



**United Nations
Environment
Programme**



Distr.: General
16 May 2005

Original: English

**Open-ended Working Group of the Parties to
the Montreal Protocol on Substances that
Deplete the Ozone Layer**

Twenty-fifth meeting
Montreal, 27–30 June 2005
Item 5(c) of the provisional agenda

**Executive Committee report on the evaluation of
customs officers training and licensing system projects (decision XIV/7)**

**Covering Note by the Executive Committee on the Report on the
Evaluation of Customs Officers Training and Licensing System Projects
to the 25th Meeting of the Open Ended Working Group**

1. The report of the Executive Committee on the evaluation of customs officers training and licensing system projects was prepared in order to enable the Committee to respond to decision XIV/7, paragraph 6 of the 14th Meeting of the Parties to the Montreal Protocol. It is attached as Annex A to this note.
2. The Senior Monitoring and Evaluation Officer had presented the draft report on the evaluation to the 45th Meeting of the Executive Committee (document UNEP/OzL.Pro/ExCom/45/11). It outlined the licensing systems in the countries visited, the customs procedures, the illegal imports detected, the training courses conducted in the countries visited, the refrigerant identifiers delivered, the experiences reported and the improvements suggested.
3. Members in general considered the report to be a good summary and analysis of the situation. Nevertheless, some members felt that the recommendations in the report went beyond the obligations of Parties under the Montreal Protocol, and should avoid being prescriptive, and should not include any reference to a specific country in order to be more general in nature and applicable to a greater number of countries. It was also

noted that there was insufficient mention of the achievements to date. Therefore a section on conclusions should be added to the report highlighting achievements.

4. These requests have been taken into account in finalizing the revised version of the report which was posted on the website of the Secretariat on 13 April 2005.

5. Other comments made by members of the Executive Committee at its 45th meeting were as follows:

- (a) References were made to parallel discussions on the topic in the workshop on illegal trade that had been held on 3 April 2005 in Montreal by the Ozone Secretariat, and it was considered that the report provided useful input for the follow-up to decision XVI/33 of the Parties on illegal trade in ozone-depleting substances. Members emphasized the need to coordinate efforts.
- (b) Members suggested several ways to combat illegal trade, such as reducing the demand for ODS, establishing licensing systems for both exports and imports of ODS, including ODS other than CFCs in licensing and quota systems and related training, and harmonizing legislation on a regional basis.
- (c) UNEP was requested to provide information on the assistance given to countries for the inclusion of other ODS in their licensing systems and requested all implementing agencies to report on the use of refrigerant identifiers by national customs services.
- (d) One member said that the evaluation did not take into account the effect which the international price for alternative substances such as HFC-134a could have as an incentive for illegal trade in CFCs and requested that, in the report to be sent to the Parties, the Executive Committee recommend that trade issues and their relationship to illegal trade in ODS be taken into account.
- (e) It was considered essential to improve cooperation between national ozone units and customs departments. One way of doing so could be for national ozone units to locate representatives in customs departments. Concern was expressed about the lack of follow-up to initial customs officer training courses. The need for more refresher courses and for the integration of training on ODS into the regular training curricula of customs officers was also underlined.

6. Further comments were received by members of the Executive Committee on the revised version of the report posted on the website of the Secretariat. These comments have been taken into account in preparing the final version of the report attached as Annex A.

7. As requested by Decision 45/10 (d) of the Executive Committee, the Secretariat submits the revised report and the covering note, after approval by the Chair of the Executive Committee, to the 25th Meeting of the Open-ended Working Group.

**Report on the Evaluation of
Customs Officers Training and Licensing System Projects**

TABLE OF CONTENTS

Summary of Conclusions and Recommendations	2
I. Background.....	5
II. Scope and Approach of the Present Evaluation Report.....	6
III. Licensing Systems, Customs Procedures and Illegal Imports Detected.....	9
a) Overview	9
b) Licensing Systems in the Countries Visited.....	10
c) Customs Procedures	15
d) Illegal Imports Detected	16
IV. Customs Training Projects	17
a) Overview	17
b) Training Courses Conducted in the Countries Visited.....	19
c) Experiences Reported and Improvements Suggested	20
d) Refrigerant Identifiers	22
V. Recommendations	23
Annex I.....Statistical Overview of Approved and Completed Projects	
Annex IIaInformation in PCRs on Licensing Projects	
Annex IIbInformation in PCRs on Customs Training Projects	

Summary of Conclusions and Recommendations

8. In the last 3-4 years, there has been a major increase in licensing systems and customs training projects. They are now incorporated into refrigerant management plans (RMPs and RMP up-dates), refrigeration servicing sector plans, and national phase-out plans.

9. So far 181 licensing system and customs training and related projects have been approved; 51 have been completed and 45 PCRs have been received. In addition, 7 annual tranches of 41 on-going national phase-out plans have been completed, which also include customs training and licensing activities.

10. The effectiveness of import licensing and prevention of illegal imports of ODS is highly dependent on the ability of customs officers to apply the regulations in force and to identify illegal shipments of refrigerants. For this the training of customs officers is crucial.

11. In most of the countries visited, the custom's departments do not consider ODS control or other environment issues as a priority. The focus is instead on generating revenues and protecting the country from dangerous goods. High ranking focal points for environment helped to increase awareness of environment issues in the customs departments of some countries and were instrumental in promoting the cooperation with the NOU.

12. Close co-operation and co-ordination between NOU and customs has proven to be very important in establishing a basis for effectively controlling and monitoring imports of ODS. The Memoranda of Understanding between NOU and customs can be useful to promote such co-operation.

13. Import Licensing Systems generally have several positive effects on the reduction of ODS consumption and are essential for the prevention of illegal imports. It enables the Ozone Offices to improve control of import and consumption of ODS. It provides certainty for the private sector, creates disincentives to import illegally, and improves monitoring and thereby reliability of statistics. It also facilitates better communication and co-ordination between government departments and registered importers. Controlling ODS imports, as required under the MP, is almost impossible without an import licensing system.

14. All countries visited have covered all controlled substances by legislative acts. Nevertheless, specific regulations concerning lists of licensed importers, import quota allocations, and degressive schedules have generally only been introduced for the import of CFCs. Other ODS, in particular CTC, TCA and HCFCs as well as refrigerant blends containing CFCs and methyl bromide are receiving less attention and are less comprehensively monitored and controlled. Likewise, export licensing systems or bans for re-exporting ODS are rare, as are import prohibitions for ODS containing equipments which are more frequently regulated by prescriptions defining a maximum age of five years for example and a limited number of accepted countries of origin.

15. Training of customs officers focuses mainly on refrigerants (foremost CFC) while other ODS such as solvents (CTC, TCA) and methyl bromide are dealt with only in general terms.

16. Due to import licensing and customs training, illegal imports of CFCs have been detected and seized in several cases. Nevertheless, customs records on illegal shipments do not necessarily reveal the full dimension of such trade.

17. Training of customs officers and provision of adequate identification equipment are needed to ensure effective application of the import licensing system. In all countries under consideration, phase I (train the trainers) is completed. Implementation of Phase II (officers' training) has frequently experienced delays due to various problems.

