the Department of Industrial Works (DIW), the authority in charge of all hazardous substances and also the authority in charge of ozone issues. DIW will then issue a statement indicating whether or not the imported chemicals are subject to specific controls and, if so, clear the shipment against the approved allowance. This relieves the customs officers of the burden of deciding whether or not a certain chemical contains controlled ODS (or any other restricted hazardous substance), a task for which they may not have the necessary technical knowledge.

Collaboration with the banks can also be established. For example, in the Philippines, letters of credit are not issued unless the necessary import licence from the designated authority is presented.

Collaboration with the banks

Procedure at port of entry

The procedure to be followed on arrival of an ODS shipment is likely to differ from country to country, depending on administrative resources available, the type of legislation on which the ODS import controls are based, etc.

Procedure at port

Imported quantities should be recorded on the allowance as the next import might come through a different port and to ensure that the total approved quantities during the specified period are not exceeded. Customs officers could also be requested to send copies of import customs declarations to the National Ozone Unit, directly or at regular intervals.

Actions in case of imports without a licence

How to prevent illegal trade

Shipments which arrive without a licence should be detained while the importer seeks to obtain a licence to import and sent back to the exporting country at the expense of the importer if a licence is not obtained. The latter can be an effective sanction. Cases of attempted smuggling should be reported for further legal action.

Fig. 14. Checklist for Training of Customs Officers

The training should cover

- reasons for the import licensing requirements
- the approved regulations
- procedure for application and approval of import licences
- chemicals covered
- common applications and appearance of these chemicals, as traded
- likely applicable customs codes
- procedure to be followed at arrival of ODS shipment
- procedure for recording imported quantities
- procedures and equipment needed to test for ODS content
- applicable actions in case of no licence or suspicions on false or misleading declarations
- contact person at National Ozone Unit (and at the authority in charge of ODS import licences if different)
- export licensing requirements

Sanctions applied in revealed cases of illegal trade in ODS should be made well known to the mass media. This can send important signals to all importers on the risks involved in illegal import. Some experiences are described in the *UNEP's publication "Monitoring Imports of ODS" (section III.19 and II.3.2)*.

Information on contact persons

Customs officers at each port of entry into the country, by land, sea and air, should all have information on a contact person to call for further inquiry, at the National Ozone Unit or the authority in charge of ODS import licences, if different.

3.6. Recording Imported Quantities

Collective records of imported quantities are preferably held by the National Ozone Unit, even if the import licences are issued by another authority.

Monitoring total ODS imports

Preliminary data on ODS imports can be recorded based on the clearance of individual shipments. These data should then be compared with the annual reports from the importers on actually imported quantities. Any discrepancies should be further investigated or clarified directly with the importers.

Recording the imported quantities correctly by chemical implies that the quantity of each ODS included in mixtures must be correctly calculated and added together. The New Zealand Ministry of Environment has developed a simple spreadsheet data programme in Excel format to facilitate the recording and in particular to facilitate the calculation of ODS content in mixtures (see **Annex C-3**). It is still in draft format but can be made available to ODS Officers who would like to test it (contact Mr Iain McGlinchy at the New Zealand Ministry of Environment).

3.7. Tracking Illegal Imports

Random controls

Random spot-checking of the compliance with the licence requirements can be required, in particular if there are indications of smuggling of ODS. It should be carried out in collaboration with the Customs Department and can be done on a campaign basis or *ad hoc*. It should be preceded by a special training of the local customs officers so that they know where to look for potential illegal ODS imports. The customs officers should be informed about what equipment is available to test suspected shipments.

Special border controls

Random market controls Random controls on chemicals on the market can also be useful. Information from the public can help to reveal or prevent illegal imports. Importers with a licence have also an interest in making the existence of illegal competitors known to the authorities. Allowance or permit number, name and address of the importer and the chemical composition marked on each container will facilitate such controls.

Information on the existence of illegal imports on the market should be taken seriously and investigated as soon as possible before illegal ODS imports become widespread. Illegal imports can never be totally avoided but they should be made as difficult as possible.

Crosschecking with customs statistics

Cross-checking Although customs statistics are not a reliable primary source to monitor ODS imports, it can still be useful to broadly crosscheck recorded data against customs statistics. This is primarily the case with regard to the importation of the ODS which have individual customs code numbers or belong to a group with only a few chemicals. A detailed investigation is justified *if customs statistics under such codes show notably higher figures* than those recorded in the implementation of the ODS import and export licencing system. Comparing the recorded information with the individual customs declarations can reveal the existence of new importers, who are importing without a licence.

4. Export Licensing Systems

Export licences are dealt with separately in this guidebook, as mentioned in the Guide to the Reader, because the issues to consider are partly different from those relevant to import licences. Import and export licences are, however, likely to be part of the same system once all decisions have been taken. It should also be noted that the considerations regarding the export licences might affect the decisions on import licences, in particular with regard to the choice of authority in charge of issuing the licences.

4.1. Reasons to Control ODS Exports

Not only ODS imports but also ODS exports must be controlled, for several reasons.

First, it is in the country's own interest to keep track of exported ODS. As mentioned, the country's consumption is calculated as imports plus production minus exports. The country's consumption will therefore appear higher than it really is if export data are not collected and reported to the Ozone Secretariat.

Exports can be deducted

Secondly, no Party to the Montreal Protocol is allowed to export controlled substances to countries which are not a Party to the Protocol. This applies also to countries which have not ratified the amendment that relates to the exported chemical (see *Article 4, paragraph 9 of the Montreal Protocol*). This implies that Annex B substances cannot be exported to countries which have not ratified the London Amendment. Methyl bromide cannot be exported to countries which have not ratified the Copenhagen Amendment (no trade sanctions on export of HCFCs have been introduced).

Exports not allowed to Non-Parties

Thirdly, the developing countries' grace period under the Protocol is only applicable to importation and production of ODS which are needed to cover the country's "basic domestic needs". This condition applies also to export to developing countries (which is limited to a specified percentage of the exporting country's baseline production). Control over exported quantities is necessary to ensure that these conditions and limitations are respected.

Exports only allowed to cover «basic domestic needs»

Finally, keeping track of exports makes it possible to establish cooperation between the authorities in charge of ozone issues in importing and exporting countries. This will facilitate revealing illegal trade.

Cooperation to control illegal trade

Information on destination	These reasons make it important to control to which country the ODS are exported. All Parties are required to report, not only on the type and quantities of exported ODS, but also on the destination (see <i>Decision VII/9 paragraph 4 at the Seventh Meeting of the Parties to the Montreal Protocol</i>).
Export licences mandatory	A licensing system for ODS exports has now become mandatory for all Parties to the Protocol (effective January 1st, 2000), as amended at the Ninth Meeting of the Parties held in Montreal in September 1997 (see <i>Chapter 1.3</i>).

4.2. Specific characteristics of export border controls

Three categories of countries can be distinguished with regard to the ODS export:

- 1) Countries which primarily import ODS, and export ODS only occasionally (the majority of the countries);
- 2) Producing countries which produce both for the domestic market and for export;
- 3) Countries which do not produce but import regularly for reexport, in addition to import for the domestic market.

These differences need to be taken into account when designing the export licensing system. The training of customs officers, in particular, should be fine-tuned to the situation of the country.

Reexport versus transshipment	It should be noted that import and reexport are treated as two separate transactions under the Montreal Protocol. Both data on imported quantities and data on reexported quantities must therefore be collected and included in the data on import and export respectively which are reported to the Ozone Secretariat. This differs from cases of a transshipment through a country, in which case the country of origin is considered as the exporting country and the country of final destination as the importing country. See <i>Montreal Protocol Handbook, page 136, Decision III/13 and IV/14</i> .
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Exports more difficult to control	In the past, few countries placed controls on export of goods like the ODS. The traditional border controls are not established to monitor exports closely. Export licences can therefore be more difficult to monitor and enforce than import licences. In smaller countries, exports will mainly be to neighbouring countries and in many cases not carried out by the same companies as those that initially imported the ODS. For example, CFCs may be exported by a service company to a branch of the same service company in a neighbouring country. Or they may be exported as part of a larger
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package of components and supplies.

Because of these specific characteristics, it may be necessary to use incentives to get companies to report exports, as well as disincentives such as fines. The Montreal Protocol definition of consumption - which allows exports to be deducted when calculating the country's consumption - could provide a base for such incentives. Individual firms could perhaps be able to apply for a credit to import further ODS to compensate for what is exported.

4.3. Export Licences and Selection of the Authority-in-Charge

With regard to export licences, it might not be necessary to issue allowances for a longer period, with the possible exception for producing countries. Instead, it might be possible to issue export licences as *permits* for each shipment.

Considering the objectives of an ODS export control, it seems most adequate that the authority in charge of coordinating ODS policy should be the authority responsible for issuing export licences. This authority has the most immediate knowledge regarding which countries are actually Parties to the Protocol and its Amendments. It is also the authority which would have the most immediate interest in keeping a firm control on the total consumption and the ODS movements within the country. Finally, it is the authority that would be the most appropriate counterpart in a collaboration between importing and exporting countries on the ODS issues.

Permits for individual shipments

Authority in charge

4.4. Implementation of an Export Licensing System

Parts of what have been said in Chapter 3 on implementing an import licensing system is also applicable to export licences.

In order to facilitate control on ODS exports and collaboration between countries to control illegal trade in ODS, also potential exporters could be required to *register* with the authority in charge. Their previous records with regard to exports might, however, be of less interest.

The exporter should be requested to provide information on the exact *quantities* of each ODS to be exported with specification of *importing country*. Mixtures should be specified as to composition and percentage of weight of each ODS. Reexporters should be requested to specify the country of origin. Preferably, also name and address of *recipient* and scheduled port in importing

Registration?

Information to request from exporters

country should be specified in the application. The information leaflet to importers, mentioned in 3.3 above, should contain information also on the requirements related to export of ODS.

4.5. Collaboration between Importing and Exporting Countries

Notify the Ozone Secretariat The relevant authority in the importing country should be advised on the intended export. It was decided at the Ninth Meeting of the Parties to the Montreal Protocol that each Party should inform the Ozone Secretariat by 31 January, 1998, of the name and contact details of the officer to whom such information should be directed (see *Annex C-2*).

Establish collaboration with importing countries A contact with the importing country should preferably be taken before the export is allowed. This will make it possible to get a confirmation that the authority in charge of ozone issues in the importing country considers the exported quantities needed to satisfy the importing country's "basic domestic needs". It will also help the importing country to prevent illegal imports.

An alternative is to send a copy of the approved export licence to the designated officer in the importing country. The authorities in charge of ozone issues in exporting and importing countries with regular trading relations should decide on the system which is most efficient for both countries in preventing illegal trade and export of over-supply of ODS.

4.6. Approval of export licences

Exporters should keep records and report The approval should state the chemical, the quantities and the country of destination. Exporters should be requested to keep *records* and *report*, by a specified date, on actually exported quantities of each substance during for instance the previous year.

5. Drafting Legislation on Import/Export Licensing Systems

5.1. Choice of Legal Base

To start with, it is useful to check the possibility of using existing laws as a basis for licensing requirements on ODS import and export. An already established Act on the Protection of the Ozone Layer is the obvious choice when it exists. Other possible laws include for instance:

- Acts on Hazardous or Toxic Substances, Acts on Chemical Products
- Environmental Protection Acts, Clean Air Acts
- Import/Export Controls Acts, Supply Control Acts, Customs Acts

The ODS legislation should fit into the existing legal and institutional regimes which deals with the environment, chemicals management and trade & industry.

Setting up a licensing system is easier if it can be done within the framework of an existing law. Some laws of the types just mentioned grant a wide range of powers to the Cabinet and can be used to issue regulations which fully take into account the objectives of the ODS licensing system. Existing laws can also provide the necessary general clauses referred to below, for instance on access to premises for inspections, sanctions and appeal.

In other cases, the powers, scope, conditions and/or procedures of the legislation at hand may be too narrow and not easily adaptable to the desired solutions. It should therefore be carefully checked how the potential choices of existing acts would affect the possibilities to reach intended results, for example, with regard to the choice of authorities and the administrative procedures.

More work will be needed if no suitable act is available. In some countries, the Cabinet might still be able to take the decision, based on a more general authority. In others, it might be necessary to adopt a separate Ozone Protection Act through the Parliament.

Explore possibility to use existing laws

Be aware of limitations

5.2. Basic Elements

The legal text should make it clear - explicitly, or through its inclusion in an existing legal text - that

- import and export of the controlled substances is *not allowed unless the importer or exporter holds a licence by the authorized authority.*

Basic elements The basic criteria and administrative procedure for approval of import and export licences should be clear from the act or regulation. This includes specifying in particular

- *which chemicals and products are controlled* (see 5.3 and 5.4 below),
- *how and by whom* approval for import and export licences shall be decided (see *Chapter 2.4.*),
- *who is qualified* for import and export licences (see *Chapter 2.3.*),
- criteria for allocating allowances to import (see *Chapter 2.3.* and *Annex A-2.*),
- administrative procedures and types of licences (see *Chapter 2.3.*, 3.2 and *Annex A-2.*), and
- delegation of powers to specified authorities (see 5.5 below).

The authority in charge should be given the power to issue *more detailed regulations, guidelines and/or rules of procedure.* The balance between what should be included in the basic legislation and what to include in follow-up regulations/guidelines/rules of procedure depends on which authority is assigned the power to issue the latter, legal tradition, etc.

Check terminology Make sure that the terminology used matches the intended procedure chosen and cannot be misunderstood by the importers and exporters.

5.3. Defining the Chemicals

All ODS should be included (see *Chapter 1.3.* above on possibilities to delay entering into force for the HCFCs and methyl bromide for a shorter period).

Unambiguous definition needed The substances for which a licence is required must be unambiguously specified. This is most easily done by naming them by their chemical names and short chemical formula (see *Annex C-1.*). Because of the great number of controlled chemicals, reference can be made to a list in an annex. The legal text must include the words "*whether alone or in mixtures*" or similar wording. It should also be stated that any *isomers* of the chemicals mentioned are included, with the exception of 1,1,2-trichloroethane which is exempted under the Protocol.

Some countries prefer to refer directly to the Montreal Protocol and its annexes. This has the advantage of avoiding a long list. It also automatically makes all definitions and clarifications decided by the Parties to the Protocol applicable. When choosing this option, a full list should anyway be made available for the importers, customs officers and other parties concerned, e.g. as an annex to the information to importers, as very few have access to the Montreal Protocol text.

Others might like to refer to the internationally used Chemical Abstracts Registration Numbers (CAS No). These number define distinctly each chemical. As a consequence, there are several number for each chemical (referring to different isomers) which can make this option cumbersome. CAS-numbers for most of the ODS (but not for all) are included in *Annex C-1*.

Preferably, the substances should not be defined in the law or regulation by reference to customs codes under the Harmonized System - because of the risk of hereby unintentionally excluding some chemical that should be covered. The most obvious risk is that ODS mixed with a small quantity of another chemical and ODS chemicals shipped together with equipment can be legally imported without a licence. When necessary because of the structure of the legislation used, it becomes particularly important that the legal text does not only include a reference to relevant customs codes under the Harmonized System Chapter 29.03, but also words like "*and any mixtures containing these substances*" and text stating clearly that the requirements apply to the specified chemicals "*whether imported alone, in a mixture or shipped along with other products*" (see *Chapter 3.3*). As mentioned in *3.5*, customs officers still need to base their daily work on the customs codes. This is, however, a different issue than the question of how to define legally the chemicals which cannot be imported or exported without a licence.

It shall be explicitly stated that import and export licences are required for *new as well as for used, recycled and reclaimed chemicals* (see *Chapter 1.3* and *Annex C-2, new Article 4B*).

Some countries might like to take this opportunity to keep track also of some *non-ODS alternatives* such as the HFCs, for instance by using the licensing system as a surveillance instrument with regard to these chemicals.

It should be noted that the Montreal Protocol does not require control on import or export of ODS in *finished products*, such as aerosols (except from Non-Parties as stated in Annex D of the Protocol). ODS contained in such products are not included in the importing country's consumption but are part of the consumption of the country where they are produced. This, of course, does not prevent any country from anyway restricting such imports, as part of its general ODS strategies (cf 5.4).

Problems when referring to customs codes

Must include used ODS

Non-ODS chemicals

ODS and products

5.4. Scope

Check coverage! When using an existing act as the base, it is necessary to check that it covers all relevant applications of the ODS. As an example, *pesticides* are often regulated under special laws. Controls on methyl bromide could therefore unintentionally be exempted if this is not taken into account.

