Manual on operations under multilateral environmental agreements

Montreal Protocol
on substances that deplete the ozone layer and

Stockholm Convention
on persistent organic pollutants

UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

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UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
Vienna, 2009

FOREWORD

The Manual comprises two main parts: part one, dealing with the implementation modalities of the Montreal Protocol, and part two, dealing with practical guidelines for the preparation of a national implementation plan (NIP) and for post-NIP activities.

Part one

The Montreal Protocol mandated significant reductions in, and ultimately elimination of, the use of several extremely useful chemicals employed by industry. Specifically, chlorofluorocarbons (CFCs) and halons, widely used compounds with a variety of applications in many industrial activities and related manufacturing processes and products, including refrigeration, air conditioning, aerosol sprays, solvents, transportation, plastics, insulation, pharmaceuticals, computers, electronics, firefighting agents and fumigants. However, scientific evidence has proven that these chemicals cause depletion of the stratospheric ozone layer. It was in the light of this threat that the international community reacted and, after intensive negotiations, adopted the Vienna Convention for the Protection of the Ozone Layer and its Montreal Protocol on Substances that Deplete the Ozone Layer, which established target dates for replacing products that had become synonymous with modern standards of living, through the use of alternative technologies and ozone-friendly substances.

The purpose of the first part of the Manual is to assist project managers and other relevant staff in UNIDO as well as in national ozone units in Article 5 countries to report on the implementation of institutional-strengthening (IS) projects, refrigeration management plans (RMPs), terminal phase-out management plans (TPMPs) and the recovery and recycling part of national phase-out plans (NPPs) funded by the Multilateral Fund for the Implementation of the Montreal Protocol.

Part one includes:

(a) Manual for institutional-strengthening projects supported by the Multilateral Fund for the Implementation of the Montreal Protocol;

(b) Templates for reporting under the institutional-strengthening projects and the role of national ozone units in the implementation of the Montreal Protocol on Substances that Deplete the Ozone Layer;

(c) Templates for reporting under projects for recovery and recycling (RMPs, TPMPs, NPPs);

Annexes:

Annex 1 Data reporting forms and instructions—UNEP Ozone Secretariat in Nairobi

Annex 2 Country programme reporting and instructions—Multilateral Fund Secretariat in Montreal

Annex 3 List of responsible government ministries in the countries where projects are currently being implementing by UNIDO

Annex 4 Terminal report for institutional strengthening

Part two

The second part of the Manual is intended to assist project managers and other relevant staff in UNIDO, as well as in the POPs units of the relevant ministries in developing countries, with practical guidelines for the preparation of national implementation plans (NIPs) and for post-NIP activities under the Stockholm Convention on Persistent Organic Pollutants funded by the Global Environment Facility (GEF).

A conceptual approach would be to build a strategy for the phase-out of persistent organic pollutants (POPs) from the very outset, i.e. during the preparation of an NIP, setting out the priorities, and transforming these priorities into activities through action plans that could be funded through the GEF provided that co-financing sources are available.

ACKNOWLEDGEMENTS

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Glossary

BL	Budget line
CAP	Compliance assistance programme
CFCs	Chlorofluorocarbons
CP	Country programme
ExCom	Executive Committee of the Multilateral Fund
GEF	Global Environment Facility
HBFCs	Hydrobromofluorocarbons
HCFCs	Hydrochlorofluorocarbons
HQ	Headquarters
IOM	Inter-office memorandum
IS	Institutional strengthening
MLF	Multilateral Fund
MOD	Miscellaneous obligation document
MP	Montreal Protocol
NGO	Non-governmental organization
NIP	National implementation plan
NOU	National ozone unit
NPP	National phase-out plan
ODS	Ozone-depleting substance
ODP	Ozone-depleting potential
OU	Ozone unit
PAD	Project allotment document
POPs	Persistent organic pollutants
R&D	Research and development
RMP	Refrigeration management plan
R&R&R	Recovery, recycling, reclamation
TOR	Terms of reference
TPMP	Terminal phase-out management plan
UN	United Nations
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organization

PART ONE

MONTREAL PROTOCOL ON SUBSTANCES THAT DEPLETE THE OZONE LAYER

INTRODUCTION

1. The Montreal Protocol and the Multilateral Fund for the Implementation of the Montreal Protocol

In the early 1970s, the scientists Paul Crutzen, Mario Molina and Sherwood Rowland established a linkage between the breaking apart of chlorofluorocarbons (CFCs) in the stratosphere and the destruction of the ozone layer. Of all the ozone-depleting substances, CFCs are the most extensively used by industry, finding applications in refrigeration, air conditioning, solvents, aerosols, foam blowing agents and sterilants. Hydrochlorofluorocarbons (HCFCs) are used to replace CFCs in refrigeration, air conditioning and foam blowing. Other ozone-depleting substances (ODSs) include carbon tetrachloride, a solvent used in the electronics and chemical industries; methyl chloroform, also a solvent used for cleaning metal parts and circuit boards; halons and hydrobromofluorocarbons (HBFCs), used in firefighting agents; and methylbromide, used in agriculture. The Montreal Protocol initially provided for the phasing out of CFCs, and subsequent amendments expanded its scope to include a total of 96 ozone-depleting chemicals.