18. One of the countries visited has involved the certification and standardization institute in the identification of ODS. Although customs retain the ultimate responsibility and control responsibilities, it is an additional means of control.

19. Training courses not only train instructors and officials, but they also create or reinforce the links between participants and create a forum for discussion. When contacts are maintained, these elements permit the creation and strengthening of an informal network to combat illicit entry of ODS.

20. Some seminars were also organized by the CAP Team at the regional level, with participation of customs officials from neighbouring countries, particularly in Asia. The development of an informal regional network of customs officials is expected to have beneficial effects in combating illegal trade of ODS. The exchange of information about shipments and lists of authorized importers between exporting and importing countries is also important.

21. Electronic licensing systems currently in use in some countries would allow, provided minor changes are introduced, for the generation of automatic notification to the receiving countries of authorized exports of ODS. These notices could also be sent to other ozone officers at the regional level. Such systems also allow for the generation of reliable up-to-date statistics.

22. Customs is one of the sources of information on imports of ODS. However, this information is based on customs codes which, in some cases, cover more than one ODS and, consequently, does not permit the generation of differentiated statistics for different substances. The main problem occurs with HCFCs and blends of CFCs which gradually take over portions of the CFC market and might then be the object of illicit commerce themselves.

23. In each of the countries visited, an electronic monitoring system with respective software is in place. Customs is committed to regularly reporting on imports of controlled substances. In some cases inconsistencies between customs reports (based on actual imports) and NOU statistics (based on licenses issued) were registered due to inexperience and errors rather than to intended manipulation. Such mistakes are being progressively eliminated.

24. A number of customs registry systems allow users to link an ODS code with a requirement to input the license number as a prerequisite to moving on to the declaration of import. This is an effective method of avoiding omissions and reminding the customs officer that the corresponding license must be verified.

25. In many countries lower ranking customs officers carry out a fundamental role for the control of imports and exports of goods. These officers are generally informally trained on the spot as required and, given their rank, do not always benefit from training seminars.

26. Some training manuals are overly long for daily use by customs officers. Concise country guidebooks and rapid screening tools have been developed in some countries and regions.

27. The recommendations in Section V relate to four main areas:

- (a) Improving the involvement of customs, including the higher levels of hierarchy, in the ODS phase-out;
- (b) Amending and upgrading the legislation framework in those Article 5 countries where it is incomplete, and improving enforcement and regional cooperation;
- (c) Accelerating and assisting implementation of customs training, including regional activities, where appropriate;
- (d) Amending training materials and contents and putting information materials and identifiers to effective use.

I. Background

28. The 14th Meeting of the Parties to the Montreal Protocol had requested UNEP/DTIE in decision XIV/7 to report through the Executive Committee to the 16th Meeting of the Parties on the activities of the regional networks with regard to means of combating illegal trade. It also requested the Executive Committee to consider making an evaluation of customs officers training and licensing systems projects a priority and to report, if possible, to the 16th Meeting of the Parties. Responding to this decision, the Executive Committee decided at its 43rd meeting to forward the Report from UNEP DTIE on the Activities of the Regional Networks with Regard to Means of Combating Illegal Trade (Part I, Sections 1 and 2, of document UNEP/OzL.Pro/ExCom/43/58/Corr.1, as amended and updated) to the 16th Meeting of the Parties, and also to report that the Committee would undertake a new evaluation of customs officers training and licensing system projects to be reported to the 17th Meeting of the Parties. This document presents the results of the evaluation prepared by the Senior Monitoring and Evaluation Officer (SMEO) with several consultants. It is presented to the 45th Meeting of the Executive Committee to enable discussion and, if need be, amendments prior to submitting it to the Meeting of the Open Ended Working Group in July 2005 and to the 17th Meeting of the Parties in December 2005.

29. The 22nd Meeting of the Open-Ended Working Group (OEWG) discussed, in July 2002, an extensive study on the ‘Monitoring of International Trade and Prevention of Illegal Trade in ODS, Mixtures and Products Containing ODS’ (UNEP/OzLPro/WG.1/22/4) which had been prepared following decision XIII/12 of the 13th Meeting of the Parties (MOP). The study provided a comprehensive analysis of the problems of illegal trade in ODS and recommended a number of actions, which, inter alia, have led to the request for this evaluation. The decision reflects a concern that the successful phase-out of large parts of ODS-consumption and production might be partly undermined by increasing volumes of illegal trade in ODS.

30. The Montreal Amendment to the Montreal Protocol adopted in 1997 at the 9th Meeting of the Parties states in Article 4B para. 1, that all Parties shall, by 1 January 2000 or within three months of the date of entry into force, 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. Although it entered into force on 10 November 1999, at the time of writing, 59 Article 5 countries have not yet ratified it, while 86 have done so. Nevertheless, a number of those 59 countries have established ODS licensing systems as required by the Montreal Amendment.

31. Decision 31/48 of the Executive Committee taken in July 2000 increased the level of funding for RMPs in low-volume-consuming countries (LVC) by 50% from the original level of funding, and doubled the funding for the preparation of new RMPs provided they included the commitment of the recipient countries to include the development of regulations and legislation, thus helping to create the pre-conditions for a later accelerated implementation of the RMP once approved. The existence of a licensing system, at least in draft form, is a prerequisite for customs training.

32. In addition, Decision 43/37 of the Executive Committee provides a further incentive to develop licensing systems, since it establishes as a prerequisite for additional funding in support of institutional strengthening in LVC and VLVC countries that i) a country assigns a full-time officer to manage the ozone unit and, ii) that a national licensing system controlling ODS imports is in place.

II. Scope and Approach of the Present Evaluation Report

33. In the desk study (doc. 44/12), the main evaluation issues had been identified and put into the following structure:

Table 1: Main evaluation issues		
	Areas of action	Issues to analyze
1.	Background information	(a) Share of sub-sectors in ODS consumption, recent trends and prospects (b) Number of registered importers, service shops, technicians (c) Projects funded and implemented (f) National phase-out strategy and status of compliance
2.	Legislation and import licensing system	(a) Ratification of Montreal Amendment (b) Main characteristics of import licensing system (if in place), including whether they cover all ODS (c) Specific regulations on the ban of ODS and equipment containing ODS (d) System of quota allocations to registered importers (e) Conditions of issuing licenses (f) Administrative procedures and documentation (g) Collaboration between the authorities responsible for ozone issues and customs officers at various levels (h) System of monitoring and reporting on trade in ODS (i) Sanctions or penalties imposed on violation of legal regulations (j) Mechanisms and capacities for prosecution and enforcement (k) Involvement of the private sector in elaborating and implementing rules and regulations (l) Support received by CAP team for developing licensing system
3.	Customs procedures	(a) Control taking place at border points or inside the country (b) Introduction of a national system of customs codes in addition to the HS to identify substances and mixtures (c) Documents (licenses, trade names, code number, labelling, etc.) to be presented to customs by importers of