Include free trade zones It should be checked and stated explicitly that the restrictions also apply to imports to and exports from *free trade zones*.

The Montreal Protocol requires also that the Parties ban import from *countries which are not Parties to the Protocol* of CFCs, halons, 1,1,1-trichloroethane, carbon tetrachloride, HBFCs and, when the Montreal Amendment enters into force, also methyl bromide (Article 4 para 1, 1bis., 1ter. and 1qua.). The same applies to export of these chemicals to Non-Parties (Art. 4 para 2, 2bis., 2ter. and 2qua.) No corresponding restrictions are in force for HCFCs. The Parties shall also ban import of the products which are listed in *Annex D* of the Protocol from Non-Parties.

Imports and exports from/to Non-Parties The term "Non-Parties" in this context refers to those countries which have not ratified the Protocol or the Amendment which controls the chemical in question (the London Amendment for "Other CFCs", 1,1-trichloroethane and carbon tetrachloride and the Copenhagen Amendment with regard to HBFCs and methyl bromide). These restrictions should be included in the legislation on import and export licensing systems unless already introduced in another piece of legislation (in which case a reference should be made to the applicable article).

Products relying on ODS supply Countries might also find it appropriate to include controls in the same legislation on certain *new and/or used products and equipment whose functions rely on supply of ODS* and which the country does not want to import (see further 1.5 above and *Annex C-2, Decision IX/9*).

5.5. Delegation of Powers

It is necessary to ensure that the authority or authorities in charge have the necessary powers to implement the licensing system effectively.

Requesting information This includes power to *request all necessary information*, including - but not limited to - the information which should be reported to the Ozone Secretariat (quantities actually imported, country of origin, whether the substances are recovered or recycled, etc.).

Imposing conditions The authority or authorities in charge must also have the power to *couple licences with conditions*. Such conditions could include, for instance, powers to:

- request reporting of actually imported and exported quantities;
- require the importers to seek clearance before the shipment leaves the port of origin;
- require labelling of imported products;
- require recording of sold quantities;
- place restrictions on to whom and/or for what purpose the substances may be sold;
- place restrictions on reexport;
- request information on the recipient of exported goods.

Some countries might like to state explicitly what kind of conditions the authority in charge can attach to a licence. Others might decide to give examples only or even leave the type of conditions open for the authority in charge to decide. Some might chose to state the obligations directly in the act or regulations governing the import/export requirements. This latter option has the benefit of avoiding further discussions with industry once the legislation is taken. The choice can depend on how decisions on import and export licences will be approved, the legal traditions in the country, etc.

The authority in charge should also have the *right to amend or withdraw a licence* if applied conditions are not met.

Withdrawal

The customs authority should have the *power to send back* an unlicensed shipment *at the expense of the importer*.

Returning shipments

Officers responsible for monitoring ODS imports, production, exports (including reexport), should have the *power to enter premises and to get access to documentation* to verify provided information.

Access to documentation

5.6. Appeal

The legislation should include - either directly or through reference to an act on which the more detailed regulations are based - a mechanism for appeal against decisions by the designated authorities.

5.7. Sanctions

It is important to make sure that adequate sanctions can be imposed in case of non-compliance. This should include, for instance, possibilities to impose sanctions

Applicable situations

- for imports and exports without a licence when required,
- for imports and exports in excess of the allowance or permit,
- for giving false or misleading information and
- for acting in breach of stated conditions.

The sanctions should allow a reasonable range of options so that they can be adapted to the seriousness of the crime. The range should make it possible to apply fines which exceed the potential profit of the illegal imports or exports.

5.8. ODS Import/Export Legislation in Various Countries

Examples from other countries

A short summary of existing import/export licensing legislation in a number of developed and developing countries can be found in UNEP's publication "Regulations to Control Ozone Depleting Substances". Countries with such legislation in place can be identified with help of the tables in Part II of that publication (question 2 and its sub-points). Part I of the publication contains also reference to relevant acts and regulations and to officers in charge of their implementation. Some legislation is described in more detail in UNEP's publication "Monitoring Imports of Ozone Depleting Substances" (Australia, the EU, as represented by Sweden, Malaysia, New Zealand, the Philippines and Thailand).

5.9. Some General Advice

Some simple points are worth remembering when drafting an act or regulation.

Writing a straightforward and easily understandable text makes it easier to check that the text is consistent and comprehensive. This makes it also easier for the laymen to understand the legislation.

Well formulated headings makes the structure of the law or regulation clear and easy to follow.

Definitions on terms used make it possible to avoid lengthy explanations in each article.

It should always be checked that the terms are used in a consistent way. For instance, if ODS is defined as including all Annex A, B, C and E substances, it should be checked that every specific article where this term is used really is intended to apply to all ODS. If not, the type of ODS (e.g. CFCs) aimed at in the particular article should instead be specified.

It is very useful to read the text carefully, many times and word by word, to check that the content is consistent, realistic and covers all - but not more than - what is intended. Drafting legislation is very much a question of common sense, consistency and carefully "thinking around the corner".

More information can be found in UNEP's publication "*Legislating Chemicals: An Overview*" which offers a standard structure for chemicals legislation in general.

Fig. 15. Some General Advice to Legal Drafters

- Use a simple and straightforward language
- Consider headings and structure carefully
- Define terms and expressions used
- Check consistency and intended meaning
- Read the text over and over again !*

Fig. 16. Checklist for Legislators

The law or regulation should (by new text or by reference to existing articles)

- state that import and export of specified ODS (and, if desired, also certain non ODS, e.g. HFCs) is not allowed without a licence;
- specify controlled ODS (can differ between articles);
- state that the requirements apply to
 - both pure and mixed chemicals;
 - all isomers except for 1,1,2-trichloroethane;
 - both virgin, used, recycled and reclaimed;
 - also when imported to or exported from free trading zones;
- ensure that ODS in pesticides and other specially controlled substances are covered;
- specify who is eligible for import and export licences, respectively;
- specify how import/export licences shall be determined (criteria and procedure);
- designate power to issue, modify and withdraw licences to a designated authority;
- authorize the designated authority to issue and amend regulations, guidelines and rules of procedure for the implementation;
- authorize the designated authority to request all necessary information;
- authorize the designated authority to couple licences with conditions, such as
 - reporting
 - record keeping
 - restrictions on sales
 - clearance before shipping
 - restrictions on reexport
 - labelling.
- authorize customs authorities to send back goods which arrives without previous clearance at the expense of the importer;
- authorize designated authorities to enter premises and get access to documentation on imports/exports and sales;
- include bans on import and export of ODS and ODS products from/to Non-Parties
 - and other restrictions on import of products containing or depending on ODS if desired;
- specify appeal procedure and sanctions;

6. National Workshops as a Tool in Setting Up Licensing Systems

Chapters 3 - 5 have presented the decisions that need to be taken in designing and implementing an import and export licensing system. These decisions are clearly political. It is therefore crucial that all relevant ministries are aware of the issues and become involved in the decision process. One option to achieve this is by arranging a national workshop. The national workshop can serve as a tool to explain the issues and obtain feedback from those who will be affected by the decisions or involved in their implementation. This will also ensure that the import and export licensing system fits the needs of the country and has support from all involved, while at the same time complying with the country's obligations under the Montreal Protocol.

**All relevant ministries
should be involved**

This chapter suggests a framework and module for the organisation of such national workshops and provides background material to assist in conducting the workshops.

6.1. Objectives and Expected Outputs

The *immediate objective* of the national workshop would be

- to discuss and agree on the design of an import and export licensing system and to reach a general agreement on procedures related to its implementation.

The *ultimate outputs* from the workshop would be:

- A final draft legislation and related recommendations on an import and export licensing system, ready for consideration by the government legislative system.
- Decisions in principle on the administrative procedures and policy for their implementation. This would involve establishing procedures for communication and cooperation between the implementing agencies at the local, regional and central level.

6.2. Target Audience

Find a good balance of experts and decision-makers

The target audience for the workshop would be officials from government ministries and agencies involved in the implementation of - or affected by - the legislation on ODS imports and exports. A balance between senior officials with decision-making authority and officials dealing directly with day-to-day issues will be necessary. The relative proportion would be country specific. Representatives from the legal departments within the key ministries should also be present.

The relevant bodies, ministries and agencies would differ from country to country and might include for instance:

- National Coordinating Committee on the Protection of The Ozone Layer (when established)
- Ministry of Environment/Ministry of Science and Technology
- Ministry of Industry
- Ministry of Trade (departments dealing with imports, exports and customs)/Ministry of Commerce
- Ministry of Foreign Affairs (department dealing with international environmental negotiations and treaties)
- Ministry of Agriculture
- Ministry of Tourism/Ministry of Home Affairs

6.3. Preparatory Work

A national workshop must be well prepared

A national workshop on this subject must be well prepared in order to achieve the intended objectives. The National Ozone Unit in each country would play a leading role in this preparation, in close formal and informal contact with key members of other ministries and authorities.

The initial task for the National Ozone Unit would be to compile - together with a colleague from the ministry in charge of import controls in general - *background information* related to:

- Current and expected national consumption of ODS, by chemical (imports, production if any, exports and distribution of consumption by major application categories);
- Already agreed governmental action plans to phase-out the ODS;
- Presently used legislation and procedures to control and monitor imports of classified goods, in particular hazardous chemicals and the ODS.

This would serve as background material during the workshop and be necessary for the preparation of draft legislation and related recommendations.

It is advisable to prepare a *draft outline of the legal text* and related recommendations prior to the national workshop. This draft would serve as a basis of discussion and agreement during the workshop. It could be based on the information and considerations presented in *Chapter 2-5* above. The preparation would have to be done in close collaboration between the National Ozone Unit and a key representative of the authority in charge of import controls in general. The choices should be taken based on consultation with superiors to ensure that the draft, at least in its general direction, is supported at senior level in the key ministries. Legal experts should be consulted. Chapter 5 highlights some issues for consideration.

A draft legal text can serve as a base for discussions

For better results at the national workshop, it might also help to consider and draft *preliminary recommendations related to the implementation*, which could include draft application and reporting forms, typical conditions in licences, and customs declaration forms. This again would be the responsibility of the National Ozone Unit and the key representative of the import control authority, in consultation with other bodies if necessary. Some examples of how application forms could be set up are included in *Annex B-3*. These examples are illustrative only and developed as a starting point for work. Application forms and decisions should be tailored to fit the needs of each country.

Implementation procedures should also be considered

It would be useful to consult *key representatives of the private sector* at the various stages during the preparatory process to obtain feedback on their reactions to a proposed structure of the import and export licensing system. Draft legal text and application forms could be made available to them for comments and reactions prior to the workshop.

Get reactions from the private sector

As a last stage of the preparatory process key workshop participants from relevant ministries would be identified and, finally, the workshop organized in terms of logistics (venue, invitations, etc.). The workshop should be chaired by a high level officer from the ministry in charge of ODS strategies.

The issues involved are complex and of political importance. To ensure a successful result, all necessary *workshop material* (background material and draft proposals) should therefore be circulated to the participants at least one month prior to the workshop.

Circulate material well in advance

6.4. Speaker Profile

The speakers at the national workshops should obviously include the ODS officer and the senior officer from the authority in charge of import controls in general who have been involved directly in the preparations. Experts in legal environmental matters and officials from departments involved in

industrial planning could also play an important role. In addition, senior national environment scientists could be invited as resource persons if available.

6.5. Workshop Agenda and Related Resource Material

A tentative model agenda for a three-day workshop is included in *Annex B-1*. *Annex B-2* contains overheads which can be used to facilitate the discussions and presentations at the workshop (the overheads can be made available in colour electronically from UNEP IE for those who has access to Power Point in Office 97). As mentioned, *Annex B-3* contains examples on how application forms can be set up. Comments to the proposed agenda are given below. The comments follow the model agenda as outlined in *Annex B-1*. An overview on how to use the information in the previous chapters and resource materials in Annex B-2 as a basis for the workshop is given in **Figure 17**. Reference is also given to some other material produced by UNEP IE.

Background information

A majority of the participants at the workshop may have limited knowledge and background with regard to the issue of ozone depletion. The workshop may therefore have to begin with a more general presentation of the environmental problem and the Montreal Protocol. This should describe in summary *how the strato-spheric ozone layer is being depleted and its detrimental effects*, particularly in the developing country context, as well as the phase-out obligations and reporting *requirements under the Montreal Protocol*.

Illustrate ODS applications

The participants from the trade and customs authorities in particular would also need a description on what kind of *applications* the ODS are used for. It is helpful to support such a presentation with slides showing various applications. These would have to be produced locally to give them a locally flavour. This can be done in a quite simple fashion, using an ordinary camera. Slides with pictures of containers with locally common brand names could also be useful.

The country's *current and forecasted ODS consumption*, by chemical and type of application, and *agreed action plans* to phase them out must be described in summary.

Why an import/export licensing system is needed

The participants should be given an opportunity to agree on the principle of establishing an import and export licensing system before

discussing the structure of such a system. To introduce this discussion, several issues need first to be presented. This includes

- the importance of a reliable system to monitor ODS imports and exports as a component of the overall strategy to meet the Montreal Protocol requirements,
- the drawbacks of relying on customs statistics as a primary source, and
- the reasons to link monitoring of ODS to an import and export licensing system.

A suitable balance between presentations and discussions on this point will have to be sought.

Decisions on the general structure of an import licensing system

The next stage in the workshop would be aimed at decisions on the general structure of an import licensing system (concerning export licensing systems, see Day 3). This could be introduced by an overview of the decisions that need to be taken in designing an import licensing system. A draft legal text could be presented in summary at this stage (with more detailed discussions here scheduled for Day 3).

Detailed discussions

Recommendations and decisions in principle on each one of the issues described in Chapter 2 could then be discussed in detail.

Decisions on administrative procedures and collaboration between authorities

Once the decisions on the basic design have been taken, the next step would be to discuss the role of the various authorities in the implementation of the system. Recommendations related to the role of various authorities in the implementation of an import licensing system, as well as the means of collaboration between them, would be presented and discussed at this stage. Relevant authorities are likely to be:

- the authority in charge of ODS strategies (in particular its National Ozone Unit)
- the central and local customs authorities;
- the authority issuing import licences for hazardous chemicals, if other than the authority in charge of ODS strategies.

Draft proposals on application forms, typical conditions, reporting forms and customs declaration forms could be presented to bring out more clearly what issues need to be determined.