The Montreal Protocol on Substances that Deplete the Ozone Layer, an international chemical management treaty, is an impressive example of a multilateral initiative. Recognizing the gravity of the threat to the ozone layer, governments and institutions are collaborating in a common global interest. The international consensus regarding the urgent necessity of preserving the ozone layer has been reflected in the establishment of a Multilateral Fund for the Implementation of the Montreal Protocol (MLF) that provides support for projects to eliminate ODSs. Its objective is to provide financial assistance to projects that would help Article 5 countries comply with their obligations under the Protocol to phase-out ODS production and use. The Fund focuses only on costs essential to the elimination of the use and production of ODSs and it funds only the additional or "incremental" costs incurred in converting to non-ODS technologies.

The Montreal Protocol and the MLF embody a simple but highly effective administrative structure. The Parties to the Protocol meet annually to receive scientific reports, set policy, adjust ODS phase-out targets when relevant, elect officers and committee members, and monitor the activities of the Fund. An Executive Committee consisting of representatives of seven Parties from developed (non-Article 5) countries and seven from developing (Article 5) countries oversees the operations of the MLF, sets policies, produces plans and budgets, allocates resources among implementing agencies and approves projects. The Fund Secretariat provides technical and administrative assistance as well as monitoring and evaluation. The work that the MLF finances in recipient

countries is implemented by the four implementing agencies (UNDP, UNIDO, UNEP and the World Bank).

1.1. Key factors

Awareness-raising

Mobilizing political support for adopting the ambitious goals of the Montreal Protocol depended on raising the general awareness of the problem both within government and among the general public.

Capacity-building

At an early stage in the implementation of the Montreal Protocol, it was realized that capacity-building and institutional strengthening were necessary if both partner governments and private enterprises were to be effective in ODS elimination.
Capacity-building allows governments to implement:

- Permits for production, import or export of ODSs
- Bans or controls on use of ODSs
- Certification of technicians qualified to use or recycle ODSs
- Economic incentives, taxes and fees to encourage reductions in ODSs
- Preferences for procurement of ODS-free products, especially by government agencies and the military
- Mobilization of industry through workshops, networking, working groups, sectoral associations and company pledges
- Campaigns to raise public awareness through advertising and other promotional campaigns
- Introduction of labelling requirements empowering consumers to make appropriate choices
- Promotion of new standards to limit the use of ODSs
- Revisions of health and safety regulations
- Creation of "banks" of controlled substances from which industry could draw its quotas.

A firm grounding in science

The Parties to the Protocol receive reports from its Scientific, Environmental Effects, and Technology and Economic Assessment Panels. These bodies have been established to consider the latest state of ozone science and technology so that the Parties' decisions can be properly informed. This is in keeping with the original mandate of the Protocol, which was always to keep abreast of scientific knowledge as well as economic issues pertaining to ODSs. At its core, the Montreal Protocol remains a science-based initiative for framing policy.

2. Roles of the governments

It is the governments that have ratified the Protocol and they are responsible for its implementation.

The governments must:

- Coordinate country activities for the phase-out.
- Consult with industrial and other interested organizations on the steps to be taken for the phase-out.
- Prepare a country programme for setting out a strategy and plan of action.
- Coordinate the financial support received from the Multilateral Fund and the technical support from the implementing agencies/bilateral agencies.
- Organize awareness and training programmes for industry and the public.
- Create a national system for monitoring and reporting on national consumption of ODSs.
- Provide special reporting on regulatory, administrative and supportive action, to be submitted by the national ozone unit to the UNEP Ozone Secretariat and the Multilateral Fund Secretariat (reporting formats and instructions are attached as Annexes 1 and 2).
- Finally, establish a national committee, which may consist of the representatives of the relevant ministries of the government (agriculture, defence, environment, finance, industry, etc.), industrial organizations, technical experts on alternatives to ODSs and NGOs.

Annex 3 contains a list of the responsible government ministries for the countries in which projects are currently being implemented by UNIDO.