Table 1: Main evaluation issues		
	Areas of action	Issues to analyze
		<p>ODS</p> <p>(d) Procedure applied in case of suspicious shipments</p> <p>(e) Sampling or other identification methods used</p> <p>(f) Characteristics making a shipment suspicious</p> <p>(g) Instance to be addressed in case of suspicious shipments</p> <p>(h) Illegal imports detected since import licensing system in place</p> <p>(i) Electronic monitoring system in place and effectively used by customs</p>
4.	Customs training	<p>(a) Number of customs training courses conducted and officers trained (under stand-alone, RMP, regional or sectoral phase-out projects)</p> <p>(b) Establishment of in-country customs training capacity</p> <p>(c) Continuity (follow-up, refreshment) of training activities</p> <p>(d) Curricula and material used in customs training</p> <p>(e) Identification equipment supplied</p> <p>(f) Adequacy and sufficiency of identifiers available to customs</p> <p>(g) Effective use of identifiers</p> <p>(h) Existence of backstopping mechanisms for customs</p> <p>(i) Priority attributed to Ozone issues by customs</p>
5.	Additional enforcement measures to reduce ODS consumption	<p>(a) Establishment of local (or regional) environmental agencies responsible for inspection among companies and end-users</p> <p>(b) Measures influencing relative prices (import taxes, environmental levies on ODS, or subsidies for alternatives)</p> <p>(c) Application of other financial or fiscal incentives for technological reconversion</p>
6.	Co-operation with national stakeholders and regional co-operation	<p>(a) Involvement of the companies and professional associations (if in place) in the strategy and the operative procedures of the ODS phase-out process</p> <p>(b) Regular reporting by importers (and the servicing sector) and the system of checks to assess the reliability of data</p> <p>(c) Usefulness of the communication and co-operation with neighbouring countries in the Regional Networks</p> <p>(d) Common efforts and exchange of experience between Network members to combat illegal trade in ODS, including sub-regional cooperation</p>

34. This provided the approach which was followed in the case studies in the nine countries visited. The issues were discussed with different relevant bodies as follows:

- (a) The National Ozone Unit;
- (b) Other government departments involved in ozone/environmental issues;
- (c) Customs Department;
- (d) Selected customs control points;
- (e) Importers of ODS;
- (f) Associations of Refrigeration Technicians, if in place;
- (g) Selected refrigeration servicing workshops;
- (h) Certification centers, such as technical institutes, if in place.

35. These discussions complemented information from existing surveys and reports based on project monitoring. Support by the NOUs and cooperation by both public and private sources of information has been, in most countries visited, highly satisfactory. UNEP provided comprehensive information in several meetings and discussions.

36. The countries were selected in accordance with geographical criteria, taking two countries each from Latin America (Bolivia, Paraguay), Europe (Romania, Turkey), Asia (Philippines, Thailand) and three from Africa (Burkina Faso, Senegal, Sudan). Four are LVC and five non-LVC countries, five have a National or Sector Phase-out Plan, and six have RMPs. All have various forms of licensing systems, mostly for CFCs, and have carried out to varying degrees customs training programmes. They have a wide range of baseline volumes, implemented with different implementing agencies and are thus by and large representative of the various situations encountered (see Table 2). The findings of the earlier evaluation of RMPs in LVC countries (see doc. 41/7) were also taken into account.

Table 2: Sample of Countries Visited and their Main Characteristics						
Country	Region	Status	CFC Baseline	RMP/RMP Update	National Phase-Out Plan/Sector	Agency
Bolivia	LAC	LVC	75.7	RMP Update	Foam	UNDP/Canada
Burkina Faso	AFR	LVC	36.3	RMP Update		UNDP/UNEP/Canada
Paraguay	LAC	LVC	210.6	RMP Update		UNDP/UNEP
Philippines	ASP	Non-LVC	3,055.9		Yes	UNEP/IBRD/Sweden
Romania	EUR	Non-LVC	675.8	RMP		UNIDO
Senegal	AFR	LVC	155.8	RMP Update		UNEP/UNIDO/Switzerland
Sudan	AFR	Non-LVC	456.8	RMP	Yes	UNIDO
Thailand	ASP	Non-LVC	6,082.1		Yes	IBRD
Turkey	EUR	Non-LVC	3,805.7		Yes	IBRD

37. The country studies give an overview of measures taken, results achieved, problems faced and initiatives planned, and then describe in more detail specific features particular to each country visited. These case studies form the basis for the present synthesis report which

summarizes the findings. They are available on request as hard copy and at the UNMFS Intranet website, 45th Meeting of the Executive Committee, Evaluation Document Library.

38. Comments on the draft were received from Burkina Faso, Canada, Paraguay, Poland, Sweden, UNDP and UNEP and were taken into account for finalizing the present document.

III. Licensing Systems, Customs Procedures and Illegal Imports Detected

a) Overview

39. ODS licensing systems and customs training activities were first being funded as stand-alone and as regional projects. In the last 3-4 years, there has been a major increase in such projects, they are now incorporated into refrigerant management plans (RMPs and RMP updates), refrigeration servicing sector plans, and national phase-out plans. Most projects which include a licensing system also have other components (register of importers of ODS, monitoring system, quota system, training of customs officers, establishment of an association, encouraging good practices, etc.). Only 12 projects support licensing systems as such, and in these cases the average funding ranges from US\$ 10,000 to US\$ 50,000. Costs are low when local or regional experts are involved (Guatemala, Peru), and on the high side when international consultants are used (e.g. PDR Lao).

40. The Latin American and the Caribbean region accounts for 17 out of the 38 approved projects related to licensing systems (45%), followed by Africa with 8 projects (21%), Asia and the Pacific with 7 projects (18%). UNEP leads as implementing agency with 23 out of 38 projects (61%). The following list gives an overview on implementation delays for the 16 completed projects (see Annex I, tables 10 a/b for details):

- 4 on time;
- 4 delayed one to six months;
- 2 delayed six to twelve months;
- 5 delayed thirteen to twenty four months; and,
- 1 delayed more than two years.

41. UNEP completed 3 out of 8 projects on time, another five have been delayed by 13 to 25 months. (See Annex V, tables 11a/b). Three out of four completed projects implemented by Environment Canada had been delayed from between 6 and 8 months, and one by 24 months.

42. The main reason for such delays is that it takes longer than foreseen to draft national legislation on licensing systems. Several ministries (environment, industry, trade, finance) have to be involved and agree, after consultations with industry and commercial companies concerned, on the measures.

43. UNEP's CAP team supports the Ozone Secretariat in monitoring the status of implementation of licensing systems especially in countries where UNEP is the lead agency or is implementing the Institutional Strengthening (IS) projects. Although, in most cases, no details of

the modalities and functioning of such systems are available, UNEP’s statistics provide the most complete overview, as shown in Table 3 below.

Table 3: Current Status of Licensing Systems in Article 5 Countries			
Region	Fully Implemented	In Preparation	Submitted for Approval by Government
West Asia	7	2	1
SA/SEAP/PICS	18	8	1
LA and Caribbean	20	7	3
Africa	27	12	8
Europe and Central Asia	10	2	
Total	82	31	13

*Source UNEP/DTIE

44. 50% of Project Completion Reports (PCRs) have been received for completed stand alone licensing projects and 85% and 75% respectively for licensing projects as part of an RMP and for regional customs training projects. Only 29% of PCRs due have been received for completed regional licensing system projects. As can be seen in the overview of PCRs for licensing projects in Annex IIa, little information has been provided on the modalities of licensing systems in place, and most importantly, no information is to be found relating to the actual implementation and effectiveness of the system.