The role of various authorities must be agreed

Fig. 17. Overview of Agenda Items and Resource Material for National Workshops

Agenda item	Resource material
<p>1. The Environmental Problem and Agreed Actions</p> <ul style="list-style-type: none"> <input type="checkbox"/> The science of <i>ozone depletion and its detrimental effects</i> <input type="checkbox"/> The <i>Montreal Protocol</i>: phase-out obligations and schedules; reporting requirements <input type="checkbox"/> What type of <i>applications</i> are the ODS used for? <input type="checkbox"/> The country's <i>current and forecasted ODS consumption</i>, by chemical and type of application, and <i>agreed action plans</i>. 	<p>UNEP video film "Saving the Ozone Layer - Every Action Counts".</p> <p>Chapter 1.1. Overhead 1. Montreal Protocol Handbook</p> <p>UNEP's series "Protecting the Ozone Layer, Vol.1-5. Slides showing various local applications, local brand names and packaging of the ODS (locally produced)</p> <p>Country Programme; later national decisions; information collected by the National Ozone Unit</p>
<p>2. Why an import/export licensing system is needed</p> <ul style="list-style-type: none"> <input type="checkbox"/> The <i>importance of a reliable system to monitor ODS imports</i> as a component of the overall strategy to meet the MP requirements <input type="checkbox"/> <i>The decision by the Ninth Meeting of the Parties under the Montreal Protocol on import and export licensing requirements</i> <input type="checkbox"/> The drawbacks of relying on customs statistics as a primary source and the reasons to link monitoring of ODS to an import licensing system. <input type="checkbox"/> Summarized presentations on <i>presently used legislation and procedures</i> to control and/or monitor imports of classified goods, in particular hazardous chemicals and ODS 	<p>Chapter 1.2 - 1.5. Overheads 2-6.</p> <p>Annex C-2.</p> <p>Annex A-1. Overheads 7-14.</p> <p>To be collected.</p>

<p>3. Objectives and general structure of an <u>import</u> licensing system</p> <ul style="list-style-type: none"> <input type="checkbox"/> Overview of the decisions to be taken in designing an import licensing system <input type="checkbox"/> Overall objectives (limiting the market availability versus only monitoring ODS) <input type="checkbox"/> Level of ambition (minimum obligations under the Protocol versus a more ambitious phase out) <p>A draft legal text could be presented in summary at this stage (with more detailed discussions scheduled for Day 3).</p>	<p>Decision tree in overhead 15.</p> <p>Chapter 2.1. Overhead 16.</p> <p>Chapter 2.2. Overheads 17-19.</p> <p>Annex A-2: Summary on choices made in some developed and developing countries. Examples from other regions could be added.</p>
<p>4. Detailed discussions</p> <ul style="list-style-type: none"> <input type="checkbox"/> How to estimate the total limits <i>for each ODS under minimum Protocol requirements</i> (when relevant) <input type="checkbox"/> How to decide on the <i>total quantities</i> to be allowed for import each year <i>under a more ambitious phase-out</i>, including legal form, status and flexibility (when relevant) <i>Who should be allowed to import ODS?</i> How to determine the <i>allowance of each importer</i> ? <input type="checkbox"/> <i>Designation of authority</i> to issue import licences 	<p>Chapter 1. Montreal Protocol Handbook, Section 1.3.</p> <p>Chapter 2.2; overhead 20-21. Chapter 2.3; overhead 22-28.</p> <p>Annex A-2: Summary on choices made in some developed and developing countries;</p> <p>Chapter 2.4; overhead 29.</p>
<p>5. Decisions on administrative procedures and collaboration between authorities</p>	<p>Chapter 3 and overheads 30-36. Information on the HS system in Annex A - section 1; overheads 8-14. Draft proposals on registration and application forms, conditions, clearance by customs. Annex B-3.</p>
<p>6. Designing and implementing an <u>export</u> licensing system</p>	<p>Chapter 5. Overhead 37.</p>
<p>7. Discussion on draft legal text</p>	<p>Chapter 5. Overheads 38-41. Draft legal text reintroduced, highlighting points to be revised in consideration of the previous discussions.</p>

Export licensing systems

Import and export licensing systems are here dealt with separately to avoid discussions on too many subjects at the same time. Some countries might, however find it better to deal with them simultaneously.

Discussions on the export licensing system are closely linked to import control issues, but also to issues on collaboration between authorities in charge of ODS strategies in importing and exporting countries to prevent illegal trade. Considerations on the appropriate authority for export licences can therefore have repercussions on the choice of authority to be designated to issue import licences.

Discussion on draft legal text

A small working group can be useful

Having discussed all issues in substance, one by one, it is time to look in more detail at the proposed text of the draft act or regulation. It might be useful to set up a small working group to review and, when relevant, propose adjustments to the draft legal text. The working group should include legal experts and representatives for key ministries/authorities.

This discussion should take into account the decisions arrived at during the previous discussions, including the discussions on the administrative issues. The National Ozone Unit would need to reintroduce the proposal in more detail and highlight points where the draft act or regulation might need to be revised in light of the discussions during the workshop. Issues noted in *Chapter 5* should be highlighted.

The Working Group's conclusions would then be reported to the plenary for discussions and agreement.

Summary conclusions and follow up actions

Summarize and decide responsibilities

The final discussion during the workshop should summarize the conclusions reached. A decision should also be taken on the responsibility for follow-up actions aimed at a final government decision on the structure and implementation of the import and export licensing system.

7. Concluding Remarks

As stated before, some countries might prefer to circulate draft proposals for an import/licensing system formally or informally among the relevant ministries and to conduct bilateral discussions with each party involved, while others might prefer a collective discussion at a national workshop. Regardless of which model is chosen, the National Ozone Unit in collaboration with legal experts would have to revise the draft legislation and recommendations on the basis of the discussions. The draft will then have to undergo an official governmental approval process in accordance with the established procedures in each country.

The National Ozone Unit would also have to take the lead in establishing administrative procedures for communication and cooperation between relevant local, regional and central authorities, as decided. Local customs officials would be key figures in the enforcement of the system. They will therefore have to participate in training and information sessions. This could be organized by the National Ozone Unit in collaboration with the main customs authority. This includes also issues related to collaboration between the customs officers and the National Ozone Unit to prevent illegal trade.

Fig. 18. Follow Up Actions

- Revise draft regulation and recommendations
- Initiate and follow up governmental approval of the regulation
- Establish administrative procedures for communication between local, regional and central authorities
- Prepare awareness campaigns targeting
 - importers of ODS
 - ODS Users
- Organize training and information sessions for customs officers

The ODS importers and industrial users will be the ones directly affected by the implementation of an import and export licensing system. They will

therefore have to be the targets of awareness campaigns, designed to inform them about the reasons and implications of such a system.

All these issues are further elaborated in *Chapter 3*.

A N N E X A

Supplementary Information

Annex A.1 Problems in Monitoring ODS Imports by Customs Statistics

(Extract from presentation by Ingrid Kökeritz at Regional Workshop on Control and Monitoring ODS Consumption in Kampala 1-3 July, 1997)

Customs statistics may seem a natural source of information on ODS imports. Many countries do rely on customs statistics to monitor their ODS imports year by year. There are, however, many problems which make it difficult to obtain reliable data through customs statistics. Some are of a practical nature, for instance:

- ❑ The agents assisting the importers at the port of entry are not generally chemical experts and may not be aware of the chemical composition of the imported product and its correct customs code number. Their main interest is to move the shipment through customs as quickly as possible.
- ❑ Imports are spread over many different ports of entry into the country. The information is often collected and filed at those ports and may not always be transferred to one main registry.
- ❑ ODS represents a very small portion of the total import, small even as part of all chemicals. Customs officers will not have time to pay special attention to this fraction among hundreds of thousands of entries. Mistakes with regard to the chemical identity can easily happen, in particular as identification of the chemical is not the main objective of the customs declaration. The same problems also relate to the central authority for collating statistics.

Developed countries which have tried to rely on customs statistics as the primary source of ODS data have experienced all these problems. Some could perhaps, in theory, be overcome with great efforts.

There are, however, three problems in using customs statistics to record imports of ODS - as required under the Montreal Protocol - which cannot be overcome even if everything is done according to the books. These problems are related to the basic structure of the internationally agreed customs coding system.

Most customs statistical codes are nowadays built on what is called the Harmonized Commodity Description and Coding System (HS for short). This is a complex system which covers every possible item that can be subject to imports and exports. It is built up in 96 chapters, starting with simple natural products and continuing towards more and more complex manufactured products (toys is e.g. in one of the last chapters). All types of goods are allocated a code number in a hierarchic system. The first eight digits are agreed internationally. The first two digits signify the chapter, the next two the heading within that chapter, the following two the "one-dash heading", followed by the "two-dash heading". Each country can then break these headings down further by introducing national "three-dash headings", "four-dash headings", etc. - *provided that* the internationally agreed structure is not changed. At

each level, there is room to specify eight products or groups of products, as each level has to finish with "Others".

From our perspective, the *first* problem is that many of the ozone depleting chemicals appear in the statistics as part of much larger groups of chemicals. The *pure* ODS belongs to Chapter 29 (Organic chemicals). In 1989, the Parties to the Montreal Protocol asked the Customs Co-operation Council (now called the World Customs Organisation, (WCO) to assign one specific code number to each of the controlled ODS, which at that time were only the five main CFCs (Annex A Group I) and the three halons (Annex A Group II). This request was partly granted, with the exception that the three halons were grouped together, as were the CFC 114 and 115.

But changing the HS is a lengthy procedure, and these changes have only recently entered into force (1 July, 1996). In 1990, the Parties to the Montreal Protocol repeated their request, now with regard to the remaining ODS. The Parties to the HS Convention found it impossible to accommodate this request and could, as a maximum, recommend countries to assign, nationally, individual code numbers for 1,1,1-trichloroethane and each one of the Other CFCs (carbon tetrachloride already had its own code number for toxicity reasons). As for HCFCs and HBFCs, the Parties to the HS could only recommend one common code number for each of these two groups, even at the national level. Of course, every country has the right to give separate national codes numbers for each HCFCs (and the HBFCs). But it will require a complicated structure of sub-divisions to provide room for all these substances, and it might be difficult to convince custom authorities to go much further than the recommendation from the HS Committee.

The *second problem* is even worse. The *HS builds on the function* of the products, while *the Montreal Protocol is only interested in its chemical composition*. All mixed ozone depleting substances will be classified according to their function in the customs statistics. They can therefore appear under many different code numbers, totally depending on how the chemical is intended to be used. Many ozone depleting chemicals are sold as mixtures. For instance, many solvents contain a small amount of other chemicals which is added to improve the performance for the intended application. With increased use of HCFCs, we will see more and more mixed ozone depleting chemicals.

The *third* problem is that chemicals which are traded together with equipment of some kind, for instance refrigeration or air-conditioning equipment, should be classified under the applicable code for the main product, not separately under the code for the chemical.

All this (except the last problem) is described in more detail in UNEP's Guidebook "Monitoring Imports of Ozone Depleting Substances", section 2. Some of the experience gained in countries which have tried to use the customs statistics as their primary source to monitor ODS imports is also described (see in particular under New Zealand and Malaysia).

The bottom line is: Do not try to use customs statistics as your primary source of monitoring ODS imports - except temporarily until you have built up a better system. You will never get reliable figures and it is not worth the effort of trying. There are easier, more direct ways of monitoring the ODS imports, in particular if you introduce requirements that all ODS importers must have an import licence.

And in any case, other types of information, such as whether the imported substance is virgin or recycled cannot be retrieved from the customs statistics.

This does not mean that customs declarations and customs statistics should not have any role to play in monitoring ODS imports. It might still be a source for cross-checking and can be of great importance when tracking down illegal imports.

Annex A. 2 Licensing Systems in Some Developed and Developing Countries

(From presentation by Ingrid Kökeritz at Regional Workshop on Control and Monitoring ODS Consumption in Kampala 1-3 July, 1997, with examples from countries in the ODS Officers Network for Southeast Asia & the Pacific, ODSNET/SEAP).

Thailand

Thailand is a good example of a country where a licensing system was first used primarily to monitor the ODS consumption, but later was more actively applied to limit the import of ODS into the country. In 1989, the Thai government declared CFCs and halons as hazardous substances under its Hazardous Substance Act, classified as a type of substance which could not be imported without a licence from the Department of Industrial Works (DIW) - the authority in charge of ODS control in Thailand. At a later date, other ODS were also added to the list. Everyone importing any type of chemical has to obtain a clearance from DIW, showing that an import allowance ("permit") has been issued or is not required. DIW keeps records of the quantities actually imported of each chemical.

In the late 1980s and the beginning of the 1990s, DIW approved all applications. This gave DIW good information on who imported CFCs and halons and how much, but it did not affect the amount of ODS available in the country. Now, DIW reduces the allowances with a specified percentage compared to previous imports.

The permits are decided by DIW alone. The quantities to be allowed each year are decided by DIW, based on the recorded situation as compared to the Montreal Protocol requirements and considerations on the needs and possibilities to reduce the consumption of each specific type of ODS. There is no official decision on the total amount to be approved each year.

Malaysia

Malaysia has chosen a slightly different methodology. At an earlier date Malaysia set up a National Steering Committee (NSC) for ozone issues, with members from relevant governmental bodies. This included the Department of Environment (DOE) which is the co-ordinating authority in charge of ODS policies (under the Ministry of Science, Technology and Environment), the Ministry of International Trade and Industry (MITI), the Ministry of Finance and the Malaysian Industrial Development Authority (MIDA), as well as representatives for the private sector, both industries using ODS and the suppliers. Academia and non-governmental organisations are also represented on the National Steering Committee. The Committee is chaired by DOE.

DOE then requested the private sector to set up Industry Working Groups, one for each major use sector and one for the ODS suppliers. The Chairman of each Working Group was officially appointed by the Government. The Working Groups were requested to investigate the ODS consumption in each sector, including alternatives for substitution by other technologies, and to

propose a schedule for the fastest possible ODS reduction in each sector of application. A phase-out schedule was then decided by the Government as part of Malaysia's Country Programme, based on these investigations and subsequent discussions within the industry and within the National Steering Committee. The currently approved Country Programme aims at phasing out CFCs, halons, 1,1,1-trichloroethane and carbon tetrachloride by the year 2000.

Using its Customs Duty Order, Malaysia then introduced a requirement that everyone importing CFCs, halons, 1,1,1-trichloroethane and carbon tetrachloride must have an import licence ("approved permit"), issued by MITI. An Advisory Committee on the Approved Permit (AP) System, consisting of representatives from MITI, DOE, the Customs Department and MIDA, approves import permits for each importer. Quantities applied for, and approved, should not exceed the quantities imported by the same importer during previous years and should be in line with the sector-specific phase-out strategies in the Country Programme. Approved quantities will be reduced by 15-20 per cent annually up to the year 2000. Permits are approved on a quarterly basis and are not transferable. Importers are requested to report quarterly to MITI on actually imported quantities.

New Zealand

New Zealand has established its import licensing system in a different way. New Zealand issued a specific Ozone Layer Protection Act in 1989. This included sector-specific phase-out schedules in the Act itself, which were arrived at after consultations with relevant government departments and industry groups.

The Ministry of Environment is in charge of ODS policies, in consultation with other relevant government bodies, but the allowances - "permits" or "quota", both terms are used - are issued by the Ministry of Commerce. Permits are issued to the users, not to the importers or wholesalers as is the case in most countries. The permits are based on the applicant's consumption during the base year - 1986 for CFCs and 1989 for 1,1,1-trichloroethane and carbon tetrachloride. The import of all halons was prohibited in 1990. No general permits/quota were therefore given for halons but import could be approved upon specific applications for special purposes. Permits/quotas were transferable between users and between sectors - although it rarely happened - but only within the same group of chemicals. CFCs, 1,1,1-trichloroethane and carbon tetrachloride are now phased-out in New Zealand.

In 1996, a new Ozone Layer Protection Act was passed, replacing the 1990 Act. Regulations under the new Act incorporate a variation of the CFC historical usage allocation system to control HCFC imports. Permits/quotas continue to be issued to end users. In addition to permits/quotas based on historical usage, a further amount was set aside for import directly by wholesalers to allow them to serve new users.

Unlike for all other controlled substances, permits/quotas for the import of methyl bromide are issued on the basis of historical usage but only to the two major wholesaler companies, as it proved too difficult to identify end users.

As required by law under the 1996 Act, the phase-out schedules for both HCFCs and methyl bromide set out in the regulations were only implemented after extensive consultation with those affected.

Australia

Australia has still another variety. The total quantities to be approved for import of each controlled chemical are decided and announced in the Gazette year by year. These quantities were gradually reduced. Originally, the federal government only had the power to decide a phase-out schedule in line with what was required under the Montreal Protocol. Since 1992, national policies and the technical and economical possibilities to achieve further reductions can also be taken into account. Making use of this power, further imports of halon have not been approved from 1993 and onwards.

All ODS importers, producers and exporters must have a licence from the federal Environmental Protection Agency (EPA). For CFCs, halons, 1,1,1-trichloroethane and carbon tetrachloride - which are now virtually phased-out - each licensee was allocated a certain percentage of the total quantity, initially based on his import, production or export during the base year (1986 for CFCs and halons, and 1989 for 1,1,1-trichloroethane and carbon tetrachloride). Quotas were freely transferable, but the EPA had to be notified. Each licensee must report quarterly to the EPA on quantities, imported, produced and exported.

A system allowing more self-regulation by industry is now tested with regard to the HCFCs. The government decides the total quantity to be allowed, somewhat below what it is considered acceptable according to national policies - which in itself is about 50 per cent below the level allowed under the Montreal Protocol. The initial cap will be reduced by 10 per cent every second year, allowing a small tail for servicing after 2015. A licence from the EPA is still required, as well as reporting of actually imported quantities. But no individual quotas will be issued as long as the total reported consumption stays within 90 per cent of the established limit. If this threshold is exceeded, individual quotas will again be allocated to each licensee, based on his share during a base year to be decided.

Singapore

Singapore has a very special licensing system. The total amount of ODS to be imported each year is decided by the Cabinet. All industrial end-users and distributors are invited to register with the Trade Development Board (TDB) which is a condition for any allocation of ODS. Registration as industrial end-user is intended for companies which are buying ODS for their own industrial use. Registration as distributor is for companies that supply ODS in small quantities to non-industrial end-users.