2.1. Legislative measures

The recipient country, through its national ozone unit, is responsible for the design and implementation of laws to facilitate ODS phase-out, including financial measures. A number of regulations have been recommended by the Meeting of the Parties and made mandatory through the Amendment to the Montreal Protocol Adopted by the Ninth Meeting of the Parties (Montreal Amendment):

- The licensing system for import and export of new, used, recycled and reclaimed ODSs, to be adopted before 2005. The licensing system should cover at a minimum: the import, export and production of all ODSs in bulk, the import of equipment using ODSs, and a ban on trade with non-Parties.
- The illegal production, import and export of ODSs as an offence punishable under national laws, with proper penalties.
- The capture by the licensing system of essential information to track transboundary shipments of ODSs and support accurate national reporting on compliance.
- Control of supply of ODSs through a quota system (gradually limiting the quantities of ODSs imported/produced).
- Control of end use (prohibition of ODS use by certain dates in specified applications).
- Sales ban on specific ODSs, control of imported products/equipment which contain, are made with or rely on ODSs.
- Control of demand to avoid creating a market for illegal substances. This can be done through prohibition of the installation of new ODS equipment for certain applications on short notice; provision for economic incentives and disincentives

(lowering taxation on imports of ODS substitutes and equipment working with ODS substitutes, or fines in the case of violations, etc.), control of emissions of ODS refrigerants, and enforcement.

2.2. Strengthening of the customs authorities

A harmonized customs coding system for all commodities has been introduced by the World Customs Organization. Most countries throughout the world have adopted this system. The World Customs Organization has assigned specific codes to the ODSs, and these can be obtained from the Ozone Secretariat.

The following measures will be useful for customs authorities:

- To develop and rigorously apply a licensing system for import, export and transit.
- To furnish customs offices with sufficient authority for intelligence, investigation and detection, to equip them and to support them by means of relevant training programmes (These tasks are mostly carried out through the refrigerant management plan under the Multilateral Fund and under supervision of the country's national ozone unit).
- To establish registers of traders in ODSs to facilitate the work of enforcement agencies.
- To establish online communication with the ozone unit.

CHAPTER I

1. Rationale for institutional strengthening

The need to provide financial support for institutional strengthening in Article 5 countries is underscored by the following factors:

- The relative lack of awareness of the phenomenon of stratospheric ozone depletion and its potential impacts, coupled with the complexity and fast changing nature of technical and scientific issues involved in protecting the ozone layer in general, and in using ODS-substitute technology in particular.
- The existence of weak institutional infrastructure for dealing with issues involved in the phase-out of the ODSs, such as transfer of technologies.
- The existence of competing demands on limited resources and of budgetary constraints that could affect the priority in national programmes of action needed to expedite the implementation of the Montreal Protocol in Article 5 countries.

2. Terms of reference for institutional strengthening

The recommended terms of reference for the strengthening of an organization are as follows:

- To monitor progress of the implementation of actions within the country programme for the phase-out of ODSs and report to the Ozone Secretariat and Multilateral Fund Secretariat as necessary.
- To collect and process data and information.
- To disseminate information on the ODS phase-out process to local end-users and relevant organizations.
- To facilitate the access of local entrepreneurs to relevant experts, specialists and consultants.
- To facilitate actions to promote the phase-out of ODSs.
- To promote cooperation between industry and government bodies for the achievement of the objectives of the country programme.
- To exchange relevant information with similar offices in other countries.
- To serve as focal point for the Fund Secretariat and the implementing agencies as well as other cooperating bilateral and multilateral agencies.

- To participate in the relevant meetings on ozone issues.
- To submit annual accounts in respect of expenditure on institutional support activities.

3. Background to capacity-building under the Montreal Protocol

Developing countries that are Parties to the Montreal Protocol (Article 5 countries) are eligible for financial and technical support through the Multilateral Fund in order to assist them fulfil their obligations under the Protocol.

The preparation of a country programme is generally the first step towards obtaining assistance from the Multilateral Fund. The country programme embodies the commitment by the government to take appropriate actions to ensure compliance with the Protocol. The country programme will initially have been established in close cooperation between the ministry of the environment of a given country and an implementing agency of the Multilateral Fund. The country programme contains an analysis of the current situation with regard to the production and consumption of ODSs, together with a strategy statement and plan of action to be implemented by the government. The approval of the country programme is a precondition for financial assistance from the Fund for investment projects and institutional-strengthening projects. The need to strengthen institutional capacity in Article 5 countries has been recognized by the Executive Committee as a critical factor in achieving the successful phase-out of ODSs in these countries.

4. Role of national ozone officers in external forums with relevance to the Montreal Protocol programme in their respective countries

National ozone officers also operate at the regional and international levels through their participation in the meetings of the Parties to the Protocol and of the relevant Regional Ozone Officers Network.

4.1. International and regional cooperation of national ozone officers

UNEP organizes a number of regional networks of ozone officers to:

- Provide a regular forum for efficient exchange of information, ideas and experiences among ODS officers.
- Encourage and facilitate the provision of assistance by experienced ozone officers to their newly appointed colleagues.
- Improve access to available technical, scientific and policy-related information required by national ozone officers.
- Provide an important opportunity to inform ODS officers of decisions of the Executive Committee and the Meetings of the Parties and assist with their implementation.
- Promote sharing of information and awareness-raising materials developed by network member countries.