45. While in some draft TPMPs or requests for RMP updates descriptions of licensing systems exist, the actual results derived from the implementation of these systems are generally not provided and the descriptions are mostly very brief. This may be due to the fact that they are recent, or that reporting on such results is not considered to be mandatory.

b) Licensing Systems in the Countries Visited

46. All nine Article 5 countries visited for this report have introduced legal acts regulating ODS import-related issues in accordance with the obligations deriving from their commitment to the provisions of the Montreal Protocol. An Import Licensing System has been established in all of these countries based in each case on different legislative frameworks. In some cases new and comprehensive ODS-related legislation has been introduced (e.g. Turkey), in others, former legal acts had to be reviewed and successively amended, and in one case (Sudan) transitional regulations had been introduced. Although required by the Montreal Amendment, ODS exports are not yet to be licensed in the majority of the countries visited.

47. In the countries visited, basic legislation relating to the import of substances controlled under the Montreal Protocol relies on the following legal acts and regulations:

Table 4: Legal Acts Regulating ODS Import and Import Licensing in Countries Visited	
Bolivia Ratification date of Montreal Amendment: 12 April 1999	Law 1333 of 04/92, Law 1584 of 08/94 and Law 1933 of 09/98 establish the framework for dealing with the obligations set out under the MP. Supreme Decree 27421 of 03/04 establishes licensing system and Supreme Decree 27562 of 06/04 introduces rules and regulations concerning environmental management of ODS including those related to licensing system. Legislation and import licensing system in place and fully operational. All ODS and equipment containing CFC-12 are covered. Licensing is required for imports of recycled and re-used ODS.
Burkina Faso Ratification date of Montreal Amendment: 11 November 2002	A ministerial decision published by announcement to the importers bearing the number 97.005/MCIA/SG/DGC OF 11.03.97 requires for all imports of ODS and all material containing ODS a Special Imports authorization (ASI), valid for six months, and non transferable. This decision is based on general rules for the importation of goods, subject to the ordonnance No 91-0069/PRES of 25.11.91 and the Decree No 91-0434/MICM of 27.11.91. No restrictions for recycled and reclaimed ODS. Participate in efforts undertaken to harmonize trade regime and licensing system at regional level within the West African Economic and Monetary Union.
Paraguay Ratification date of Montreal Amendment: 27 April 2001	Law 61 of 10/92 and Law 1507 of 12/99 establish the framework for dealing with the obligations set out under the MP. Decree 3980 of 07/99 establishes the base for control of ODS and alternative technologies as well as the licensing system. This decree states that effective 1/1/05 all imports of ODS from Annex A, Group I will be completely prohibited. No sanctions are contemplated within this decree other than seizure and eventual destruction of goods (after 6 months). Licensing requirements apply for all ODS; imports of recycled ODS prohibited. No restrictions on re-exports.
Philippines Not ratified yet but licensing system is applied.	Republic Act 6969 from 1990 was revised and amended in 2004 incorporating provisions of the National CFC Phase-out Plan. Administrative Order 2004/08 regulates policies on importation, licenses, sales, consumption according to the targets of the Phase-out Plan. Licensing system covers CFCs, Halons, Carbon Tetrachloride, HCFCs, Methyl Bromide. Legal texts make no reference to export licensing.
Romania Ratification date of Montreal Amendment: 21 May 2001	Government Order 91/95, successively amended to specify ODSs under the MP. Ministerial Order 506/96 regulates the procedures of importation. Law 159/2000 established trade regime, import licensing and restrictions for the use of ODS. Legislation and licensing covers all controlled substances under the MP and its Amendments. Export of ODS is subject to licensing. Import of ODS-based equipment is strictly prohibited.
Senegal Ratification date of Montreal Amendment: 12 August 1999	Environment Protection Act from 1991. In 1999 the Consumer Protection Act introduced a system of import permits and licenses, all ODS are covered, except MB which was phased out in 2000, however, and TCA which is not imported (no baseline). Specification to comply with MP requirements by Decree 2000/73 and Interministerial Order no.008874, 2001. Participate in efforts undertaken to harmonize trade regime and licensing system at regional level within the West African Economic and Monetary Union.
Sudan Ratification date of Montreal Amendment: 18 May 2004	Transitional Decree – Environment Protection Ordonance from 2000, and Decree on the Management and Organization of the Ozone Sphere Penetrating Substances from 2001. Current legislation covers all CFCs, Halons, Chlorinated Carbon Compounds and all HCFCs. No reference is made to the export of ODS. Legislation has still to be updated and upgraded to conform to MP requirements, but present import licensing and quota system is effective.
Thailand	Hazardous Substances Act and Factory Act, both from 1992, subsequently amended. A Ministerial Decree from 1995 regulates imports of controlled substances. Import

Ratification date of Montreal Amendment: 23 June 2003	quota system introduced in the same year. Licensing covers imports and exports of all ODS. Quota system only for CFC-11 and CFC-12.
Turkey Ratification date of Montreal Amendment: 24 October 2003	Legal Act on the Turkish Ozone Policy in force since 1998. It established an import quota system incl. compulsory monitoring and reporting by ODS importers and Customs. Quotas allocated in accordance with targets of the Sector Phase-out Plan. All imports of ODS controlled under the MP and its Amendments need to obtain license. Control of exports of ODS “shall be regulated by the Undersecretariat after obtaining approval of the Ministry”. No specific information about the status of export licensing.

48. In most of the countries visited, the import licensing system and the respective quota allocations to importers are designed and applied in a degressive way in accordance with the time schedule set by the MP and/or the targets established under the respective national CFC phase-out plans (in the case of Paraguay, phase-out in 2005, in the case of Turkey 2006, in that of the other countries 2010). Since the introduction and actual application of the licensing system, significant reduction of CFC consumption has been achieved in most countries due to the increasingly restricted availability of CFCs (see Table 5 below). In Paraguay, degressive quota allocations were designed but have not been applied, and in Senegal, actual imports in 2003 have exceeded quotas by about 20%. Violations of regulations relating to the import regime are subject to penalties in the form of fines, cancellation of licenses or, in serious cases, also imprisonment. Examples of illegal imports detected are given in Table 6 below.

49. Through the restricted availability of CFC which is a consequence of the application of import licensing, price differences between controlled and alternative refrigerants have significantly decreased, mostly through increases in CFC prices. In some of the countries visited government intervention in market prices was introduced. In Thailand, an excise tax of 30% on CFC is imposed, and in Romania a fee of 10 million Lei (approx. US\$ 250) is to be paid by importers for obtaining a license. Such measures may actually contribute to decreasing demand for CFCs in the market, but, in principle, they may also constitute an incentive to increase illegal imports. It is, therefore, important to complement measures relating to relative prices by the enforcement of customs control and an improved control over the market by means of close co-operation with importers and the servicing workshops.