TDB will allocate 50 per cent of the decided total quantity for public tender. All registered industrial-users and distributors are invited to bid for it. Those who tender the highest price will be allocated ODS until the tender quantities are fully allocated. Successful bidders will pay a tender price to TDB pegged at the lowest successful bid - in addition to the price they pay to the suppliers.

The remaining 50 per cent is offered to all who participated in the tender in proportion to their consumption or distribution the previous year, at the same price. The TDB then issues ODS Quota Warrants to all registered industrial end-users and distributors for the quota allocated.

All importers and exporters must be licensed by the TDB. The importers may only import ODS for local consumption based on collected ODS Quota Warrants. The industrial end-users and distributors provide the importers with Quota Warrants for the quantity they want to purchase. The importer then attaches warrants corresponding to the requested import quantity to his import permit application. The TDB approves the Import Permit if the Quota Warrants matches the quantity declared in the application. The importer can then use the Import Permit to clear the ODS through the Customs checkpoint.

European Union (EU)

Under the EU regulations, an import licence is required for all controlled ODS, whether virgin, recovered or reclaimed, which is imported into the European Union from an outside country. Imports and exports between EU countries are not restricted. The application for an import licence must specify the quantity (in kilograms), the country of origin, the commercial name, the customs codes, the nature of the substance (virgin, recovered or reclaimed) and the intended use or purpose of the chemical, as well as the place and date of importation if known.

The EU applies a quota system whereby each importer (and producer) is assigned a quota based on the quantity it placed on the market or used for its own account during the relevant base year. As of 1 January, 1996, the only ODS which can be imported into the EU are HCFCs, methyl bromide and ODS falling under one of the applicable exemptions under the Montreal Protocol (ODS for approved essential uses, ODS for feedstock use, recycled ODS, etc.). Production and import of HCFCs are allowed only for certain applications.

All ODS importers have to report annually on quantities imported, with separate figures for virgin substances, recycled ODS, ODS which will be used for approved essential uses, etc. Each importer of HCFCs must report every quarter to the EU Commission, with a copy sent to the designated national authority, on its imports to the EU. The Commission will take appropriate steps to protect the confidentiality of the information submitted.

For more details, see UNEP's guidebook "Monitoring Imports of Ozone-Depleting Substances".

Annex B. 1 Model Agenda for National Workshops on Import/Export Licensing Systems

Day 1

1. Introduction:

Welcome speech and introduction to the workshop by high level officials

2. The Environmental Problem and Agreed Actions

Presentations to bring out:

- * The scientific findings on ozone depletion and its detrimental effects
- * The Montreal Protocol (phase-out commitments, reporting requirements)
- * Applications of ODS Chemicals (those relevant to the country)
- * Current and forecasted national consumption
- * The country's agreed Action Plans to phase out ODS

3. Presentations and Discussions on Why an Import Licensing System Is Needed

- * The importance of a reliable system to monitor ODS imports and reasons to link monitoring of ODS imports to an import licensing system
- * The Amendment at the Ninth Meeting of the Parties to the Protocol, requiring introduction of an import and export licensing system
- * Presently used legislation and procedures to control and/or monitor imports of classified goods, in particular hazardous chemicals and ODS (if any).

Questions and discussions on related issues in principle.

4. Discussion on the Objectives and General Structure of an Import Licensing System:

Introductions on:

- * Principle decision steps when establishing an import licensing system
- * Summary presentation of a preliminary draft legal text and general recommendations on procedural issues.

Discussions to agree on:

- * Overall objectives (limiting their market availability versus only monitoring ODS)
- * Level of ambition with regard to the ODS phase out (minimum obligations under the Protocol versus a more accelerated phase out).

5. Conclusions on Issues Discussed During Day 1

Day 2 (morning)

6. Detailed Discussion To Decide On:

- * How to estimate the total limits for each ODS under a more accelerated phase-out (when relevant).
- * How to decide on the total quantities to be allowed for import each year (legal form, status and flexibility).
- * Who will be allowed to import ODS?
- * How to determine the allowance of each importer.
- * Designation of authority to issue import licences.

Preliminary conclusions on issues discussed during the day 2 morning session.

Day 2 (afternoon)

7. Discussion on Administrative Procedures and Collaboration Between Authorities

- * Standard administrative procedures
- * Issues related to ensuring compliance and tracking illegal imports.

8. Discussion on Recommendations Concerning Export Controls

- * Introduction of export licensing requirements
- * Strategies and procedures to facilitate collaboration between countries.
- * Designation of authority in charge

Conclusions on recommendations regarding the institutional and procedural issues.

A Working Group to be set up to review the draft legal text.

Day 3

9. Working Group to Review the Proposed Text of the Draft Legislation

10. Presentation by Working Group to Plenary

11. Conclusions and Agreement on Responsibility for Follow-Up Actions.

Annex B.2 Overheads for Use at National Workshops on ODS Import and Export Licensing Systems

ODS Phase-out schedules for "Art. 5 countries "



1999 2002 2003 2005 2007 2010 2015 2016 ----2040

Annex A

base level: 1995-1997

- 5 main CFCs

- Halons

freeze

freeze

-85%

-50%

-50%

0

0

Annex B

base level: 1998-2000

- Other CFCs

- Carbon tetrachloride

- 1,1,1-trichloroethane

-20%

-85%

0

0

-70%

0

Annex C

base level: 2015

- HCFCs (consumption only)

freeze

0

Annex E

base level: 1995-1998

- Methyl bromide

freeze

-20%

0

(HBFCs, Annex C, Gr.II, shall have been phased out by all Parties already by 1 Jan. 1996)

OH Number 1



Examples of ODS Legislation

- *Controls on supply*
 - bans on import/production/sale of specified ODS (specified dates)
 - gradual limitations on ODS import/production
 - bans on import and/or sale of certain products/equipment
 - (e.g. aerosols cans, MAC designed for CFC 12, second hand equipment)
 - import notification requirements
 - labelling requirements
- *End use controls*
 - bans on ODS use for defined applications (specified dates)
 - controls on ODS emissions
 - restrictions on right to handle e.g. ODS refrigerants

Basic Elements of an ODS Control Strategy



- Tools
 - Regulations
 - Economic incentives and disincentives
 - Public awareness

Work best if combined

- Targets
 - ODS Supply (import and production)
 - ODS Demand (use by application)
- Most effective if targeting both**
- new installations/uses
 - already established use
 - small scale users (small enterprises, individual users)
 - medium and large scale users

Must cover all

Challenges to Achieve Reductions Stipulated by the Montreal Protocol



Prevent Growing ODS Consumption as Soon as Possible

- Economical and industrial growth can lead to increased dependency of ODS technology
- Prevent dumping of obsolete, ODS dependent technology

To Eliminate Established Consumption Takes Time

- Refrigeration equipment has a long life-time
 - gas is vented during maintenance and repair
 - maintenance sector is informal and hence difficult to target
- Solvent use
 - difficult to identify users and convince them to change

Why is a System to Monitor ODS Imports Important ?



- “MP Consumption” = Import + Production - Export
 - Monitoring import and export is therefore crucial

- Monitoring important for
 - Identify consumption patterns and use as a basis for designing **control strategies**
 - Reporting to the Ozone Secretariat

- Unlike custom statistics, import licences provide an opportunity to effectively both **monitor and control supply of ODS**



Five Good Reasons for an Import/Export Licensing System

- Import and export licences is an effective tool to limit ODS supply
- Import licences provide a gateway to controls on end users
- Import and export licences help collecting reliable information on imported and exported ODS by chemical
- Import licences facilitate controls on illegal imports
- Import and export licences are mandatory under the Montreal Protocol

Why is HS Inherently Inadequate to Monitor ODS Imports ?



- Separate Code Numbers for all ODS difficult even for pure chemicals
- Mixtures are classified in HS according to their function, not according to their chemical composition
- Chemicals traded together with equipment (refrigeration or air-conditioning) are classified under the code for the main product

International Classification of Ozone Depleting Substances *as pure chemicals* - Illustrating the Basic Structure of the Harmonised System (HS)



Section VI. Products of the Chemical or Allied Industries

Chapter 29. Organic chemicals

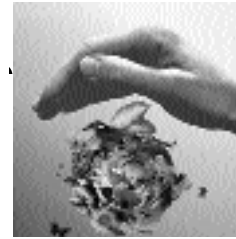
I. Hydrocarbons and Their Halogenated , Sulphonated , Nitrated or Nitrosated Derivatives

- 29.01-02
- 29.03 Halogenated derivatives of hydrocarbons
- 2903.10 Saturated chlorinated derivatives of acyclic hydrocarbons
 - 2903.11-13
 - 2903.14 Carbon tetrachloride
 - 2903.15-16
 - 2903.19 Other
(includes 1,1,1-trichloroethane)
 - 2903.20
 - 2903.30 Fluorinated, brominated or iodinated derivatives of acyclic hydrocarbons (includes methyl bromide)
 - 2903.40 Halogenated derivatives of acyclic hydrocarbons containing two or more different halogens
(includes all CFCs, Halons, HCFCs, HBFCs;)
(subdivided 1/1 1996, see next fig.)
 - 2903.50
 - 2903.90 Other

OH Number 8

Amendments to the International HS Subheading 2903.40

(entered into force 1 January 1996)



Subdivision of Subheading 2903.40 :

-Halogenated derivatives of acyclic hydrocarbons containing two or more different halogens:

- 2903.41 Trichlorofluoromethane (= *CFC 11*)
- 2903.42 Dichlorodifluoromethane (= *CFC 12*)
- 2903.43 Trichlorotrifluoroethanes (= *CFC 113*)
- 2903.44 Dichlorotetrafluoroethanes and
chloropentafluoroethane (= *CFC 114 and CFC 115*)
- 2903.45 Other derivatives perhalogenated only with
fluorine and chlorine (= *other CFCs*)
- 2903.46 Bromochlorodifluoromethane ,
bromotrifluoromethane and
dibromotetrafluoroethanes
(= *Halon 1211, 1301 and 2402*)
- 2903.47 Other perhalogenated derivatives
(“perhalogenated”= *fully halogenated = chemicals
with chlorine, bromine, fluorine or iodine but no
hydrogen*)
- 2903.49 Other (*includes e.g. HCFCs and HBFCs*)

OH Number 9

Recommendation for Complementary National Codes on ODS

(Extract from the Decision by the Customs Co-operation Council 20 June 1995)



THE CUSTOMS CO-OPERATION COUNCIL,

RECOMMENDS that Member Administrations and Contracting Parties to the Harmonized System Convention take all appropriate action to insert the following additional structure in their statistical nomenclatures with effect from 1 January 1996 or as soon as possible thereafter:

Subheading 2903.19 of the Harmonized System

--- 1,1,1-Trichloroethane (methyl chloroform)

Subheading 2903.45 of the Harmonized System

- Chlorotrifluoromethane (= CFC 13)
- Pentachlorofluoroethane (= CFC 111)
- Tetrachlorodifluoroethanes (= CFC 112)
- Heptachlorofluoropropanes (= CFC 211)
- Hexachlorodifluoropropanes (= CFC 212)
- Pentachlorotrifluoropropanes (= CFC 213)
- Tetrachlorotetrafluoropropanes (= CFC 214)
- Trichloropentafluoropropanes (= CFC 215)
- Dichlorohexafluoropropanes (= CFC 216)
- Chloroheptafluoropropanes (= CFC 217)

Subheading 2903.49 of the Harmonized System

- Derivatives of methane, ethane or propane , halogenated only with fluorine and chlorine (= the HCFCs)
- Derivatives of methane, ethane or propane, halogenated only with fluorine and bromine (= the HBFCs)

OH Number 10

Chapter Titles for Mixed Chemicals under the Harmonized System

(titles for Chapter 32-37 indicative only)



Chapter 30.	Pharmaceutical products
Chapter 31.	Fertilisers
Chapter 32.	Dyes, pigments, paints and inks
Chapter 33.	Cosmetics
Chapter 34.	Soap, organic surface-active products, washing preparations, lubricating preparations, polishing or scouring preparations
Chapter 35.	Glues
Chapter 36.	Explosives
Chapter 37.	Photographic goods
Chapter 38.	Miscellaneous chemical products

Chapter 38. Miscellaneous Chemical Products

- Some of the 24 headings



-
- 38.08 Insecticides, rodenticides, fungicides, herbicides, anti-sprouting products and plant/growth regulators, disinfectants and similar products, ... for retail sale or as preparations or articles
e.g. methyl bromide preparations
-
- 38.10 Pickling preparations for metal surfaces; fluxes and other auxiliary preparations for soldering, brazing or welding;
-
- 38.13 Preparations and charges for fire-extinguishers ; ...
- 38.14 Organic composite solvents and thinners, not elsewhere specified or included ; prepared paint or varnish removers
- 38.15 Reaction initiators, reaction accelerators and catalytic preparations, not elsewhere specified or included
-
- 38.22 Composite diagnostic or laboratory reagents, other than those of heading No 30.02 or 38.06
-
- 38.24*Not elsewhere specified or included* chemical products and preparations of the chemical or allied industries;
- 3824.10 - 60:
- (3824.70) Mixtures containing perhalogenated derivatives of acyclic hydrocarbons containing two or more different halogens:
- 3824.71 Containing acyclic hydrocarbons *perhalogenated* only with fluorine and chlorine
(= mixtures containing CFCs - **provided that the function of the product does not match the description of any code above 3824.71**)
- 3824.79 Other
(*could in principle cover mixtures containing halons, but fire extinguishers have a separate code higher up in the hierarchy, 3813*)
- 3824.90 Other
Includes, among many other chemicals, HCFC and HBFC mixtures (as they are not "perhalogenated"), as well as mixtures containing 1,1,1-trichloroethane and carbon tetrachloride (as they do not contain "two or more different halogens") - provided that their function does not match a higher code, in this or any other chapter.