- Review progress on implementation of investment and non-investment projects.
- Facilitate feedback to the Multilateral Fund Secretariat, Ozone Secretariat and implementing agencies on progress made by member countries towards complying with the Montreal Protocol, difficulties encountered and the need for further support and assistance.
- Assist with collecting and verifying data for reporting to the Ozone Secretariat and the Multilateral Fund Secretariat.
- Initiate regional and joint activities to promote awareness-raising, information exchange and other enabling actions to facilitate compliance.

4.2. Country-to-country assistance of ozone officers

In the framework of the network, ozone officers of those countries having achieved an advanced stage in ODS elimination and well-established institutional capacity (an ozone unit) are encouraged to provide country-to-country assistance to new ozone officers of countries that are less advanced in ODS phase-out. The assistance could be provided in the form of training of ozone officers and the relevant national consultants, not only for the institutional set-up, but also for the projects being successfully implemented.

Site visits for the implementation of ongoing projects are very useful and practical.

4.3. Meetings of the Parties

The Meeting of the Parties to the Montreal Protocol is in effect the agreement's governing body. The Meeting takes place annually and is open to any Party that has ratified the Protocol. In practice, the majority attend regularly (developing countries' delegations are given financial assistance to do so).

The Meeting of the Parties:

- Receives and considers reports from the Protocol's Scientific, Environmental Effects, and Technology and Economic Assessment Panels, set up to consider the latest state of ozone sciences and technology, so that the Parties' decisions can be properly informed.
- Agrees on any amendment and adjustment to the Protocol's text, including adjustments to the phase-out schedules for ODSs, and on new components of the Protocol.
- Adopts decisions that give effect to all the functions listed above, implement the Protocol's compliance system, clarify the meaning of terms in the text of the Protocol, encourage parties to carry out various actions, set up review groups and commission reports.

5. Support for institutional strengthening by the Multilateral Fund—capacity-building

5.1. Objectives

Support for institutional strengthening in an Article 5 Party might, in exceptional cases, be an essential element for achieving the objectives of the Fund and of the Montreal

Protocol. Therefore, limited funding or assistance should be provided by the Fund for institutional strengthening. The level of such funding should be decided upon by the Executive Committee on the basis of a recommendation from the Secretariat, taking into consideration the amount of controlled substances consumed in that country and the linkage between the institutional-strengthening and specific implementation projects. Such support may not be given to more than one institution in a country, since it mainly targets the strengthening of a coordinating machinery for ODS phase-out activities. It is expected that the interested Party (recipient country) should cover the provision of infrastructure, such as rental of office space, furniture and personnel.

The main objective of institutional strengthening is to provide necessary resources to an eligible country to enable it to strengthen a mechanism within the country in order to facilitate expeditious implementation of projects for speedy and effective phase-out of the controlled substances, as well as to ensure effective liaison between the country on the one hand, and the Executive Committee, the Fund Secretariat, and the implementing agencies on the other. The 35th Meeting of the Executive Committee decided that all institutional-strengthening projects and renewals should be approved at a level 30 per cent higher than the historically agreed level. This will help countries ensure the new strategic framework agreed on, and provide increased support for critical areas such as public awareness. The level of funding of institutional strengthening noted above is to prevail until 2005. This proposal would also include a clear commitment that this level of institutional strengthening or a level close to it should prevail for all Article 5 Parties until at least 2010, even if they should complete phase-out before that time. It should also be noted that UNEP is provided with $US 200,000/year to support public awareness and countries will receive enhanced direct support on policy and substantive issues through UNEP's new Compliance Assistance Programme. Requests from Article 5 countries for support of institutional strengthening should be decided on in view of their individual merits (on a case-by-case basis). In considering the requests on a case-by-case basis, the peculiar circumstances influencing ODS phase-out in the country should be considered, together with the recommended funding level.

Institutional strengthening in Article 5 countries is designed to provide the capacity for:

- Enhanced ability to provide a suitable climate in the country for the expeditious phase-out of ODSs.
- Increased coordination, promotion and monitoring of the country's activities aimed at phasing out ODSs.
- Improved information systems for collection, analysis and dissemination relating to issues involved in protection of the ozone layer.
- Enhanced facilitation of the exchange of information with other Parties and organs established by the Protocol.
- Improved liaison between the country and the relevant organs under the Protocol.
- Improved reporting systems for national data on ODS consumption.