50. Concerning the companies in possession of quotas allocated for importing CFCs, and the actual use of quotas in 2003/2004, the following can be reported:

Table 5: Licensed Importers and Actual CFC Imports in the Countries Visited		
Country	Licensed importers in 2004	Actual use of import quotas
Bolivia	4	Actual CFC imports lower than assigned by annual quotas. Only 80% of allowable yearly amount is divided amongst registered importers. Remaining 20% are set aside for "eventual" importers. So far none have been registered.
Burkina Faso	1	License for CFC-12 only; fully used.
Paraguay	7	Although foreseen in the legislation, no degressive quota system is enforced. Previously unregistered importers have been attributed quotas for 2004 and 2005, through informal communication by the NOU.
Philippines	7	Actual CFC imports lower than assigned by annual quotas. Almost no R-11 import, also less R-12.
Romania	7	Actual CFC imports less than quota allocated.
Senegal	5	Only R-12 import. In 2003, imports about 20% in excess of authorized quotas.
Sudan	24	Full use of the quota for R-12. Import of R-22 less than allowed. Practically no more import of R-11.
Thailand	19	Some importers have not fully used their quotas for both R-11 and R-12.
Turkey	16	No full use of R-11 and R-12 quotas by importers.

51. The establishment of the import licensing systems has in most cases proven to have several beneficial effects on the reduction of ODS consumption and the prevention of illegal imports. It is generally reported that:

- (a) it enables the respective Ozone Office to acquire an improved control of imports and consumption of controlled substances;
- (b) it provides predictability for the companies concerned;
- (c) it creates through control mechanisms and penalties disincentives to import illegally;
- (d) it produces transparency and thereby a safer feeling for competing business companies;
- (e) it improves monitoring and the reliability of statistics;
- (f) it facilitates better communication and co-ordination between the responsible government agencies and registered importers.

52. In most countries, quotas allocated to importers of CFCs have not been fully used. Imports of CFC-11 show a radical decline, even the demand for CFC-12 is partly decreasing while CFC prices tend to increase.

53. While all countries visited have covered all controlled substances by legislative acts, specific regulations concerning lists of licensed importers, import quota allocations, and degressive schedules have generally been introduced for the import of CFCs only. This is mainly due to the fact that all countries visited have been implementing RMPs or sectoral CFC phase-out plans with specific targets for the reduction of CFC consumption. Other ODS, in particular

CTC, TCA and HCFCs as well as refrigerant blends containing CFCs and methyl bromide are receiving less attention and are less comprehensively monitored and controlled. Methyl bromide is often grouped with toxic or hazardous chemicals which are subject to certain controls, but are covered only in a few countries by licensing and even fewer by quota schemes. It should be noted here that the Montreal Amendment requires that all ODS are licensed, while in practice only few Article 5 countries included ODS from Annexes C and E in their systems. Actually Article 5 countries are obliged by the Montreal Amendment to include Annex C (HCFCs) starting from 2005 and Annex E (Methyl Bromide) starting from 2002. From the point of view of prevention of illegal trade it is very important that HCFCs are included since otherwise CFCs could be traded under trade names and customs codes of HCFCs, thereby escaping by and large customs controls.

54. The import of recovered/recycled/reclaimed CFCs is legally prohibited in several countries visited. In others, e.g. Sudan, no reference is made in legal acts to such substances, even if the Ozone Office maintained that such goods have to be subject to the licensing system. It is, however, very difficult for customs officers to distinguish with certainty recycled/reclaimed CFCs from virgin substances even with certificates of origin. In any case, international offers of rightly certified recovered/recycled/reclaimed refrigerants are very limited, and the demand is also low, since the general opinion of refrigeration servicing workshops in the countries concerned is that such restored CFCs may not have the same quality as virgin substances.

55. Imports of equipment containing ODS are not mentioned in the Montreal Amendment and are not always, or are only partly or indirectly, prohibited by for example limiting the age of imported cars to five years maximum, and their origin to car producing countries that had already completed the conversion before 1999. Such regulations are sometimes part of licensing schemes but more often relate to other foreign trade regulations. In the case of Bolivia, however, 100% of imported MAC units are physically inspected and require a certificate from the Standards Institute in order to proceed. In the case of other refrigeration equipment, a representative sample of the shipment is tested and a certificate is also required. In Burkina Faso, equipment functioning with CFC is not allowed to be imported under the licensing scheme and a certificate with product characteristics is required from the supplier.

56. There is now a need, on a regional basis, to reconcile supply of ODS with consumption if illegal trade is to be avoided. This activity takes on special importance as producers in China plan to close CFC production by 2007, which is earlier than some countries in the region had anticipated. It was recommended at a regional workshop that China's and India's authorities should receive a list of licensed importers so they could restrict the CFC exports to legitimate clients in the countries in the region. While for India this is already taking place, there is no information whether such exporter/importer data exchange is happening also for China or in any other region.

c) Customs Procedures

57. Regarding actual customs control of imported substances containing ODS, detailed regulations and screening procedures are in place. The most important checks are the following:

- (a) Availability of licenses/import permits;
- (b) Consistency of documentation regarding codes and names;
- (c) Origin of the goods imported
- (d) Physical examination of containers (packaging, labelling, etc.);
- (e) If the imported goods are classified under “green line”, Customs will assign a declaration number and then release it, sometimes with only minimal document review. In the case of “yellow (or orange) line” only control of documents will take place. In case of classification under “red line”, customs will proceed to a thorough screening of documents and physical inspection of goods;
- (f) In case of suspicious shipments, customs generally notify the responsible authority (generally the NOU, in some cases Customs Court, or other authorities). Physical check of the content is then carried out by authorized laboratories.

58. In each of the countries visited, an electronic monitoring system with respective software is in place. Customs departments regularly (mostly by end of the year) report on registered imports of controlled substances. Monitoring based on customs statistics, import licenses issued and importers’ records allow for transparency and provide, despite some mistakes detected, a fairly reliable data basis for calculating trade and consumption of ODS. In some of these systems (e.g. in Bolivia and Paraguay’s electronic customs registry) the customs brokers have to enter the import license number before completing the import declaration form. This is an effective method to verifying the license of the importer and to remind customs officers that they have to check the presence of the license with the import declaration. In addition, computerized on-line licensing systems linking the NOU with customs, importers, brokers and even banks which finance import credits (Guatemala), are used or are under development in several Article 5 countries.

59. The countries would further enhance this type of mechanism if the lists of authorized importers were to be circulated to exporting countries or would be placed on the web. This would effectively create an additional filter for illegal imports by detecting them before the shipments are made.