Practical Problems in Using Custom Statistics to Monitor ODS Imports



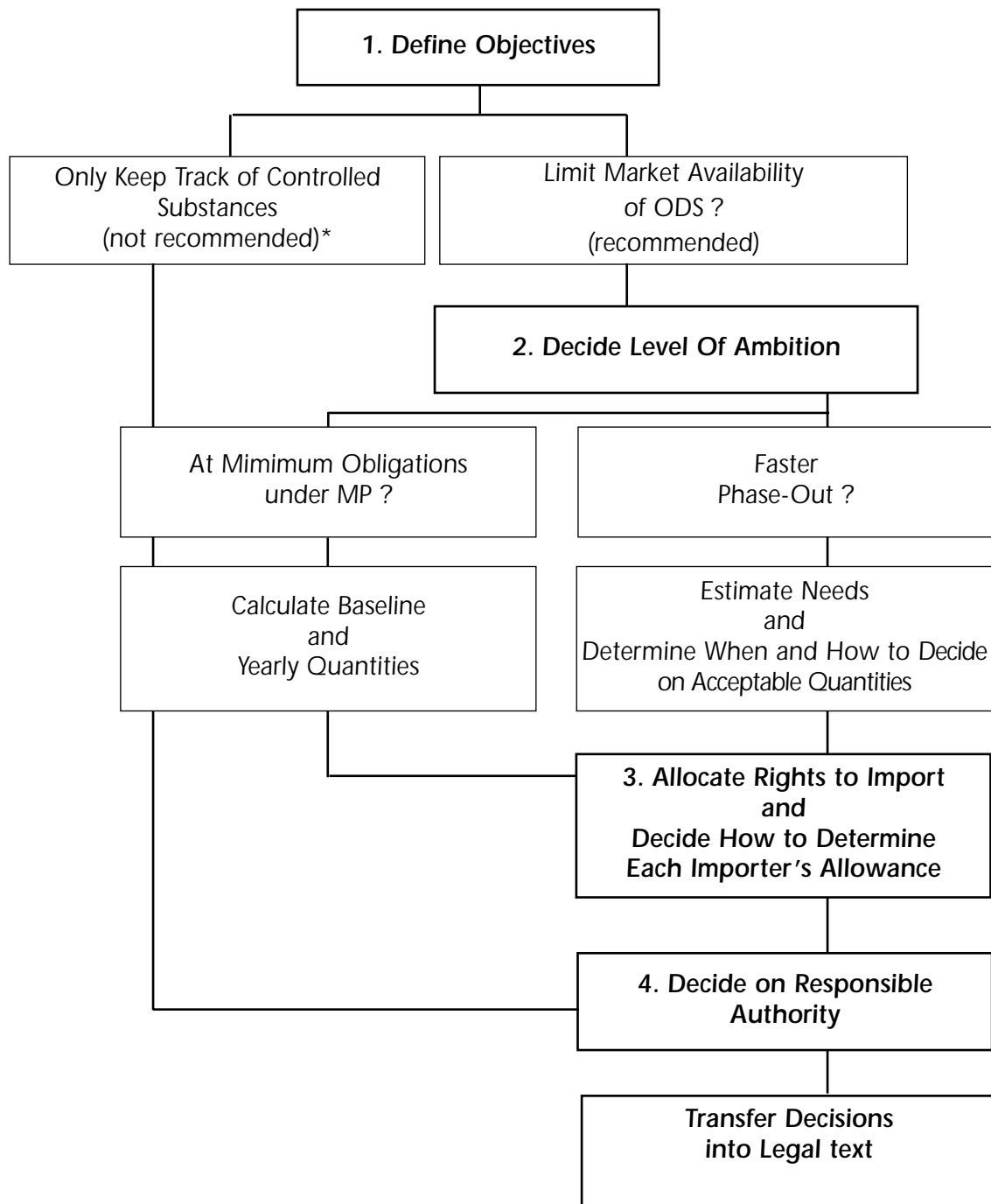
- Import agents have limited knowledge about the composition of the imported chemicals and their correct customs codes
- Import statistics from different ports is often not compiled centrally
- ODS represent a very small portion of the total imports and are seldom given special attention by custom officers

Conclusion on Customs Codes and Statistics



- Custom Statistics is an unreliable primary source of information on ODS imports
- Reporting directly linked to import licences is more reliable and can generate more information
- Customs Statistics might be useful for cross-checking
- Knowledge on Customs Code System (HS) necessary for collaboration with customs officers on import and export licensing requirements

DECISION TREE



OH Number 15



STEP 1 DEFINE OBJECTIVE

- IMPORT LICENSING CAN BE USED TO :
 - a) Keep track of the controlled substance imported
 - simple, but
 - does not reduce consumption
 - Reductions must be achieved by other control measures
(*Thailand in early days*)
 - or**
 - b) Limit market availability of the controlled substances
(Recommended)
 - reduces consumption = helps fulfil MP requirements
(*Thailand now, Malaysia, Singapore, Australia, etc.*)
- DIFFERENTIATE BY CHEMICAL (CFCs versus HCFCs)?

STEP 2 DECIDE LEVELS OF AMBITION



■ LIMITS FOR TOTAL QUANTITY TO BE ALLOWED FOR IMPORT EACH YEAR:

- a) Stick to minimum obligations under the Protocol ?
(Australia in early days)
- or**
- b) More accelerated phase out ?
(Australia since 1992, Sweden, EU, Malaysia)



RATIONALE FOR ACCELERATED PHASE OUT

- Flexibility and margin of error, e.g. boom in tourism
- Decreased dependence on obsolete and sunset technology
- Montreal Protocol phase out schedules may be accelerated
- Increases exposure to latest technology
- Establish environmental leadership
- Better for the environment



“At Home We Make it Abundantly Clear to Our Industry: Let’s Get Rid of This Sunset Technology as Fast as Possible”

Mr Tan Meng Leng , Department of Environment, Malaysia, 1990



OH Number 19

DECIDE TOTAL IMPORT QUANTITIES UNDER ACCELERATED PHASE OUT



- a) Estimate needs in each sector, considering:
- country programme (CP)
 - existing need
 - development forecast
 - potential for reduction
- b) Consider legal form, status and flexibility of decision
- decide full phase out schedule by legislation from start ?
(*New Zealand, EU*)
 - decide by regulation each year ?
(*Australia*)
 - to be decided by authorities in charge ?
(*Malaysia, Thailand and Philippines*)

Examples of Legal Methodology to Decide Total Annual ODS Imports



- **Australia:** Decisions each year - published in gazette

- **New Zealand:** Full reduction schedule in Ozone Layer Protection Act - subject to review every 2nd year

- **EU:** Full reduction schedule in EU regulation - full legal process required for revision

- **Malaysia:** Licence approvals by Advisory Committee with representatives from relevant ministries
- guided by reduction schedule in revised Country Programme

- **Thailand and the Philippines:**
Licences approved by authority in charge of ODS without involvement of other ministries; no official decision on total annual allowance.



DESIGNATING IMPORTERS

- Who should be allowed to import:
Only previous importers or new importers also ?
- Should a difference be made between substances with shorter phase out schedule (CFCs etc.) versus those with longer phase-out schedules (HCFCs) ?
- Should a certain quantity be set aside for specific needs ?

HOW SHOULD THE ALLOWANCE FOR EACH IMPORTER BE DECIDED?



- Should allowance be strictly proportional to previous years ?
- Should it take into account potential for reduction of each type of chemical ? How ?
- or**
- Should it be based on a “first come --- first served “basis ?
 - Should the import allowances be freely transferable ?
 - What should be the period of the licence validity ?

Characteristic Import Licence Features in Some Countries



Australia

- Special Ozone Protection Act
- All importers to be licensed by federal EPA (in charge of ODS issues)
- Total quantity announced yearly in the Gazette
- Importers to report quarterly on actual import

CFCs etc. (Annex A and B):

- Individual import allowances (“quotas”) to importers based on import level during MP base line years
- Quotas freely transferable

HCFCs :

- No individual quotas as long as certain total limits are not exceeded

Characteristic Import Licence Features in Some Countries



New Zealand

- Special Ozone Layer Protection Act
- Phase-out schedules included directly in the Act
- Licences (“permits”) issued to end users (not to importers or wholesalers)
- Permits based on applicant's consumption during MP base line years with percentage reduction according to phase-out schedules
- Permits issued by Ministry of Commerce (not in charge of ODS issues)
- Permits freely transferable
- HCFCs: Certain additional allowance for wholesalers to serve new end users
- Reporting requirements newly introduced

OH Number 25

Characteristic Import Licence Features in Some Countries



Singapore

- Total quantity decided annually by Cabinet
- All industrial end-users and distributors to register with Trade Development Board, TDB (not in charge of ODS issues)
- 50% offered for public tender to registered enterprises
- Tender price paid to Government (on top of supplier's price)
- Remaining 50% offered in proportion to previous year's consumption, at same price
- Importer must show ODS Quota Warrants from end-users
- Import permits issued by TDB

Characteristic Import Licence Features in Some Countries



Malaysia

- Uses customs Duty Order to require import licences (“permits”)
- Sector phase-out targets decided by Cabinet (Industry involved in decision process)
- Import permits issued by Ministry of International Trade (MITI) on advice by Advisory Committee consisting of
 - Department of Environment (DOE/Ozone Unit)
 - MITI
 - Customs Department
 - Malaysian Industrial Development Authority
- Import permits for each importer:
 - within sector targets
 - not exceeding previous years
 - reduced by 15-20 % annually
- Permits not transferable
- Importers required to report quarterly to DOE/Ozone Unit

OH Number 27

Characteristic Import Licence Features in Some Countries



Thailand

- ODS Designated as Hazardous Substances
(Department of Industrial Works, DIW, in charge)
- DIW/Ozone Unit Issues ODS Import Allowances (“permits”)
- Import Clearance from DIW Required for all Chemicals, by shipment
- Permits not Transferable

In early days:

- All applications approved

Now:

- Permits reduced annually
- Reductions decided by DIW (without prior official decision)
- Decisions based on
 - Importer's previous records
 - Reductions needed to fulfil MP commitments
 - Reduction potentials

STEP 4 DECIDING ON RESPONSIBLE AUTHORITY



- Import control authority ?
Authority responsible for ODS strategies ? (Recommended)
Other ?
- Should other authorities be consulted ?



Registration of Importers

- All importers should be required to register
- Request information on previous imports with supporting documents
- A file should be created for each importer
- Each importer could be assigned a registration number

Checklist on information to request



- quantities of each ODS
- composition in percentage by weight
- exporting country
- other facts relevant for the approval
- trade names
- scheduled place and date of arrival
- expected use sectors

Signed with declaration of accuracy by the importer



Checklist on Useful Conditions

- period of validity
- requirement to report on actually imported quantities
- requirement to seek clearance before shipping
- requirement to label imported containers
- requirement to keep records on sold quantities

Checklist on Instructions to Importers



- Why import licences are required.
- Requirements to register - who is eligible, what kind of licences will be issued.
- How applications should be made:
 - by whom, to which authority, by what date
- List all applicable ODS
- Quantities in kilograms, without ODP-adjustment.
- Both pure and mixed chemicals, with % by weight
- Specified information to process application (e.g. imports previous years, intended use)
- Other information required for reporting to the Ozone Secretariat
- Trade names
- Standard conditions, such as
 - clearance before shipping, record keeping, reporting, etc.
- Procedure at customs.
- Possible actions in case of imports without licence or misleading or false information.

Recording Requirements in Victoria State, Australia



Distributors (both importers and others) to record

- name and address of the purchasers
- quantities sold
- end use categories:
 - aerosols
 - vehicle air-conditioning
 - commercial and industrial air-conditioning and refrigeration
 - domestic refrigeration
 - domestic air-conditioning
 - foam production
 - solvent use
 - dry cleaning
 - portable fire extinguishers
 - halon fire suppression systems
 - miscellaneous (to be specified)

Dissemination of Information to Importers



Distribute information to

- all known ODS importers
- importation agents and brokers known to handle chemicals
- Chamber of Commerce and other trade associations
- technical magazines and mass media (TV, radio, newspapers)



Training of Customs Officers

The training should cover

- reasons for the import licensing requirements
- the approved act and/or regulations
- procedure for application and approval of import licences
- chemicals covered
- common applications and appearance of these chemicals, as traded
- likely applicable customs codes
- procedure to be followed at arrival of ODS shipment
- procedure for recording imported quantities
- applicable actions in case of no licence or suspicions on false or misleading declarations
- contact person at ODS unit (and at the authority in charge of ODS import permits if different)
- export licensing requirements



Licensing Exports

- Export figures required to calculate consumption
- Exports not allowed to Non-Parties
- Only allowed to cover “basic domestic needs”
- Collaboration to track illegal trade
- Licence to be issued by ODS authority (Recommended)
- Information to country of destination ?

TRANSLATING THE DECISION INTO LEGAL TEXT



- a) Possible to use available legal instruments ?
- e.g.
- Ozone Layer Protection Act
 - Act on Hazardous Substances/Act on Chemical Products
 - Environmental Protection Act
 - Import/Export Controls Act
- or**
- b) Necessary to pass a new act (Ozone Protection Act) ?

Consider suitability to achieve desired results (see Step 1-4)

Details to Consider in Translating Decisions into Legal Text



- Specify substances by chemical names
- Ensure that licences are required for
 - both pure and mixed chemicals, incl. isomers
 - both virgin and used/recycled/reclaimed ODS
 - also in free trade zones
 - pesticides
- Specify who is eligible and criteria/procedure
- Delegate power to
 - issue regulations, guidelines and rules of procedure
 - issue and withdraw licences and impose conditions
 - get access to premises and documents
 - request information
- Check sanctions and appeal
- Include ban on imports and exports from Non-Parties
 - ODS imports from and exports to Non-Parties
 - Imports of products listed in Annex D
- Restrictions / bans on used products ?

Delegation of Powers



- *Issues relevant for follow-up regulations/ guidelines and /or conditions attached to licences:*
 - *requests for information*
 - *application forms and procedures*
 - *reporting*
 - *record keeping*
 - *restrictions on sales*
 - *labelling*

- *Get access to premises and documents*

- *Powers assigned to which authority / ies ?*

- *Need to specify in detail?*

Products That May Not Be Imported From Non-Parties ("Annex D Products")



Following products if they contain CFCs (Annex A, Gr. I) or Halons :

- Automobile and truck air conditioning units (whether incorporated in vehicles or not)
- Domestic and commercial refrigeration and air-conditioning/heat pump equipment (as refrigerant or in insulating foams), e.g:
 - refrigerators, freezers
 - dehumidifiers, water coolers, ice machines
 - air-conditioning and heat pump units
- Aerosol products, except medical aerosols
- Portable fire extinguisher
- Insulation boards, panels and pipe covers
- Pre-polymers

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Annex B.3 Application and Decision Forms

Introduction to the Draft Application and Decision Forms

Application forms for various stages in the import and export licensing process can be structured and formulated in countless different ways. The same is true for the decisions. Real examples of application and decision forms are not included in this resource module. These are best collected directly from countries of interest. Such contacts will at the same time make it possible to receive comments on the conditions that might have affected the structure and formulation of the forms and the positive and negative experience of use in practical life. UNEP's guidebook "Regulations on Control of Ozone Depleting Substances (ODS)" provides contact information to authorities and officers in charge of such control.

Some draft forms are, however, specifically developed for this resource module to illustrate how the forms could be structured. It should be noted that these forms are developed to give "food for thoughts" only. Ultimately, each country will have to design their forms in the way which suits the decided structure and procedure best.

The examples include three draft forms.

- 1) Draft Form 1: Application Form for Registration as Importer of Ozone Depleting Substances.

This form is intended to *collect basic information* on all enterprises (and persons) who want a licence to import ODS. The information requested includes contact addresses, information on who is authorized to act on behalf of the enterprise and information on imports during previous years with supporting documentation. It is assumed that the level of previous imports will be considered to be of significance when import licences are approved.

It is likely that information is needed with regard to all the years which affect the country's own base level in relation to the Montreal Protocol obligations. The Protocol base levels for Article 5 countries are calculated as the average of three or four years and differ from substance to substance. The form annexes contain therefore separate tables for Annex A, Annex B and Annex C+E substances, respectively. Space is also provided for information regarding earlier year which the country might choose to use as base year.

For HCFCs (Annex C), with a Montreal Protocol base year as late as 2015, it is assumed that the information to be collected, for the time being, will have to relate to the same years as for methyl bromide (Annex E), that is to 1995-1998. In case HCFC import will be monitored only, an alternative would be to design a special form for applications to register as HCFC importer.

The form contains also a template for a *decision* on the registration (*page 5*). It is suggested that this decision should include a decision on which quantities the authority will use as base levels for the enterprise when later deciding on import allowances. An early decision on the enterprise's base levels (for each one of the relevant ODS) will facilitate the enterprise's planning and avoid repeated discussion on this issue.

- 2) Draft Form 2: Application for Allowance to Import Ozone Depleting substances (ODS) during a specified period, here assumed to be a calendar year.

The form is intended for *new* chemicals. As agreed at the Ninth Meeting of the Parties, the import licensing system shall also be applicable to import of used, recycled or reclaimed ODS. But the type of information to be collected for such substances is different. It includes for instance information to support the statement that the substances are indeed used, recycled or reclaimed. Imports of these substances are also excluded from the Protocol reduction requirements. The same is the case with substances which will be entirely used as feedstock in the production of other chemicals. It has therefore been assumed that a separate application form should be designed for import of these substances (no such form is included here).

This draft application form contains requests for information on chemical composition, trade names, exporting country and intended use area (*page 1*). Other types of information can also be desirable. This is indicated in brackets on *page 2*. Such information requests will be highly country specific and is therefore not included in this draft form.

The ODS content in mixtures, specified by chemical, must be calculated. The form requests the applicant to make this calculation. The importer's calculation must, however, be checked - miscalculations are likely. Using the spreadsheet, developed by Mr McGlinchy (see Annex C-3) should facilitate this task.

This application form contains also a template for a *decision* on the yearly allowance (*page 3-5*), divided in a recommendation part to be signed by the ODS officer and a decision part to be signed at the appropriate governmental level. The form assumes that the ODS officer will prepare the decision by also filling in and ticking the appropriate points in the decision part.

Finally, the last page (*page 6*) of the form contains a *table to be filled in later when clearing individual shipments* against the approved yearly allowance. The right hand part of this page is assumed to be filled in by the ODS officer on the original which was returned to the importer with the allowance approval, based on a clearance request on the Draft Form 3 referred to below. The customs officer will fill in the left hand part when the shipment actually arrives. This document will hereby become the main document and ultimately contain full information on approved, as well as actually imported quantities, regardless of at which ports the imports have taken place. It is assumed that the ODS officer also notes the approved clearance requests in his records.