5.2. Mandate and responsibilities (defined by the 30th Meeting of the Executive Committee)

The ozone unit established/supported under the aegis of the support for institutional strengthening will be the focal point in the country for all matters concerning the Montreal Protocol. Each Article 5 country is urged to ensure that:

(a) Its national ozone unit is given a clear mandate and responsibility to carry out the day-to-day work to prepare, coordinate and, where relevant, implement the government's activities to meet its commitments under the Montreal Protocol; this also requires access to decision-makers and enforcement agencies;

(b) The national ozone unit's position, capacities, and continuity of officers, resources and lines of command within the authority in charge of ozone issues are such that the unit can carry out its task satisfactorily;

(c) A specified high-level officer or a post within the authority is given overall responsibility for supervising the work of the unit and ensuring that action taken is adequate to meet commitments under the Protocol;

(d) Necessary support structures, such as steering committees or advisory groups, are established, involving other appropriate authorities, the private sector and non-governmental organizations, etc.;

(e) Annual work plans for the national ozone unit are prepared and integrated into the authorities' internal planning processes;

(f) A reliable system is established to collect and monitor data on imports, exports and production of ozone-depleting substances; and

(g) Measures taken and problems encountered are reported to the Multilateral Fund Secretariat and/or the implementing agency in charge of the institutional-strengthening project when required by the Executive Committee.

5.3. Activities and work plan of the national ozone units

Ozone units are responsible for the following activities carried out under institutional-strengthening support projects:

(a) Coordination with various government offices to ensure that investment and environmental protection policies adopted are in line with and supportive of the government's efforts to phase-out the use of ODSs in line with targets set by the Multilateral Fund;

(b) Creation of and increase in national awareness regarding dangers of ODSs;

(c) Dissemination of information on new technologies and ODS substitutes;

(d) Collection and processing of information on ODS consumption;

(e) Promotion and coordination of phase-out actions identified in the country programme;

(f) Monitoring and evaluation of progress in implementation of ODS phase-out activities;

(g) Organization, implementation and monitoring of training sessions;

(h) Assistance to policymakers on ozone-related issues;

(i) Implementation of the country's refrigerant management plan, national phase-out plan, sectoral phase-out plan and terminal phase-out management plan;

(j) Liaison between the government and responsible international organizations, such as the Multilateral Fund Secretariat, the Ozone Secretariat of UNEP and implementing agencies;

(k) Exchange of information with other Parties;

(l) Annual reporting of consumption data to the Ozone Secretariat of UNEP, as per the reporting requirements set forth in article 7 of the Protocol;

(m) Reporting of progress to the Multilateral Fund Secretariat on implementation of the country programme and to the implementing agency on the implementation of the institutional-strengthening support project;

(n) Provision of advice to the government on restrictions on imports or other methods for taxing ODSs and equipment containing them;

(o) Development and regular updating of a register of ODS importers and consumers.

5.4. Market control

The government of the recipient country will implement a set of administrative instruments, economic instruments and additional measures to support ODS phase-out. These instruments and measures are described in detail in the action plan contained in the ODS country programme.

The following are some of the instruments and measures contemplated:

- Sector-specific bans on ODS consumption and bans on the import of selected ODS-based goods corresponding to the domestic sector-specific bans.
- Introduction of ODS production licences.
- Bans on re-export of ODSs.
- Bans on import of ODSs.
- Improvement of customs sub-classifications and ODS import licences.
- Non-compliance measures.
- Economic support for ODS phase-out activities.
- Monitoring arrangements.
- Introduction of an accreditation system (certificates) for refrigeration servicing technicians.
- Collection of information that will become available from customs offices in relation to the import of ODSs and products containing ODSs.
- Independent and regular inspections and assessments in order to confirm reports, and review and establish financial and technical support needs for those sectors, industries and enterprises affected by ODS phase-out.

CHAPTER II

1. Funding arrangement by the Multilateral Fund and procedure for obtaining funds

In the early phase of implementation of the Montreal Protocol, the initial support to ozone units through institutional strengthening was for a duration of three years. The 19th Meeting of the Executive Committee decided that any subsequent renewal of support for institutional strengthening would be for two years. It would be conditional upon a progress report and an articulated plan of future actions. It should be recalled that the level of funding is to be decided upon by the Executive Committee on the basis of a recommendation from the Secretariat, taking into consideration the amount of controlled substances consumed in the country concerned and the linkage between the institutional-strengthening and specific implementation projects. The 35th Meeting of the Executive Committee decided that all institutional-strengthening projects and renewals should be approved at a level 30 per cent higher than the historically agreed level. This will help countries implement the new strategic framework agreed upon, and will provide increased support for critical areas such as public awareness.

The ozone unit is in most cases part of the country's ministry of the environment and is the only authority to receive financial assistance through the institutional framework under the Montreal Protocol.

2. Requesting funds from the MLF

The Multilateral Fund has set a lead time of six weeks prior to expected approval for submission of documentation to the Multilateral Fund Secretariat for its review and onward transmission to the Executive Committee.