60. In countries in which a National or Sector CFC Phase-out Plan is being implemented (Thailand, Philippines, Turkey, Sudan), an annual verification audit of actual imports is required, based on statistics provided by the Ozone Office (licenses issued) and Customs (effective shipments). In the first years following the introduction of the import licensing system in Thailand and the Philippines several inconsistencies had been detected by the auditors which were due to errors and mistakes such as the use of incorrect customs codes or confusions of net weight with gross weight. In one case, customs simply confused tonnes with kilograms. Some of these and similar errors, which were due mainly to inexperience rather than to intended manipulation, have been clarified and corrected by the verification reports. In general, audited verification confirms that data relating to import quota allocations and actual imports are correct

and procedures for issuing licenses and import permits have been in line with legal regulations. Former errors are being progressively eliminated.

d) Illegal Imports Detected

61. Illegal imports of CFCs have actually been detected in several cases. Incidences were reported as follows:

Bolivia	No illegal imports detected by customs.
Burkina Faso	There are no statistics on seizures of ODS. However, the presence of illegally imported products is noticeable in the public markets.
Paraguay	In 2005, one falsified license was identified. Customs Director was to request further information on whether this was an isolated case. According to importers, illegal ODS and ODS containing equipment are available on the market (halons, recycled ODS, MAC units).
Philippines	In 2003/04, 28 cases of violation of the import regime were detected, 15 of them due to incorrect Harmonized System (HS) codes mostly by error, the others mainly to mislabelling.
Romania	No illegal import detected by customs. Some importers, however, cannot disregard smuggling or other disguised importation of CFCs into the country the quantity of which is considered to be insignificant.
Senegal	No illegal import reported by customs but some illegally imported CFC was found in a few workshops.
Sudan	One case of 250 cylinders labelled as R-134a but actually containing R-12 was reported.
Thailand	In 2003/04 a total of 32,1 tonnes of illegally imported ODS were seized by customs, entering the country from North-East (Laos). Service shops reported to find increasingly often R-12 contaminated with other chemicals. In 2004, the number of incidences was decreasing.
Turkey	Customs did not report on illegal imports, however, there are serious suggestions from industry and importers that some cheap R-12 is entering the country illegally. Stakeholders estimate the volume of this at less than 10% of the annual quotas allocated to licensed importers.

62. Illegally imported ODS is sometimes sent back at the expense of the importer, in other cases it is stored for future disposal. In Thailand and also in the Philippines seized CFCs are auctioned whereby a reward of 35% of the auction revenues are paid to the officer that detected the shipment and 30% to the informant, if any. In Senegal too, the customs officer and his superiors receive a premium in case of detecting and preventing smuggling.

63. Customs records on seized illegal shipments do not necessarily reveal the full picture. On the one hand, seized illegal imports demonstrate the efficiency of the licensing system and actual customs controls, on the other they indicate that demand for cheap CFCs continues to be important. The opposite might also be true: not detecting any illegal imports may indicate either insufficient controls by customs or that there was no attempt to illegally import. It is, therefore, important to supervise the market and to maintain close co-operation with importers and

servicing workshops as additional sources of information. Inspection of the storage rooms of importers and workshops can usually only be done by authorized customs agents carrying specific mandates. Cooperation with the NOU and industry associations would be useful in such cases, and reports need to be prepared and exchanged between customs and the NOU.

64. In the on-going evaluation of methyl bromide projects, smuggling of limited quantities of methyl bromide in small cans was reported for several countries, mostly for the use of small farmers.

65. In some countries (e.g. Bolivia, Paraguay and Turkey) there are free trade zones. Imports to and exports from these zones are not under the control of the licensing system or any other kind of monitoring from the NOU, unless they are later imported into the country. Therefore, there is no record at the NOU about stock of ODS available in these areas.

IV. Customs Training Projects

a) Overview

66. So far 181 customs training, licensing systems, and related projects have been approved. 140 are training and licensing projects, 51 of which have been completed and 45 PCRs have been received. In addition, 7 annual tranches of 41 on-going national phase-out plans have been completed, which also include customs training and licensing activities.

Category	No. of Projects Approved	No. of Projects Completed	PCRs Received
Customs Training Stand-Alone Projects	7	3	3
Individual Customs Training Projects that are part of RMPs	61	24	26
Customs Training and Licensing Training integrated in RMP Projects	28	4	4
Regional Customs Training Projects	6	4	3
Licensing System Stand-Alone Projects	4	2	1
Regional Licensing System Projects	8	7	2
Individual Licensing Systems that are part of RMP Projects	26	7	6
Customs Training, Licensing System and ODS Monitoring in National Phase-Out Plans	41	7	0
Total	181	58	45

67. The majority of customs training projects are implemented by UNEP (56), followed by UNIDO (14), Canada (11), Australia (8) and France (6). UNEP implemented most of the 11 customs training projects approved for Canada, all 8 approved for Australia in the Pacific Island Countries (PIC's) and 1 approved for France. These projects follow the UNEP approach. The rest are divided almost equally between Finland and Germany, while Poland and UNDP have implemented only a few projects. Some licensing and training activities are also carried out as part of national phase-out plans implemented by the World Bank. Most customs training projects

are in Africa (38) followed by Asia and the Pacific (32) and the LAC region (23). (See Tables 2 and 3 in Annex I).

68. For individual customs training projects, which are part of an RMP but have a separate project number, 100% of PCRs due have been received. The same is true for customs training projects integrated into RMPs and for stand alone projects. No PCRs have been received for activities within national phase-out plans which are still ongoing

69. Thirty two percent of the projects based on original completion dates, and 23% of the projects based on revised completion dates, have been delayed for more than two years, and only 3% and 6% respectively have been completed on time. (See Annex I, Tables 5a and b). One reason is that phase I of the customs training projects may not start before the national import licensing system is in place, and the preparation of the relevant legal acts is generally a rather lengthy process. Another reason for the delays may be the difficulty in following up on Phase I (train the trainers) with Phase II (train customs officers), in particular if Phase II has not started soon enough after Phase I was completed.

70. 14 out of 18 customs training projects (77%) implemented by UNEP have been delayed by 13 to 25 months or more, based on original approved dates of completion, and 11 out of 18 (61%), based on revised dates of completion. (See Annex V, tables 6a and b). Six out of 7 projects (86%) implemented by Environment Canada, mostly with UNEP, have been delayed by 13 to 25 months or more, based on original dates of completion, and 5 out of 7 projects (71%), where based on revised dates of completion. When provided, the most frequent explanation for delays is related to delays in implementing the licensing system.

71. While in most PCRs reasons for delays are succinctly explained, in some they are not addressed at all and even with significant delays the project is described as “satisfactory and as planned”, in particular in some recently received PCRs prepared by UNEP (see Annex IIb).

72. While workshop reports include an evaluation section, this provides only subjective ratings of the level of satisfaction of the participants and their comments with regard to the quality and quantity of information received. The answers given at the end of workshops are generally in the “Excellent” to “Good” categories and although they provide some information as to the actual quality of the materials used and make a number of suggestions for improvements, follow up to the recommendations from the Phase I workshops as well as to suggestions made by individual participants in their evaluation of the workshops is not transparent nor reported upon.

73. National training programmes for customs officers implemented by UNEP are using a Country Handbook on ODS Legislation and Import/Export Licensing System, in addition to the Training Manual for Customs Officers developed by UNEP. This country handbook, developed before training commences, is a compendium of country specific regulations and offers background information on ODS issues including an overview of the MP, its amendments and national phase-out strategies and is, therefore, used as the main teaching material. It also provides in-depth information on the national legislation and licensing system, revised customs codes, monitoring and control system for ODS and ODS containing products, and the

implications for customs officers. UNEP has also reported that several NOU's have translated the customs manual into local languages.

74. Training takes place in two phases. In Phase I, workshops are held for customs trainers and other stakeholders, to "train the trainers". These courses existed before the creation of the CAP and were given by international consultants, then followed by the policy and enforcements officers of the CAP teams for courses implemented by UNEP. In Phase II, the trained customs trainers are training other customs officials from offices in major ports of entry and environment inspectors, as appropriate. They are expected also to prepare a training module to be included in the curriculum of customs schools. Participants of these workshops are also trained on how to use ODS identifiers.