It is necessary to calculate correctly the aggregated quantity of each ODS, in pure plus

mixed chemicals, when reviewing an import clearance request in order to deduct this quantity from the the approved allowance for the relevant ODS during the control period. This is one of the reasons why the clearance is more conveniently done by the ODS officers who are more familiar with the specific ODS mixtures than by the customs officers who handle thousands of substances and products.

3) Draft Form 3: Clearance Request for Shipment of Ozone Depleting Substances

This request is assumed to be submitted by the importer before the shipment leaves the port of origin.

The importer is requested to give information on the exporter. This information will be important for cooperation between importing and exporting countries.

This form asks the importer to state likely customs code numbers. In the end it is, however, the customs officers who decide which customs code number the shipment will be classified under.

Other application forms will also be needed, for instance for export licences.

DRAFT FORM 1

Form No 1

Received..199.....

**APPLICATION FOR REGISTRATION AS IMPORTER OF
OZONE DEPLETING SUBSTANCES(ODS)***To be filled in by the importer in two copies (one will be returned to the applicant with a decision):**Name of applicant :**Enterprise identification no:**Person authorized to act on behalf of the enterprise (name and title):.....**Contact person (name and title):.....**Postal address:.....**Visiting address:.....**Tel.no:..... Fax.no:.....**E-mail address (if any):.....*

..... hereby applies for registration as importer of the following types of ozone depleting substances (*Use the chemical code name as indicated in the information leaflet!*):

- | | | |
|------------------------|--------------------------|-----------------------|
| CFCs: | <input type="checkbox"/> | types of CFC: |
| Halons: | <input type="checkbox"/> | types of halon: |
| Carbon tetrachloride: | <input type="checkbox"/> | |
| 1,1,1-trichloroethane: | <input type="checkbox"/> | |
| HCFCs: | <input type="checkbox"/> | types of HCFC:..... |
| methyl bromide: | <input type="checkbox"/> | |

Information on previously imported quantities of these chemicals, see attached table(s), Annex

Customs declarations and other requested information are attached as supporting evidence, see Annex

[hereby certify that the information given in this application and its annexes is accurate. Evidence of my right to act on behalf of the enterprise is attached as Annex

*Place and date:**/signature of person authorized to act on behalf of the enterprise/**Name in block letters:.....**Title:*

Registration Form, page 1/5

INFORMATION ON PREVIOUS IMPORTS OF CFCs AND HALONS

Enterprise/person:.....

Chemical code name	Total quality in 19.....			Total quality in 1995			Total quality in 1996			Total quality in 1997		
	as pure chemicals (kg)	in mixtures (kg)	name of mixtures ¹	as pure chemicals (kg)	in mixtures (kg)	name of mixtures ¹	as pure chemicals (kg)	in mixtures (kg)	name of mixtures ¹	as pure chemicals (kg)	in mixtures (kg)	name of mixtures ¹
CFC 11												
CFC 12												
CFC 113												
CFC 114												
CFC 115												
Other CFCs												
Halon 1211												
Halon 1301												
Halon 2402												

Additional information:

1 Additional information can be given in the space below the table.

INFORMATION ON PREVIOUS IMPORTS OF CARBON TETRACHLORIDE AND 1,1,1-TRICHLOROETHANE

Enterprise/person:.....

Chemical code name	Total quality in 19..			Total quality in 1998			Total quality in 1999			Total quality in 2000		
	as pure chemicals (kg)	in mixtures (kg)	name of mixtures ¹	as pure chemicals (kg)	in mixtures (kg)	name of mixtures ¹	as pure chemicals (kg)	in mixtures (kg)	name of mixtures ¹	as pure chemicals (kg)	in mixtures (kg)	name of mixtures ¹
Carbon tetra-chloride												
1,1,1-tri-chloroethane												

Additional information:

.....

.....

.....

.....

.....

¹ Additional information can be given in the space below the table.

INFORMATION ON PREVIOUS IMPORTS OF HCFCs AND METHYL BROMIDE

Enterprise/person:.....

Chemical code name	Total quality in 1995			Total quality in 1996			Total quality in 1997			Total quality in 1998		
	as pure chemicals (kg)	in mixtures (kg)	name of mixtures ¹	as pure chemicals (kg)	in mixtures (kg)	name of mixtures ¹	as pure chemicals (kg)	in mixtures (kg)	name of mixtures ¹	as pure chemicals (kg)	in mixtures (kg)	name of mixtures ¹
HCFC 22												
HCFC 123												
HCFC 124												
HCFC 141b												
HCFC 142b												
Other HCFCs												
Methyl bromide												

Additional information:

1 Additional information can be given in the space below the table.

For official use.

**DECISION
ON
REGISTRATION OF IMPORTER OF OZONE DEPLETING SUBSTANCES (ODS)**

..... is registered as importer of the following ozone depleting substances:
.....
with registration number

Import allowances will be based on the following base level quantities:

for .....	..... kg	for .....	..... kg
for .....	..... kg	for .....	..... kg
for .....	..... kg	for .....	..... kg
for .....	..... kg	for .....	..... kg
for .....	..... kg	for .....	.....kg
for .....	..... kg	for .....	.....kg

Import allowances must be requested for each calendar year not later than by of the preceding year, and shall be addressed to.....

Allowances for each year will be decided by {Ministry of Environment} not later than and will be gradually reduced.

Please note! This registration in itself does not entitle the enterprise to import ODS. ODS can only be imported based on an appropriate allowance with subsequent clearance or, in certain cases, on a permit for an individual shipment.

Application for registration as importer ofis denied for the following reasons:

.....
.....

Appeal against this decision should be addressed to..... and be submitted not later than

Date:

.....
/name of duly authorized officer/

DRAFT FORM 2

Form No 2

Received 199.....

APPLICATION¹**FOR ALLOWANCE TO IMPORT OZONE DEPLETING SUBSTANCES (ODS)
IN 199....**

Name of applicant:..... ODS Import Reg. No:

Person authorized to act on behalf of the enterprise (name and title):

Contact person (name and title):.....

Address:

Tel. no:..... Fax. no:

E-mail address (if any):.....

..... hereby applies for an allowance to import the following ozone depleting substances (ODS) during 199.....:

Pure chemicals (use chemical code names):

Controlled substances:	Requested quantities:	Trade name:	Exporting country:	Intended use (see codes on page 4)
.....	.....kg	.....	.....	.....
.....	.....kg	.....	.....	.....
.....	.....kg	.....	.....	.....
.....	.....kg	.....	.....	.....
.....	.....kg	.....	.....	.....
.....	.....kg	.....	.....	.....

Mixtures (components should be stated by chemical code names):

Trade name:	Chemical composition (% of each ODS):	Requested quantities:	Exporting country:	Intended use (see codes on page 4):
.....kg	.....	.....
.....kg	.....	.....
.....kg	.....	.....
.....kg	.....	.....
.....kg	.....	.....
.....kg	.....	.....

These requested quantities correspond to the following quantities, counted as pure chemicals:

ODS:	Quantity:	Enterprise base level: ²	ODS:	Quantity:	Enterprise base level: ²
.....	.....kg	..... kg	.....	.....kg	..... kg
.....	.....kg	..... kg	.....	.....kg	..... kg
.....	.....kg	..... kg	.....	.....kg	..... kg
.....	.....kg	..... kg	.....	.....kg	..... kg
.....	.....kg	..... kg	.....	.....k	..... kg

¹ The form shall be submitted in two copies (one copy will be returned to the applicant with the decision attached).

Note! This form is intended for new chemicals (however, not for chemicals for use as feedstock). Import licences for used, recycled and reclaimed chemicals and ODS intended for use as feedstock shall be requested on form No {}.

² As stated in the Registration Decision for your enterprise.

[Additional information: requests could here be made for further information as needed for approval of the application, for planning ODS phase-out strategies and/or for information to the Ozone Secretariat, e.g. on estimated volume in coming two-three years, the enterprise's intended activities to phase-out its import of ODS, etc.)]

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

I hereby declare that the information given in this application and its annexes is accurate.

Note! Making a statement which the applicant knows or ought to have known to be false or misleading is subject to penalties as stated in {the Act xxx.....Article yyy.....}.

Place and date:.....

.....

(authorized representative of the applicant)

.....

(name in block letters, title)

For official use**RECOMMENDATION**

The information and calculations provided in this application have been checked and found

- accurate
 inaccurate in the following respects:

.....

I recommend that is allocated an *allowance to import* ozone depleting substances (ODS) as stated below. The recommended quantities constitute a% reduction of the enterprise's imports of these chemicals during 199....

Date:

.....
 /signature of authorized ODS officer/

.....
 Allowance No

DECISION**Allowance**

As authorized by Art. {xx} of the {Act on etc.....and}, I hereby entitle to import the following quantities of ozone depleting substances during the period *1 January 199.... to 31 December 199....*:

<i>ODS:</i>	<i>Quantity:</i>	<i>ODS:</i>	<i>Quantity:</i>	<i>ODS:</i>	<i>Quantity:</i>
.....:	..... kg	.....:	..... kg	.....:	..... kg
.....:	..... kg	.....:	..... kg	.....:	..... kg
.....:	..... kg	.....:	..... kg	.....:	..... kg

in total, *including ODS components in mixed chemicals*. The allowance can be divided in multiple shipments.

This allowance is applicable to imports from the following countries :

.....

The allowance is subject to the following conditions:

- Clearance of each shipment shall be requested from {the Ministry of the Environment} before the goods leave the port of origin. Goods which arrive without previous clearance can be detained at the port of entry and/or returned to the port of origin at the importer's expense.
- Imported containers shall be labelled with the name and address of the importer, allowance number, and chemical composition (in full and with chemical code names).
- Actually imported quantities during 199.... shall be reported to {the Ministry of the Environment} by on Form No
-shall keep records of sold quantities including names and addresses of the purchasers and intended usage, specified as indicated in the code list overleaf. The records shall be kept for {five} years and:
- made available upon request for inspections.
 - submitted annually to the {Ministry of Environment} by
 - submitted to {the Ministry of Environment} upon request.

AllowanceApplication Form, 3/6

End Use Code Numbers

1. Refrigeration

- 1.1. Commercial
- 1.2. Industrial
- 1.3. Domestic
- 1.4. Transport

2. Air-conditioning

- 2.1. Commercial
- 2.2. Industrial
- 2.3. Domestic
- 2.4. Transport (private and public)

3. Aerosols

- 3.1. Commercial products
- 3.2. For industrial use

4. Foam blowing

- 4.1. Flexible foams
- 4.2. Rigid foams
- 4.3. Semi-rigid foams

5. Solvents

- 5.1. Electronics
- 5.2. Metal cleaning
- 5.3. Dry cleaning (textiles)
- 5.3. Other

6. Fire fighting

- 6.1. Portable
- 6.2. Fixed systems

7. Fumigation

- 7.1. Quarantine
- 7.2. Pre-shipment
- 7.3. Soil fumigation
- 7.4. Other agricultural uses
- 7.5. Other

8. Miscellaneous (to be specified)

(Decision, continued)

Rejected application

Import allowance for the following ODS from is denied for the following reasons:

the country in question is not a Party to Montreal Protocol/the relevant Amendment of the Montreal Protocol;

.....
.....
.....

Appeal against this decision shall be addressed to
and submitted not later than by

Date:

.....
[name and position of authorized official]

{Official stamp}

DRAFT FORM 3

Form No 3

**CLEARANCE REQUEST FOR SHIPMENT OF OZONE DEPLETING SUBSTANCES
(Control period 199.....)**

Applicant:..... ODS Import Reg. No:..... Allowance No:.....
Contact person (name and title):.....
Address:.....
Tel. no:..... Fax. no:..... E-mail address:.....

..... hereby applies for clearance of the following shipments of ozone depleting substances (ODS):

Pure chemicals (use chemical code names)

ODS:	Quantity (kg):	Trade name:	Customs code no:	Exporter:!	Scheduled time of arrival:	Port of entry:
1.
2.
3.
4.

Mixtures (components to be stated by chemical code names):

Trade name:	Quantity (kg):	Chemical composition (% of each ODS):	Customs code no:	Exporter:!	Scheduled time of arrival:	Port of entry:
1.
2.
3.
4.

Exporter (full name and address):.....

I hereby declare that the information given in this application and its annexes is accurate. The approved Allowance for this period is attached (Appendix 1).

Note! Making a statement which the applicant knows or ought to have known to be false or misleading is subject to penalties as stated in

Place and date: /authorized representative of the importer/

1 Name, address, country (use space overleaf or attached if necessary).

A N N E X C

Resource Material for Implementation of Import/Export Licensing Systems

Annex C 1 Chemical Name, Formula and Commonly Used Code Name for Controlled Substances

Chemicals Controlled by the Montreal Protocol

Chemical code name	Chemical short formula	Chemical name	CAS-nummer
Annex A, gr. I.			
01	<i>CFC-11</i>	CCl ₃ F	Fluorotrichloromethane 75-69-4, 83589-40-6
02	<i>CFC-12</i>	CCl ₂ F ₂	Difluorodichloromethane 75-71-8
03	<i>CFC-113</i>	C ₂ Cl ₃ F ₃	Trichlorotrifluoroethane 76-13-1, 354-58-5, 26523-64-8
04	<i>CFC-114</i>	C ₂ Cl ₂ F ₄	Dichlorotetrafluoroethane 76-14-2, 374-07-2, 1320-37-2
05	<i>CFC-115</i>	C ₂ ClF ₅	Chloropentafluoroethane 76-15-3, 12770-91-1
Annex A, gr. II.			
06	<i>Halon-1211</i>	CF ₂ BrCl	Bromochlorodifluoromethane 353-59-3
07	<i>Halon-1301</i>	CBrF ₃	Bromotrifluoromethane 75-63-8
08	<i>Halon-2402</i>	C ₂ F ₄ Br ₂	Dibromotetrafluoroethane 124-73-2, 25497-30-7 27336-23-8
Annex B, gr. I.			
09	<i>CFC-13</i>	CClF ₃	Trifluorochloromethane 75-72-9
10	<i>CFC-111</i>	C ₂ FCl ₅	Fluoropentachloroethane 354-56-3
11	<i>CFC-112</i>	C ₂ F ₂ Cl ₄	Difluorotetrachloroethane 76-11-9, 76-12-0
12	<i>CFC-211</i>	C ₃ FCl ₇	Fluoroheptachloropropane
13	<i>CFC-212</i>	C ₃ F ₂ Cl ₆	Difluoroheptachloropropane 3182-26-1
14	<i>CFC-213</i>	C ₃ F ₃ Cl ₅	Trifluoropentachloropropane 60285-54-3, 134237-31-3
15	<i>CFC-214</i>	C ₃ F ₄ Cl ₄	Tetrafluorotetrachloropropane 677-68-9, 29255-31-0
16	<i>CFC-215</i>	C ₃ F ₅ Cl ₃	Pentafluorotrichloropropane 28109-69-5
17	<i>CFC-216</i>	C ₃ F ₆ Cl ₂	Hexafluorodichloropropane 661-97-2, 662-01-1, 1652-80-8, 2729-28-4, 42560-98-5
18	<i>CFC-217</i>	C ₃ F ₇ Cl	Heptafluorochloropropane 135401-87-5
Annex B, gr. II.			
19	*	CCl ₄	Carbon tetrachloride 56-23-5
Annex B, gr. III.			
20	*	C ₂ H ₃ Cl ₃	1,1,1-trichloroethane** (also called methyl chloroform) 71-55-6

Annex C, gr. I.