The documentation for extension of an institutional strengthening project consists of the following:

Type of document	**Prepared by:**
Terminal report on the previous phase (format given in annex 4)	UNIDO: items 1-10; Ozone unit: 11-25; Review by UNIDO PM
Project concept for the renewal phase (format given in annex 5) of action plan	Ozone unit; Review by UNIDO in light
Plan of action for the extension/renewal phase (format given in annex 6)	Ozone unit; Review by UNIDO in light of action plan of previous phase and reports received Milestones for the renewal phase UNIDO
Progress report on the implementation of the country programme (relating to the preceding year—this report is due for submission by the country's ozone unit to the Ozone Secretariat by 30 September (30 June on a voluntary basis) and to the Multilateral Fund by 1 May each year.) (formats and instructions given in annexes 1 and 2)	Ozone unit
- Executive summary, - Summary of the terminal report, - Summary of the action plan	UNIDO
Covering letter to the Multilateral Fund giving the financial status as at the date of submission of the documentation/request for renewal of the institutional-strengthening support	UNIDO

The detailed plan of action and the project concept reflect in a general descriptive manner the plan of action. (format given in annex 6).

The terminal report on the previous phase is compiled jointly by the ozone unit (for details on activities carried out by the ozone unit) and by UNIDO (covering the financial part of reporting). (format given in annex 4).

The progress report on the implementation of the country programme is provided on a regular annual basis by the ozone unit to the UNEP Ozone Secretariat and the MLF, with copies to UNIDO (formats and instructions in annexes 1 and 2).

Milestones, summaries and the covering letter are in accordance with the sample formats (in annex 10).

Following full signature of the main documents by the government authorities and UNIDO, the full set of documentation is submitted by the implementing agency to the Multilateral Fund Secretariat for review and onward transmission to the Executive

Committee. The institutional-strengthening support project is approved on the basis of these documents.

The renewal phase of the institutional-strengthening support to ozone units needs to be included in the annual business plan of the implementing agency (dealt with by the first Executive Committee meeting of the year), or in the business plan amendments (submitted to the second and third Executive Committee meetings of the year).

UNIDO must submit a business plan to the Secretariat of the Multilateral Fund by 30 April. Therefore, ozone officers are kindly requested to provide indicative consumption of ODSs for the previous year by 15 April at the latest.

CHAPTER III

Practical implementation of institutional-strengthening projects, step by step

1. Initiation of project implementation

1.1. The project document

The administrations of the Multilateral Fund and of UNIDO require a formal document for the transparent dissemination of funds (UNIDO uses the term "project document"). The individual project agreement/project document is based on the standard format approved by the 33rd Executive Committee meeting following earlier consultations with the implementing agencies and their legal services. (A sample is attached as a separate document.)

(Note:
1. This project document does not need to be submitted to the Multilateral Fund and the Executive Committee for approval; it is an agreement directly between the governments/ ozone units and the implementing agency.

2. The project document does not need to be cleared by UNIDO's legal service, given their prior involvement when the 33rd Meeting of the Executive Committee established a basic standard document. In March 2001, UNIDO's legal service advised that the project document should be submitted for review by the legal service only when there are alterations to the clauses. However, following signature of the project document by the recipient country and UNIDO, a copy thereof is given to the Office of Legal Affairs for their records.

3. Issuance of the initial project allotment document (PAD) is requested on the basis of the Executive Committee's approval (The relevant pages of the Executive Committee's report serve as reference documents).

1.2. Individual steps in project document preparation

Following the approval of a new support phase, a legal working document (project agreement) is prepared by UNIDO, based on the approved standard format.

A number of project document items which are country-specific need to be adjusted in the standard format, to reflect the plan of action (earlier submitted to the Multilateral Fund's Executive Committee for approval of the institutional-strengthening support project).

In the case of new institutional-strengthening support, i.e., an initial support phase, the following information must first be obtained:

- Institutional set-up of the ozone unit and its location
- Official designation of the ozone unit manager/ozone officer
- Government contribution in kind (relating to office rental, furniture and basic salaries)
- Preliminary breakdown of funds, when approved (e.g., an estimate for incentive payments, local travel, equipment, telephone costs, etc. is given in the table below):

Project components and budget allocation

	Year 1*	Year 2*	Total*
1. PROJECT PERSONNEL COMPONENT			
Personnel incentives (BL 17-50):			
Coordinator and technical advisers			
Coordinator/manager			
National experts			
Support staff (BL 13 or 21)			
Subtotal			
2. INFORMATION/AWARENESS PROGRAMME			
Workshops, including printing costs and workshop costs (BL 21)			
Subtotal			
3. EQUIPMENT COMPONENT			
Expendable equipment (office equipment, supplies, software, including operation and maintenance of office equipment) (BL 21)			
Subtotal			
4. MISCELLANEOUS COMPONENT			
Sundries, communication costs, equipment maintenance, local travel, etc. (BL 21 and 51)			
Subtotal			
5. CONTINGENCIES			
Contingencies (BL 71)			
Subtotal			
GRAND TOTAL			

(*) To be determined on a case-by-case (country-by-country) basis.

- The work programme (in case the implementation modality follows the sub-contract pattern), which is an integral part of the terms of reference.