75. Other agencies such as GTZ and Environment Canada follow the same approach, with some modifications. They also use UNEP's Training Manual. UNIDO's seminar in Romania was shorter and follow-up relied mostly on the NOU. The recent customs training activities in the context of national phase-out plans implemented by the World Bank and other implementing agencies basically follow the same approach as UNEP.

b) Training Courses Conducted in the Countries Visited

76. Although difficult to quantify, the effectiveness of import licensing and prevention of illegal imports of ODS is highly dependent on the ability of customs officers to apply the legal regulations in force and to identify illegal shipments of refrigerants. For this the training of customs officers is crucial. In the countries under consideration, the following measures on customs training have been implemented:

Table 8: Customs Training Implemented and Planned in the Countries Visited				
Country	Phase I: Train the Trainers	Phase II: Train Customs Officers	Availability of Training capacity in Customs	Identifiers Supplied
Bolivia	Project delayed due to social unrest which led to the burning of the NOU offices. 38 trainers trained in May 2004.	160 expected to be trained in early 2005.	No in-house training capacity in customs.	6 detectors and 17 identifiers.
Burkina Faso	20 trainers trained in August 2002.	120 customs officers trained.	It is expected that a training module on ODSs will be incorporated into the programme of the Customs Training School.	5 identifiers supplied.
Paraguay	25 trainers trained.	Planned for 2005.	No in-house training capacity in customs.	7 identifiers.
Philippines	36 trainers trained in	Project started in	In-house training	50 units supplied, 30

Table 8: Customs Training Implemented and Planned in the Countries Visited				
	stand-alone customs training project ahead of National CFC Phase-out Plan.	March 2003. 322 customs officers trained.	capacity available. On-going training courses planned.	provided to customs, 20 with NOU.
Romania	Under RMP 31 customs trainers and 12 staff members of Local Environment Protection Agencies trained. Completed in 2002.	No exact data on the number of customs officers trained.	Due to lack of financial and human resources no in-house training capacity for subsequent courses built up. Additional funding required.	6 units, 5 of them for customs and 1 for training purposes.
Senegal	Under RMP in 2002 60 trainers trained.	Briefing of about 20 customs officers in 2 regions.	On-going in Customs School, but not yet implemented.	7 plug-in and 4 battery-powered identifiers.
Sudan	10 trainers and 12 staff members of Environment Protection Agencies trained under RMP.	240 customs officers trained from different customs points.	In-house training capacity in place. Further training activities on-going.	10 identifier sets supplied, 4 used by customs in Khartoum and 6 in Port Sudan.
Thailand	Delay due to the problem of releasing identifier equipment provided by MLF from customs without import taxes being paid. Oct. 2004, 30 trainers trained.	Due to the problem of releasing the identifiers, start of Phase II in February 2005.	In-house training capacity available. It is planned to carry out on-going training courses.	60 units.
Turkey	13 trainers trained.	So far 35-40 customs officers trained 2003 in Ankara and in 2004 some 55-60 in Istanbul. Under the National Phase-out Plan, about 1000 officers to be trained.	In-house training capacity available. Training courses organized and implemented by TTGV.	Under the Phase-out Plan, 200 identifiers are supplied.

c) Experiences Reported and Improvements Suggested

77. In most countries under consideration national customs handbooks based on UNEP’s manual and complemented by national regulations have been prepared and provided to customs. Some of these manuals should be updated to include newest alternative technologies and procedures. On the other hand, the handbooks are found sometimes to be too detailed for customs officers who lack knowledge about chemicals. It should therefore be considered whether, in addition to the basic manuals, a more concise “field guide” for customs officials should be elaborated and applied. Examples are the guide for customs officers prepared by the

NOU in Romania (also available as software), UNEP's Customs Quick Reference Tool, the rapid screening tool developed by the CAP team in the West Asia Region or the poster included in UNEP's training manual both of which are reportedly placed on office walls and used by some customs officers as a day to day reference.

78. In the case of Bolivia, customs training although essential, now focuses less on the identification of chemicals, as each import of ODS has to be inspected by an independent certified laboratory. In other countries, only suspicious shipments are referred to laboratories in or outside customs. Mixtures of chemicals or unknown trade names may raise questions which require the specific knowledge of the NOU to answer. This is particularly so when one customs code includes several ODSs and has not been expanded to be specific for each product. In some cases (e.g. Senegal) it was found that country handbooks for customs should be complemented to include issues such as treatment of goods in transit, movement of banned goods within the customs area or through the borders, procedures to follow in case of suspicious shipments, etc.

79. One factor which seems to greatly enhance progress is the establishment of solid cooperation links between the different actors at the highest levels. In the case of Bolivia, an exemplary relationship exists between the Ozone Unit, the Ministry of Environment, the Ministry of Finance and Customs, and the Bolivian Institute of Standardization and Quality. Bolivia also has developed a solid working relationship with the provincial authorities. In Thailand and the Philippines, Memoranda of Understanding between the NOUs and the Customs Departments significantly enhanced their cooperation. In the case of Senegal, however, this relationship needs to be further developed. At the time of the country visit this was on the agenda of the Ozone Unit and recently a high level officer was appointed to represent customs in the National Ozone Committee.

80. Ensuring that the in-country training capacity is put in place is a priority. Of the 9 countries visited, although all of them have carried out phase I to some degree and have trained trainers, and 4 of them have initiated phase II, only 4 have solidly developed regular in-house training capacity which they are tapping into. This partly explains the fact that some countries have experienced difficulties in getting phase II started. The high rotation of officers including the trainers within a country does not help. The cost effectiveness of this training approach would be enhanced by more focused selection of participants in phase I. Increased attention should be put on future availability for training, background and previous teaching skills.

81. For some projects not visited (Cuba, Colombia, Benin), Environment Canada sent an experienced environmental inspector from the ministry to the Train-the Trainer workshops. This was reportedly found to be very useful by the customs officers as they could benefit from the experience of another person and country in identifying and controlling ODS, receiving direct practical information based on real-life experiences.

82. Training contents should be incorporated in the curricula of customs schools, a process which so far is rather the exception than the rule. In those countries where no customs training schools exist, alternatives should be explored with other teaching institutes and continued involvement of the ozone officer as a resource person.

83. Also efforts should be made to ensure the participation of high level officials in part I of the Phase I seminars in order to increase the awareness of and backing by higher levels of the customs hierarchy for the implementation of the import controls and the organization of phase II courses.

84. The training approach would yield better results if the officers with the direct on the ground responsibility for verification of goods were trained very rapidly after completion of phase I. This is rarely the case, however. The main reasons for this are: that trainers might not always feel confident enough to conduct a seminar on their own; that some higher customs officials hesitate to release trainers and participants for the time of the seminar; that in some countries participants expect per diems; and that after several months the momentum generated by the first workshop for the trainers has been lost, and the trainers might not be available any more if they have changed location and position in the framework of regular rotations of all customs officers.