21	<i>HCFC-21</i>	CHCl ₂ F	Fluorodichloromethane	75-43-4
22	<i>HCFC-22</i>	CHClF ₂	Difluorochloromethane	75-45-6
23	<i>HCFC-31</i>	CH ₂ FCI	Fluorochloromethane	593-70-4
24	HCFC-121	C ₂ HCl ₄ F	Fluorotetrachloroethane	354-11-0, 354-14-3, 130879-71-9,134237-32-4
25	HCFC-122	C ₂ HF ₂ Cl ₃	Difluorotrichloroethane	354-15-4
26	<i>HCFC-123</i>	C ₂ HF ₃ Cl ₂	Trifluorodichloroethane	306-83-2
27	<i>HCFC-124</i>	C ₂ HF ₄ Cl	Tetrafluorochloroethane	354-25-6
28	HCFC-131	C ₂ H ₂ FCI ₃	Fluorotrichloroethane	811-95-0, 134237-34-6
29	HCFC-132	C ₂ H ₂ F ₂ Cl ₂	Difluorodichloroethane	1649-08-7
30	<i>HCFC-133</i>	C ₂ H ₂ F ₃ Cl	Trifluorochloroethane	75-88-7
31	HCFC-141	C ₂ H ₃ FCI ₂	Fluorodichloroethane	1717-00-6
32	<i>HCFC-141b</i>	C ₂ H ₃ FCI ₂	Fluorodichloroethane	1717-00-6, 25167-88-8
33	HCFC-142	C ₂ H ₃ F ₂ Cl	Difluorochloroethane	
34	<i>HCFC-142b</i>	C ₂ H ₃ F ₂ Cl	Difluorochloroethane	75-68-3
35	HCFC-151	C ₂ H ₄ FCI	Fluorochloroethane	1615-75-4
36	HCFC-221	C ₃ HFCl ₆	Fluorohexachloropropane	134190-54-8
37	HCFC-222	C ₃ HF ₂ Cl ₅	Difluoropentachloropropane	116867-32-4
38	HCFC-223	C ₃ HF ₃ C1 ₄	Trifluorotetrachloropropane	338-75-0, 460-69-5 29470-99-9, 134237-95-9
39	HCFC-224	C ₃ HF ₄ Cl ₃	Tetrafluorotrichloropropane	422-51-5, 679-85-6
40	HCFC-225	C ₃ HF ₅ Cl ₂	Pentafluorodichloropropane	127564-92-5
41	<i>HCFC-225ca</i>	C ₃ HF ₅ Cl ₂	Pentafluorodichloropropane	422-56-0
42	<i>HCFC-225cb</i>	C ₃ HF ₅ Cl ₂	Pentafluorodichloropropane	507-55-1
43	HCFC-226	C ₃ HF ₆ Cl	Hexafluorochloropropane	422-55-9
44	HCFC-231	C ₃ H ₂ FCI ₅	Fluoropentachloropropane	134190-48-0
45	HCFC-232	C ₃ H ₂ F ₂ Cl ₄	Difluorotetrachloropropane	819-00-1, 127564-82-3, 134237-39-1
46	HCFC-233	C ₃ H ₂ F ₃ Cl ₃	Trifluorotrichloropropane	61623-04-9
47	HCFC-234	C ₃ H ₂ F ₄ Cl ₂	Tetrafluorodichloropropane	4071-01-6
48	HCFC-235	C ₃ H ₂ F ₅ Cl	Pentafluorochloropropane	422-02-6
49	HCFC-241	C ₃ H ₃ FCI ₄	Fluorotetrachloropropane	134190-49-1
50	HCFC-242	C ₃ H ₃ F ₂ Cl ₃	Difluorotrichloropropane	
51	HCFC-243	C ₃ H ₃ F ₃ Cl ₂	Trifluorodichloropropane	7126-01-4
52	HCFC-244	C ₃ H ₃ F ₄ Cl	Tetrafluorochloropropane	19041-02-2
53	HCFC-251	C ₃ H ₄ FCI ₃	Fluorotrichloropropane	
54	HCFC-252	C ₃ H ₄ F ₂ Cl ₂	Difluorodichloropropane	7126-15-0
55	HCFC-253	C ₃ H ₄ F ₃ Cl	Trifluorochloropropane	460-35-5
56	HCFC-261	C ₃ H ₅ FCI ₂	Fluorodichloropropane	7799-56-6
57	HCFC-262	C ₃ H ₅ F ₂ Cl	Difluorochloropropane	430-93-3
58	HCFC-271	C ₃ H ₆ FCI	Fluorochloropropane	

Annex C, gr. II.

59	*	CHFBr ₂	Fluorodibromomethane	
60	HBFC-22B1	CHF ₂ Br	Difluorobromomethane	1511-62-2

61	*	CH ₂ FBr	Fluorobromomethane	
62	*	C ₂ HFBr ₄	Fluorotetrabromoethane	
63	*	C ₂ HF ₂ Br ₃	Difluorotribromoethane	
64	*	C ₂ HF ₃ Br ₂	Trifluorodibromoethane	
65	*	C ₂ HF ₄ Br	Tetrafluorobromoethane	124-72-1
66	*	C ₂ H ₂ FBr ₃	Fluorotribromoethane	
67	*	C ₂ H ₂ F ₂ Br ₂	Difluorodibromoethane	75-82-1, 31392-96-8
68	*	C ₂ H ₂ F ₃ Br	Trifluorobromoethane	421-06-7
69	*	C ₂ H ₃ FBr ₂	Fluorodibromoethane	958-97-4
70	*	C ₂ H ₃ F ₂ Br	Difluorobromoethane	
71	*	C ₂ H ₄ FBr	Fluorobromoethane	762-49-2
72	*	C ₃ HFBr ₆	Fluorohexabromopropane	29470-94-8, 134273-35-7
73	*	C ₃ HF ₂ Br ₅	Difluoropentabromopropane	
74	*	C ₃ HF ₃ Br ₄	Trifluorotetrabromopropane	
75	*	C ₃ HF ₄ Br ₃	Tetrafluorotribromopropane	
76	*	C ₃ HF ₅ Br ₂	Pentafluorodibromopropane	
77	*	C ₃ HF ₆ Br	Hexafluorobromopropane	63905-11-3
78	*	C ₃ H ₂ FBr ₅	Fluoropentabromopropane	
79	*	C ₃ H ₂ F ₂ Br ₄	Difluorotetrabromopropane	
80	*	C ₃ H ₂ F ₃ Br ₃	Trifluorotribromopropane	
81	*	C ₃ H ₂ F ₄ Br ₂	Tetrafluorodibromopropane	
82	*	C ₃ H ₂ F ₅ Br	Pentafluorobromopropane	422-01-5
83	*	C ₃ H ₃ FBr ₄	Fluorotetrabromopropane	
84	*	C ₃ H ₃ F ₂ Br ₃	Difluorotribromopropane	
85	*	C ₃ H ₃ F ₃ Br ₂	Trifluorodibromopropane	431-21-0
86	*	C ₃ H ₃ F ₄ Br	Tetrafluorobromopropane	679-84-5
87	*	C ₃ H ₄ FBr ₃	Fluorotribromopropane	
88	*	C ₃ H ₄ F ₂ Br ₂	Difluorodibromopropane	
89	*	C ₃ H ₄ F ₃ Br	Trifluorobromopropane	
90	*	C ₃ H ₅ FBr ₂	Fluorodibromopropane	
91	*	C ₃ H ₅ F ₂ Br	Difluorobromopropane	
92	*	C ₃ H ₆ FBr	Fluorobromopropane	352-91-0

Annex E

93	Methyl bromide	CH ₃ Br	Methyl bromide	74-83-9
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* Code numbers not in common use

** Does not include the isomer 1,1,2-trichloroethane

Annex C. 2 Extract from the Report of the Ninth Meeting of the Parties to the Montreal Protocol

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NINTH MEETING OF THE PARTIES TO
THE MONTREAL PROTOCOL ON
SUBSTANCES THAT DEplete
THE OZONE LAYER
Montreal, 15-17 September 1997

REPORT OF THE NINTH MEETING OF THE PARTIES TO THE MONTREAL PROTOCOL ON SUBSTANCES THAT DEplete THE OZONE LAYER

1. The Ninth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer was held at the headquarters of the International Civil Aviation Organization (ICAO) in Montreal, from 15 to 17 September 1997.

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VII. ADOPTION OF DECISIONS

97. The Ninth Meeting of the Parties adopted a number of decisions, on the basis of the recommendations submitted by the Open-ended Working Group and its subgroups. The text of the decisions, as adopted by consensus, is contained in paragraph 0 below.

98. The Adjustments and Amendments to the Montreal Protocol (see annexes I-IV below) were adopted on the basis of the report of the Legal Drafting Group, which was presented by Mr. Patrick Széll (United Kingdom), the Chairman of the Group, at the closing session of the Meeting, on 17 September.

99. *Introducing the report, the Chairman of the Legal Drafting Group pointed out that the adjustments were divided into three annexes to cover the three different categories of Parties: those who had ratified the Protocol only, those who had also ratified the London Amendment and those who had additionally ratified the Copenhagen Amendment. He pointed out that the fourth annex contained the amendment instrument. Within its Article 1, sections A, B, E and F arose directly from the decisions of the Ninth Meeting of the Parties, while its sections C and D were logically required as a consequence of sections A and B. Its Articles 2 and 3 had been drafted by analogy with the corresponding Articles of the Copenhagen Amendment.*

A. Decisions

100. The Ninth Meeting of the Parties to the Montreal Protocol decides:

(. . .)

Decision IX/8. Licensing system

Noting that decisions V/25 and VI/14 A set in place systems for exchange, recording and reporting of information concerning trade in controlled substances to meet the basic domestic needs of Parties operating under Article 5,

Noting that decision VI/14 B requested that recommendations be made to the Seventh Meeting of the Parties concerning whether reports under Article 7 should be made in relation to trade to meet the basic domestic needs of Parties operating under Article 5,

Noting that decision VII/9 required that an import- and export-licensing system be incorporated into the Montreal Protocol by the Ninth Meeting of the Parties,

Noting that, in response to a report prepared by the Secretariat on illegal imports and exports of ozone-depleting substances, decision VIII/20 urged each Party not operating under Article 5 to establish a system for validation and approval of imports of any used, recycled or reclaimed controlled substances before they are imported and to report to the Ninth Meeting of the Parties on the establishment of such a system,

Noting that decision VIII/20 also requests the Ninth Meeting of the Parties to consider instituting a system to require validation and approval of exports of used and recycled ozone-depleting substances from all Parties,

Noting that the Ninth Meeting of the Parties has adopted an Amendment to the Protocol, requiring all Parties to implement an import and export licensing system,

1. That the licensing system to be established by each Party should:

a. Assist collection of sufficient information to facilitate Parties' compliance with relevant reporting requirements under Article 7 of the Protocol and decisions of the Parties; 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;

2. To facilitate the efficient notification and/or reporting and/or cross-checking of information, each Party should inform the Secretariat by 31 January 1998 of the name and contact details of the officer to whom such information and requests should be directed. The Secretariat shall periodically prepare, update and circulate to all Parties a full list of these contact details;

3. That the Secretariat and Implementing Agencies should take steps to assist Parties in the design and implementation of appropriate national licensing systems;

4. That Parties operating under Article 5 may require assistance in the development, establishment and operation of such a licensing system and, noting that the Multilateral Fund has provided some funding for such activities, that the Multilateral Fund should provide appropriate additional funding for this purpose;

Decision IX/9. Control of export of products and equipment whose continuing functioning relies on Annex A and Annex B substances

1. To recommend that each Party adopt legislative and administrative measures, including labelling of products and equipment, to regulate the export and import, as appropriate, of products, equipment, components and technology whose continuing functioning relies on supply of substances listed in Annexes A and B of the Montreal Protocol, in order to avert any adverse impact associated with the export of such products and equipment using technologies that are or will soon be obsolete because of their reliance on Annex A or Annex B substances and which would be inconsistent with the spirit of the Protocol, including decision 1/12 C of the First Meeting of the Parties to the Protocol, held in Helsinki in 1989;
2. To recommend to non-Article 5 Parties to adopt appropriate measures to control, in cooperation with the importing Article 5 Parties, the export of used products and equipment, other than personal effects, whose continuing functioning relies on supply of substances listed in Annexes A and B of the Montreal Protocol;
3. To recommend to Parties to report to the Tenth Meeting of the Parties on actions taken to implement the present decision;

(. . .)

Decision IX/22. Customs codes

1. To express appreciation to the Multilateral Fund, UNEP and the Stockholm Environmental Institute for the useful information on the problems and possibilities of using customs codes for tracking imports of ozone-depleting substances (ODS) contained in the book *Monitoring Imports of Ozone-Depleting Substances: A Guidebook*;
2. To recommend this book as a guide to Parties seeking more information on this issue;
3. In order to facilitate cooperation between customs authorities and the authorities in charge of ODS control and ensure compliance with licensing requirements, to request the Executive Director of UNEP:
 - a. To request the World Customs Organization (WCO) to revise its decision of 20 June 1995, recommending one joint national code on all HCFCs under subheading 2903.49, by instead recommending separate national codes under subheading 2903.48 for the most commonly used HCFCs (e.g., HCFC-21; HCFC-22; HCFC-31; HCFC-123; HCFC-124; HCFC-133; HCFC-141b; HCFC-142b; HCFC-225; HCFC-225ca; HCFC-225cb);
 - b. To further ask the World Customs Organization to work with major ODS suppliers to develop and provide the Parties to the Montreal Protocol, through UNEP, with a check-list of relevant customs codes for ODS that are commonly marketed as mixtures, for use by national customs authorities and authorities in charge of control of ODS to ensure compliance with import licensing requirements;
4. To request all Parties with ODS production facilities to urge their producing companies to cooperate fully with WCO in the preparation of this check-list;

(. . .)

Decision IX/28. Revised formats for reporting data under Article 7 of the Protocol

1. To note with appreciation the work done by the Implementation Committee and the Secretariat on the review and redesign of the formats for reporting data under Article 7 of the Montreal Protocol;
2. To note that the issue of reporting data is an important one and that it is an area to which the Parties may consider giving greater consideration;
3. To approve the revised forms for reporting data prepared according to the reporting mandates of the Protocol. The data forms are set out in annex VII to the report of the Ninth Meeting of the Parties;
4. To recall decision IV/10 and decision IX/17, paragraph 3, and request TEAP, in cooperation with the UNEP Industry and Environment Centre, to prepare a list of mixtures known to contain controlled substances and the percentage proportions of those substances. In particular, the list should provide information on refrigerant mixtures and solvents. It should report this information to the Parties at the seventeenth meeting of the Open-ended Working Group, and annually thereafter;
5. To request UNEP Industry and Environment Centre to draw on its existing reports and its OzonAction Information Clearing-house (OAIC) diskette database, and, in collaboration with the other Implementing Agencies and the Secretariat of the Multilateral Fund, prepare a handbook on data-reporting which will provide information to the Parties to assist all Parties with data-reporting. This information should include techniques for data collection, trade names, as identified by TEAP, customs codes (where these exist), and advice on what sectors of industry may be using these products;
6. To stipulate that, for the purpose of the data-collection only, when reporting data on the consumption of methyl bromide for quarantine and pre-shipment applications, the Parties shall report the amount consumed (i.e., import plus production minus export) and not actual "use";
7. To note that the revised data forms in annex VII to the report of the Ninth Meeting of the Parties, when completed, largely fulfil the reporting requirements under the Montreal Protocol, excluding those for essential-use exemptions;

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(. . .)

Annex IV

AMENDMENT TO THE MONTREAL PROTOCOL ADOPTED BY THE NINTH MEETING OF THE PARTIES

ARTICLE I : AMENDMENT

(. . .)

Article 4B : Licensing

The following Article shall be added to the Protocol as Article 4B :

1. Each Party shall, by 1 January 2000 or within three months of the date of entry into force of this Article for it, whichever is the later, establish and implement a system for licensing the import and export of new, used, recycled and reclaimed controlled substances in Annexes A, B, C and E.
2. Notwithstanding paragraph 1 of this Article, any Party operating under paragraph 1 of the Article 5 which decides it is not in a position to establish and implement a system for licensing the import and export of controlled substances in Annexes C and E, may delay taking those actions until 1 January 2005 and 1 January 2002, respectively.
3. Each Party shall, within three months of the date of introducing its licensing system, report to the Secretariat on the establishment and operation of that system.
4. The Secretariat shall periodically prepare and circulate to all Parties a list of the Parties that have reported to it on their licensing systems and shall forward this information to the Implementation Committee for consideration and appropriate recommendations to the Parties.

Article 2 : RELATIONSHIP TO THE 1992 AMENDMENT

No State or regional economic integration organization may deposit an instrument of ratification, acceptance, approval or accession to this Amendment unless it has previously, or simultaneously, deposited such an instrument to the Amendment adopted at the Fourth Meeting of the Parties in Copenhagen, 25 November 1992.

Annex C. 3 **A short explanation of the layout of the draft “Data Reporting Assistance Form”**

Model Computerized Data Recording System by Mr Iain McGlinchy, Ministry of Environment, New Zealand

The «Data Reporting Assistance Form» spreadsheet was set up to meet the needs of the New Zealand Government. It was designed so that any person with a basic knowledge of how spreadsheets work can use it and can modify it to suit their own needs. No special skills are needed.