The document spells out:

- The general activities prescribed by the Executive Committee (please refer to the sections on "mandate and responsibilities", "activities and work plan of the national ozone units" and "market control").
- The specific activities identified by the country, to be implemented through the next support phase (presented in the action plan and approved by the Executive Committee).
- The proposed financial working modalities (i.e., disbursement of funds through the local UNDP offices, subcontracting arrangement between UNIDO and the ozone unit, incentive payments to ozone unit personnel through direct recruitment by UNIDO under national expert/consultant contracts and support personnel contracts).
- The detailed budget.
- Reporting requirements.
- Basic job descriptions of the ozone unit staff.

The project document/agreement is subsequently sent to the ozone officer to arrange for its signature by the environmental authorities (represented by the ministry of the environment, an environment directorate or the ozone unit directly).

2. The elements funded by the Multilateral Fund

Funds for institutional-strengthening support are granted for the following three elements:

- Office equipment to provide basic infrastructure for information processing and dissemination, as well as to improve ozone units' communication facilities;
- Operational costs, for such purposes as post and telecommunications, stationery, maintenance of equipment and awareness-raising;
- Personnel costs: incentive payments to ozone unit staff, paid at the rate of 100-200 per cent of the basic national salary level attached to the position. (See: UNEP/OzL.Pro/ExCom/7/20)

While originally the use of funds was predetermined by the Multilateral Fund's Executive Committee (7th Meeting of the Executive Committee), the 24th Meeting of the Executive Committee decided "that some flexibility should be shown in how countries used the funds approved under projects for renewal of institutional strengthening and that, while slight variations in funds transferred between budget lines could be accepted, overall accountability was essential". (See.: UNEP/OzL.Pro/ExCom/24/47)

3. Practical management of funds by UNIDO

While the first two elements above were not contested by UNIDO's Administration, the incentive payments, over the years, were repeatedly questioned, particularly due to the fact that the payments are made to government staff, contrary to UNIDO's rules

and regulations. The word "incentives" was introduced by the Fund Secretariat in order to avoid the use of the word "salaries" because the United Nations does not pay salaries to government employees.

The position of the Multilateral Fund and its Executive Committee in this regard is set forth below.

It was recognized by the Multilateral Fund's Executive Committee that ozone unit staff are obliged to work in a broad context, thus providing a national institutional mechanism for coordinating their countries' national and international efforts for the protection of the ozone layer. This entails:

- Increased requirements in respect of reporting to the recipient government, the Ozone Secretariat, the Multilateral Fund and the implementing agency/agencies.
- Design, establishment and enforcement and updating of policy and regulatory measures.
- Design of a public awareness strategy and implementation thereof through the media, workshops with stakeholders, information sessions at educational institutions, commemoration of International Ozone Day, etc., meetings with customs officials and dissemination of information on alternatives to ozone-depleting substances.
- Co-ordination of all activities for the phase-out of ODSs.
- Facilitation of the work of the implementing agencies in investment projects, sector phase-out projects, terminal phase-out management plans, etc.
- Identification of companies requiring conversion to ozone-friendly substances.
- Collection and monitoring of the ODS data (consumption, import and export).
- Maintaining of effective liaison between the country and the Executive Committee, the MLF Secretariat and the implementing agencies.
- Participation in Montreal Protocol-related meetings and meetings of the regional network of ozone officers.
- Co-signing by the ozone officer of the working agreement between the implementing agency and the recipient enterprise.
- Close follow-up on the destruction of old ODS-based equipment.
- Promotion of synergism among multilateral environmental agreements.
- Active participation in preparation of project proposals.
- Travel in the country related to Montreal Protocol activities.
- Organization of and participation in workshops and round tables.
- Facilitation of customs clearance for the equipment supplied under investment projects.
- Participation in project completion reports.
- Preparation of public awareness materials.
- Preparation of job descriptions for national short-term consultants.
- Preparation of terms of reference for different activities.
- Approval of the list of potential bidders for investment projects.

- Review of the technical feasibility of offers.
- Approval of the best economically and technically feasible offer.
- Monitoring of the conversion of projects.

4. Choice of implementation modalities

At the time of signature of a project document in which two implementation modalities for dissemination of funds are presented, the ozone unit manager must indicate in writing which is the preferred option.

4.1. Incentives for ozone unit staff

Professional staff of the ozone unit (budget line 17 and 17-50)

In April 1997, the issue of incentive payments was taken up by the external auditors, who requested a specific legal arrangement for such payments, i.e., that they should take place under subcontract. However, in a number of countries it subsequently turned out that, for administrative reasons, this arrangement was not feasible, and a former Controller of UNIDO therefore agreed in June 1999 that incentive payments be made under national expert contracts.