85. The five day approach developed and followed by UNEP in Samoa and recently used in the Caribbean seems worthwhile to pursue, in particular for LVC countries. In this model, the first three days are devoted to training the trainers and to selecting the final trainers at the end, jointly with high level customs officials. The fourth day is devoted to preparing the trainers to deliver a seminar on the fifth day to customs officers. This allows the know-how acquired by the trainers to be applied in the same week in the presence of the international trainer or CAP policy and enforcement officer acting as trainer.

86. Although a longer seminar might allow for the inclusion of information about several international environmental conventions, such as practiced in the Philippines, reticence to allow officers to go for longer periods of training will also have to be addressed.

d) Refrigerant Identifiers

87. The refrigerant identifiers supplied are able to detect R12, R22, R134a, HC and air and show the proportion of each in a sample from a cylinder or a system. The identifiers have mainly been used by customs officers to verify cylinder contents. In some countries they are also used to check the type of refrigerant in cylinders in the market, including cylinders which have been filled locally, or the content of MAC systems. They cannot identify CFC-11 or CFC-115 or any blends with those. In such cases, the reading "unknown" would appear and only a laboratory would be able to identify the product with a gas chromatograph.

88. The identifiers are simple to use and provide consistent and accurate results. Training is required to ensure refrigerant is handled safely, that emissions are minimised and that samples are not contaminated. This has been covered in training courses of phase I and phase II where those have been held already.

89. Two types of identifier have been supplied: a) Without integral printer, network powered; b) With integral printer, battery and/or network powered. Some can also be connected to the car battery. Those which do not rely solely on the electricity network are more appropriate, providing flexibility, especially in customs situations where there is not always an electrical

supply adjacent to container storage and where printed records are kept for later evidence, if required.

90. The identifiers use a filter which must be changed when it changes colour (i.e. it has become contaminated). It is essential that spare filters are supplied with the identifiers, which was not the case in all countries visited. Sometimes recalibration is needed by the suppliers.

91. Several countries reported to be still working on operating guidelines or administrative instructions, defining the ownership of the identifiers and responsibilities for their distribution, use, storage and maintenance. In the meantime, the identifiers delivered are kept partly with the NOU and partly in central customs warehouses. They are used for training purposes but are not, or are rarely, made available for actual controls at customs check points. Another issue to be solved is that the results of testing might not necessarily hold up in court as proven evidence, but might require a second testing by established institutions like a bureau of standards. Where laboratories are nearby, customs officers could take suspicious shipments directly there without using identifiers themselves.

V. Recommendations

(a) Improving the involvement of customs, including the higher levels of hierarchy, in the ODS phase-out

92. It would be useful if high ranking customs officers participated in the National Ozone Committees. The signing of a Memorandum of Understanding between the Director General of the Customs Department and the Ozone Unit, or at a higher level between the Minister of Finance and the Minister of Environment, is recommended, as is the creation of focal points for environment in customs with access to the top level of customs hierarchy.

93. It is recommended that UNEP should continue to address higher level officials from customs and other government departments to raise their awareness and to ensure high level support for the correct application of the licensing system and identification of ODS imports. This could continue to be done as part of the opening and closing of customs training seminars, or with the development of a one day seminar, designed specifically for these higher level officials.

(b) Amending and upgrading the legislation framework in those Article 5 countries where it is incomplete, and improving enforcement and regional cooperation

94. It is recommended that in some countries additional regulations regarding the exports of ODS, licensing schemes for all ODS imports, the ban of ODS sales to non-licensed companies and restrictions for ODS-based refrigeration and air-conditioning equipment might be introduced and applied. This might best be done by creating a comprehensive Ozone Law including all requirements deriving from the MP, which would encompass all successive amendments of different legal acts and decrees, as well as providing the flexibility for incorporating any future amendments or adjustments to the Protocol.

95. In accordance with the Montreal Amendment to the Montreal Protocol licensing systems should be systematically applied not only to CFCs but also to imports and exports of other ODS, in particular to CTC, TCA, HCFCs, refrigerant blends containing CFCs and methyl bromide.

96. In cases of illegal CFCs surfacing on local markets, customs might proceed to the inspection of storage rooms of importers and workshops, in cooperation with the NOU and relevant trade or industry associations.

97. Article 5 countries might consider involving certification and normalization institutes, on a regular or ad-hoc basis in the identification of ODS in case there is a lack of adequately equipped laboratory facilities in customs.

98. It is recommended that countries, which have not yet done so, make national customs codes more detailed by adding digits to the HS codes to ensure differentiation of all ODS for the generation of detailed and reliable statistics. The recommendation of the World Customs Organization (WCO) issued on 28 June 2003 may be of great assistance for this purpose.

99. NOUs and Implementing Agencies might consider suggesting the development of electronic licensing systems, including on-line intranets following the example of some Article 5 countries.

100. It is also recommended that countries might adapt their customs registry systems so that the requirement to introduce a license number can be associated with the customs code of corresponding ODS.

101. It would be helpful if exporting countries would inform importing countries about licensed shipments and check that the clients are on the list of authorized importers, provided by the importing countries on a regular basis.

(c) Accelerating and assisting implementation of customs training, including regional activities, where appropriate

102. It would be more effective if Phase I (Train the Trainer) and Phase II (Training of customs officers) takes place in rapid succession in order to preserve the momentum generated by the Train the Trainer workshops.

103. The five day approach combining Phase I and II in one seminar developed and followed by UNEP in Samoa and recently used in the Caribbean seems worthwhile to pursue, in particular for LVC countries.

104. An experienced customs officer or environmental inspector/enforcement official from another country with established control practices for ODS should be invited, where possible, to participate in the training of trainers workshops as resource person.

105. The NOUs and the Implementing Agencies conducting the second phase of the training should endeavour to ensure that mainly customs officers who actually carry out the inspections participate.

106. It is recommended that NOUs and Implementing Agencies should ensure that follow up to the recommendations from Phase I workshops as well as suggestions made by individual participants in their evaluation sheets be carried out in a more transparent manner.

107. It would be useful to extend training activities also to professional trade agents or brokers who are generally in charge of managing the clearance of shipments.

108. It is recommended that the NOUs and the Implementing Agencies conducting the training should consider means to maximize the benefits derived from the development of informal networks created during the training by maintaining an active database of trainers and trainees at the national and if appropriate, at the regional level.

109. It is recommended that UNEP should organize, where appropriate, further seminars on regional cooperation between customs officers, in particular for regional customs unions, thereby supporting the harmonization of legislation and customs procedures, as for UEMOA in West Africa, and promoting the creation of informal regional networks of customs officials.

(d) Amending training materials and contents and putting supporting information materials and identifiers to effective use

110. It is recommended that UNEP should amend its training manual for customs officers by adding information on customs controls and detection of illegal trade with methyl bromide, CTC and TCA.

111. It is recommended that UNEP should continue to generalize the development of rapid screening tools, such as the Customs Quick Reference tool for customs inspections, as posters, check lists and databases, ensuring wide distribution of these tools to Article 5 countries.

112. The dispatch of refrigerant identifiers supplied to customs services should be expedited (one each to the main entry points where they can be used directly on incoming shipments), along with the finalization of operating instructions covering their use, storage and maintenance as well as clarification of related legal aspects.