The spreadsheet was written in Microsoft Excel 5.1. Although some versions of the spreadsheet have been saved in Excel 7.0, the spreadsheet can still be opened and will still function in Excel 5.1.

The spreadsheet contains a large number of «Macros». These macros carry out the complicated equations necessary to calculate the totals and also check for errors. Most users will not notice they are present and only the most advanced user would need to change these. Although macros have been used extensively, the sheet has been designed to be easy to alter by a non-specialist.

The spreadsheet was developed because the New Zealand government was experiencing difficulties tracking imports of the refrigerants which are being marketed as replacements for CFCs and HCFCs, in particular the new R400 and R500 series. All of the 400 and 500 series are mixtures, but there are a growing number of these and the percentages of the components are sometimes being changed by the manufacturers as they seek to make them work better.

Although the import of mixtures is becoming more common, the Montreal Protocol requires reporting of consumption of pure substances. This means that ODS officers in countries such as New Zealand which import a range of mixtures must make long calculations to accurately calculate the data they must report to the Secretariat. There is a large chance for mathematical error in this process.

In response to these concerns the spreadsheet was designed to carry out several important functions for ODS Officers. Its main purpose is to accurately calculate consumption of controlled substances in their country in both metric and ODP tonnes. The other function is to calculate ODP values for any new mixtures or where the composition of mixtures has changed.

Structure

The spreadsheet has four «sheets» It will always open on the second sheet, which is the «Data Reporting Assistance Form». This is the only sheet most ODS officers will need to look at or change.

The first sheet labelled « Documentation » contains some background information on inputting data and also some technical advice provided by the person who created the spreadsheet.

The third and fourth sheet should not be altered by the ODS Officer. These contain the «macros» which carry out the error checking and calculations.

ODP calculation

The left hand part of the «Data Reporting Assistance Form» spreadsheet (the yellow columns) contains a list of all the pure substances known to be in use in New Zealand. In some developed countries there may be more substances in use, but it is unlikely they will be found in developing countries for some time. The information in the first column «substance name» uses the standard CFC or HCFC number used in the Montreal Protocol and by industry. The next column gives the ODP which was taken from the Montreal Protocol. For all other substances, including the mixtures (except as noted), the substance name and identification numbers are those issued by the US refrigeration industry body ASHRAE.

In most countries it should not be necessary to change the list of substances on the spreadsheet. The current list has been checked by a range of experts in the TEAP and is accurate in its details of ODP and percentage compositions. However, as noted, one of the key features of the spreadsheet is that is easy to add new substances or mixtures, using the normal Excel insert row function, if needed.

To allow the spreadsheet to calculate the correct amounts imported it is necessary to define the components of each mixture and the percentages of these in each mixture. To simplify defining the components of mixtures, each pure substance has been given a short unique code which is shown in the column headed «Part 1». The unique code used in the spreadsheet can be anything as long as it is unique to the substance. It does not have to be the CFC number and can be text. For convenience in typing the data, the unique codes used in defining the mixtures for CFCs and HCFCs is R (for Refrigerant) followed by the normal CFC or HCFC identification number used in the Protocol. For other substances which do not have a normal abbreviation or code, such as methyl bromide, text (i.e. MB) has been used. A generic code called «NonODS» is used for any substance, such as chloropicrin, which ODS Officers will not want to track imports of but appears as part of a mixture. For example, the generic «NoODS» could also be used for the quantities of alcohol or other detergents in solvents if an ODS officer wished to add these to the spreadsheet.

The spreadsheet's unique codes for pure substances have then been used to build a list of mixtures showing the percentage of each pure substance in their components. The use of unique codes to specify the components of mixtures allows great flexibility in adding new mixtures or changing components of existing mixtures. The spreadsheet allows mixtures with up to five components, but only one mixture with more than three parts is known so far.

The spreadsheet automatically calculates the ODP value for all mixtures. If an ODS officer inserts a new mixture the spreadsheet will automatically calculate the ODP for the new mixtures, once the percentages of the components have been inserted. The spreadsheet has an in-built check to

make sure that the components of any mixture add up to 100%. This check is carried out each time the red « Check format and recalculate » button is pushed. (Unfortunately for technical reasons the red button cannot be shown on the attached print out). If a row does not add to 100%, the sheet will automatically locate the start of the row where the first error is. (The spreadsheet cannot tell you what the correct percentages should be).

The spreadsheet currently lists a range of non-ozone depleting substances. These are included because they are components of mixtures and also because some governments may wish to monitor imports of these as well. There is no requirement to report information on the non ozone depleting substances to the Secretariat. Information on the non-ozone depleting mixtures in the R400 and R500 series has also been included for completeness. Again, it is not necessary to collect this information or to report it to the Secretariat. This decision can be made by the ODS officer.

Data entry

The second, and most important part of the spreadsheet for most ODS officers, is the green area with columns for data entry.

The spreadsheet was designed on the basis that the ODS officer would collect data from importing companies and not by using official customs codes. It assumes that the ODS Officer would seek information on imports and exports of substances, including mixtures. The information is likely to be collected under a mandatory reporting requirement and it is intended that the data collected would include terms and brand names used by the importers. Importers in New Zealand are specifically asked not to calculate the totals for components of mixtures as this is done by the ODS officer. ODS Officers may wish to print out the left hand column of the spreadsheet to assist importers in supplying the correct information.

How the information is collected and how often, is the decision of the ODS officer. In the case of New Zealand information is collected six-monthly. A new copy of the spreadsheet is created each six months to input the data on to.

If the ODS officer is interested only in «consumption», the data for exports can be put on the same sheet as imports, but as a negative value. The spreadsheet will automatically deduct the amount from the totals. However, it may be easier to make another copy of the spreadsheet and enter the export data separately as export data must still be reported separately to the Secretariat.

Data for each company is entered next to the appropriate substance on each row. The headings of the columns can be changed to give the names of local importers. New columns can be added as needed using the normal Excel column-insert function.

By pushing the red «Check format and recalculate» button the spreadsheet will check that data has not been entered in a blank line. However, it does give an error if text is inserted instead of a number. The spreadsheet also cannot check that the person inputting the data put the correct information in the right row or column. If the spreadsheet finds an error it will take you to the start of the line which has the error in it.

Once the data for a company has been entered **you MUST push the red « Check format and Recalculate » button for it to calculate the totals.** Because of the large number of calculations and checks for errors that the spreadsheet makes each time **it does not automatically recalculate when you add new data.** Although not shown on the print out for technical reasons, there are two large buttons, one on each side of the sheet (Cells A2 and Z2). Both buttons do the same thing. If all of the data is entered correctly, the spreadsheet automatically takes you to the top of the «Totals» column. It will do this regardless of where the cursor is on the sheet at the time. The button can be pushed at any time to check for errors or to re-calculate totals.

The Totals column

The spreadsheet calculates four results. The first column gives the amount of each substance imported in metric tonnes. This column is necessary to show the amount of mixtures imported as mixtures. Although you do not need to report this data to the Secretariat, many Governments will want to know this information.

The next column gives the same information, but in ODP tonnes.

The third, blue, column is the most important. This is the data for reporting to the Secretariat. This column takes the amount of each substance imported as a pure substance and adds all the amounts of that substance which were also imported as a part of a mixture.

Because the spreadsheet rounds to the nearest whole number, small amounts (less than 500kg if data is entered in metric tonnes) will be shown as 0. If this of concern, all amounts should be entered in kilograms.

The fourth column gives the same information as for the « pure substances » in the third column, but in ODP tonnes. This figure is useful for developed countries as they must make sure that HCFC consumption does not rise over a certain amount of ODP tonnes. It will also be useful for developing countries to make sure that their CFC consumption does not exceed their base year.

The spreadsheet automatically calculates a subtotal for a group where ever there is a blank row. In some cases there is only one item in the « group » (e.g. carbon tetrachloride), so the subtotal will be the same as the total. Subtotals are not counted twice.

Any comments or questions about the spreadsheet should be sent to:

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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	U	V	X	Y	Z	AA	AB
70	R405A (G2015)	0.028	R22	45%	R152a	7%	R142b	6%																		
71	R406A (GHG-12)	0.057	R22	55%	R600a	4%	R142b	41%																		
72	R407A (Klea 60)	0.000	R32	20%	R125	40%	R134a	40%																		
73	R407B (Klea 61)	0.000	R32	10%	R125	70%	R134a	20%																		
74	R407C (Suva 9000, Klea 66)	0.000	R32	23%	R125	25%	R134a	52%																		
75	R408A (FX10)	0.028	R125	7%	R143a	46%	R22	47%																		
76	R409A (FX56)	0.048	R22	60%	R124	25%	R142b	15%																		
77	R409B (FX57)	0.048	R22	65%	R124	25%	R142b	10%																		
78	R410A (AZ20)	0.000	R32	50%	R125	50%																				
79	R410B (Suva 9100)	0.000	R32	45%	R125	55%																				
80	R411A (G2018B)	0.048	R1270	2%	R22	88%	R152a	11%																		
81	R411B (G2018B)	0.052	R1270	3%	R22	94%	R152a	3%																		
82	R412A (TP5R)	0.055	R22	70%	R218	5%	R142b	25%																		
83	R413A (49L)	0.000	R218	9%	R134a	88%	R600a	3%																		
84	Mixes-Azeotropes																									
85	R500	0.738	R12	74%	R125a	26%																				
87	R501	0.291	R22	75%	R12	25%																				
88	R502	0.334	R22	49%	R115	51%																				
89	R503	0.599	R23	40%	R13	60%																				
90	R504	0.311	R32	48%	R115	52%																				
91	R505	0.784	R12	78%	R31	22%																				
92	R506	0.460	R31	55%	R114	45%																				
93	R507A (AZ50)	0.000	R125	50%	R143a	50%																				
94	R508B (Suva 95)	0.000	R23	54%	R116	54%																				
95	R509 (TP5R2)	0.025	R22	54%	R218	54%																				
96																										
97	Unnamed (by ASHRAE)																									
98	FX20	0.030	R125	45%	R22	55%																				
99	FX40	0.000	R32	10%	R143a	45%	R125	45%																		
100	FX55	0.059	R22	60%	R142b	40%																				
101	FX220	0.000	R23	3%	RR32	25%	R134a	72%																		
102	D136	0.038	R22	50%	R124	47%	R600	3%																		
103	HX4	0.000	R32	10%	R125	33%	R134a	56%	R134a																	
104	HX3	0.000	R125	43%	R134a	53%	R600	4%																		
105	Rx4	0.000	R125	96%	R200	5%	R218	9%																		
106	Daikin Blend	0.000	R23	2%	R32	28%	R134a	70%																		
107	XF	0.000	R23	4%	R134a	96%																				
108																										
109	Methyl Bromide Mixtures																									
110	Methyl Bromide with 33% Chloroacrin	0.002	MB	67%	NonODS	33%																				
111	Methyl Bromide with 2% Chloroacrin	0.998	MB	98%	NonODS	2%																				
112																										
113	Non-refrigerant Mixes																									
114	CFC-11& CFC-12																									
115	R400																									
116																										

A N N E X D

UNEP IE OzonAction Programme



About the UNEP IE OzonAction Programme

Nations around the world are concerned about the emissions of man-made CFCs, halons, carbon tetrachloride, methyl chloroform, methyl bromide and other ozone-depleting substances (ODS) that have damaged the stratospheric ozone layer — a shield around the Earth which protects life from dangerous ultraviolet radiation from the Sun. More than 160 countries have committed themselves under the Montreal Protocol to phase out the use and production of these substances. Recognizing the special needs of developing countries, the Parties to the Protocol also established a Multilateral Fund and appointed implementing agencies to provide technical and financial assistance to enable the developing countries to meet their commitments under the treaty. UNEP is one of the Fund's implementing agencies; the others are UNDP, UNIDO and the World Bank.

Since 1991, the UNEP IE OzonAction Programme in Paris has been strengthening the capacity of governments (especially National Ozone Units) and industry in developing countries to make informed decisions on technology and policy options that will result in cost-effective ODS phase-out activities with minimal external intervention. The Programme accomplishes this by delivering a range of need-based services, including:

Information Exchange

to enable decision makers to take informed decisions on policies and investments. Information and management tools already provided for developing countries include the OzonAction Information Clearinghouse (OAIC) diskette and World Wide Web site, a quarterly newsletter, sector-specific technical publications for identifying and selecting alternative technologies, and policy guidelines.

Training and Networking

that provide platforms for exchanging experiences, developing skills, and tapping the expertise of peers and other experts in the global ozone protection community. Training and network workshops build skills for implementing and managing phase-out activities, and are conducted at the regional level (support is also extended to national activities). The Programme currently operates seven regional and sub-regional Networks of ODS Officers comprising more than 80 countries, which have resulted in member countries' taking early steps to implement the Montreal Protocol.

Country Programmes Institutional Strengthening and Refrigerant Management Plans

that support the development of national ODS phase-out strategies and programmes, especially for low-volume ODS-consuming countries. The Programme currently assists 74 countries in the development of their Country Programmes and implements Institutional-Strengthening projects for 50 countries.

A refrigerant Management Plan is an integrated national sector strategy to phase out ODS in the refrigeration sector. UNEP is developing and implementing such plans to assist low-volume ODS-consuming countries.

For more information about these services please contact:

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About UNEP Industry and Environment

UNEP established its Industry and Environment office (UNEP IE) in 1975 to bring industry and government together to promote environmentally-sound industrial development. UNEP IE is located in Paris. Its goals are:

- to encourage the incorporation of environmental criteria in industrial development plans;
- to facilitate the implementation of procedures and principles for the protection of the environment;
- to promote preventive environmental protection through cleaner production and other proactive approaches; and
- to stimulate the exchange of information and experience throughout the world.

To achieve these goals, UNEP IE has developed the following main programme elements: Accident Prevention (APELL), Cleaner Production, Energy, OzonAction, Industrial Pollution Management and Tourism. UNEP IE organizes conferences and seminars, and undertakes training and cooperative activities backed by regular follow-up and assessment. To promote the transfer of information and the sharing of knowledge and experience, UNEP IE has developed three complementary tools: technical reports, the quarterly Industry and Environment review and a technical query-response service.

READER FEEDBACK

ODS Import/Export Licensing Systems Resource Module

All of the information services offered by UNEP IE's OzonAction Programme under the Multilateral Fund are designed to meet the specific needs of target readers such as yourself. In order for us to determine if this publication adequately meet your needs, as well as to help us to develop new publications in the future, we request your feedback about its utility, content and format. **Please take a few minutes to express your opinion about this publication, so that we may meet your needs better in the future.**

Note: Please type or write clearly.

1. Quality

Please rate the following quality aspects (tick the appropriate boxes):

	Very Good	Good	Adequate	Poor
Objectivity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Subject Coverage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Up-to-Date	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Readability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Organization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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2. Usefulness

In general, how much of this document is:

	Most	About Half	Less than half	Little
Of technical/substantive value to you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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New to you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will be used by you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Effectiveness

This document is designed to assist the developing country governments in the design and establishment of the import/export licensing systems. It is primarily written for government officers in charge of designing and implementing strategies to phase out the ODS and for their colleagues in authorities in charge of import and export controls in general. The intention is to provide practical help and step-by-step guidance for the design and implementation of ODS import and export controls. The main emphasis is on import controls. **Has this document been effective in meeting these objectives?**

Please tick one box: Fully Adequately Inadequately

Please explain the reason for your rating:

4. Uses

A. Please indicate in general how you have used the document (tick all that apply):

- Guidebook on how to design import/export licensing systems
- Guidebook on how to implement import/export licensing systems
- Guidebook on how to Improve existing import/export licensing systems
- Resource document for the design of other policy and legislative measures to support the ODS phase-out programme.

B. Please explain in more specifics how the document will/has assisted your ODS phaseout programme and the design, implementation on improvement of import/export licensing systems.

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A. Will others read your copy?

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Please indicate any changes that would make the document more useful to you in the future, or any additional comments you have on the utility or shortcomings:

7. The following data would be useful for statistical analysis

Please indicate the category which best describes you:

- Government ozone unit.
- Authorities in charge of import and export control in general
- Other government institutions
- Other (please specify) _____

Your name (optional) _____ Country _____

Organization / government agency / institution _____

Date _____

UNEP would like to thank you for completing this questionnaire. Please airmail or fax to:

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