The professional staff of an ozone unit is recruited under budget line 17-xx—national experts and/or 17-50—short-term consultants. For regular staff, such as the ozone officer, who acts also as ozone unit manager, the basic job description is part of the action plan document. For short-term consultants, specific job descriptions are prepared at the request of the ozone unit manager, following identification of specific requirements. Payment of the incentives is effected through the local UNDP office in line with UNIDO's administrative procedures (miscellaneous obligation document—MOD).

To start the recruitment procedure, the ozone unit must provide a list of its staff by name and function and propose monthly incentive entitlements within the approved financial framework.

One major problem repeatedly encountered in the implementation of the incentive components is timely contract renewal. For a contract to be renewed, annual activity reports need to be submitted to UNIDO. These, however, do not always arrive in good time. While payment of incentives is intended by the Multilateral Fund to take place on a regular, continuous monthly basis within the assigned lifetime of the project (the period of two years), UNIDO's financial administration does not allow retroactive contract renewal. This may contribute to a delay in the implementation of the project, entailing an extension of the duration of the project beyond two years. It also means a forced contract interruption of incentive payments, while, at the same time, the day-to-day work of the ozone unit—being a government institution and covering a wide range of activities under the country's Montreal Protocol country programme—continues uninterrupted.

Administrative support in the ozone unit (budget line 13)

The administrative staff of the ozone unit are recruited under budget line 13. UNIDO's rules concerning recruitment of General Service staff require a break in service. Ozone

units request incentive payments to their GS staff under an annual contract. Considering that, also in the case of administrative support in the ozone units, staff are basically hired by governments, such a break in service is not easy to justify to the government authorities. Therefore, a waiver of Headquarters-applied contract interruptions needs to be requested and justified to UNIDO's Administration.

MOD arrangement (budget lines 13 and 17)

Funds are channelled through the local UNDP office for all components relating to operational costs or for the incentive component only, whereby ozone unit staff would be recruited directly by UNIDO (budget lines 13 and 17).

4.2. Reporting by the ozone unit to UNIDO

An activity report must be submitted by the ozone unit manager to UNIDO at the end of the one-year contract, whereas the reports of other professional staff of the ozone unit are channelled through the ozone unit manager.

Where half-yearly reporting under subcontract is required, the relevant activity reports will be accepted and will replace individual reporting pertaining to national expert contracts. The purpose of this procedure is to avoid duplication of work, bearing in mind the extensive workload (see point 3, above, on the position of the Multilateral Fund's Executive Committee).

A brief report on the work performed is also requested from the administrative support staff, in order to ensure transparency in the use of funds. Major reporting to be provided by the ozone officer to the Ozone Secretariat and to the Multilateral Fund Secretariat is described in detail in the UNEP Handbook on Data Reporting under the Montreal Protocol, which includes guidance on how to establish the reports. Updates to new data reporting requirements are provided by the Multilateral Fund Secretariat, when required. The reporting mostly concerns data on ODS use and elimination.

Note: The Handbook on Data Reporting under the Montreal Protocol has been published by UNEP (ISBN 92-807-1735-9), and can be used as a resource in addition to this Manual.

4.3. Subcontracting arrangements (budget line 21)

Funds can be made available for all or part of the components through a subcontract between the ozone unit and UNIDO, following prior choice of the ozone officer. The components that may be covered are: incentive payments, equipment, awareness activities and operational costs.

Depending on the financial size of the institutional-strengthening project, the duration of the subcontract may be six months plus half-yearly extensions or the lifetime of the project, i.e., two years. (The lifetime duration is now increasingly being applied.)

The terms of reference

In particular, the financial aspects of the terms of reference must be cleared by the ozone unit manager prior to requesting the subcontract, i.e., funds required for the individual activities, such as equipment, incentives, awareness activities, operational costs (stationery, telephone costs), and local travel.

A detailed annual work programme should be prepared in conformity with the funding components requested (e.g., awareness activities, ozone unit staff incentives, hiring of short-term staff to assist the ozone unit) as an integral part of the terms of reference.

Disbursement of funds to the ozone unit

Funds are deposited in half-yearly installments, following submission of half-yearly (signed) financial and activity reports and clearance of them by the project manager. To enable payment of an installment, the ozone unit must submit an original invoice specifying the contract article and item to which the payment requested relates. Contracts indicate item-by-item the reporting and payment schedule.

Waiver of bidding

If the ozone unit chooses to obtain the funds through a subcontract with UNIDO, for which the ozone unit should preferably establish its own bank account in order to ensure transparency, a waiver of bidding must be formally requested, stressing that the institutional-strengthening support is available exclusively to the ozone protection unit, who are the direct counterparts (beneficiaries) in the institutional-strengthening projects, as well as in any other Montreal Protocol-related activities. (Please refer to chapter II, section 1.) The request for a subcontract, prepared by the project manager, must include a request for a waiver of bidding and an explanation as to why the ozone unit is exclusively entitled to receive the funds (sample IOM attached as annex 7).

Reporting under subcontract and checking/clearance of reports

In line with Executive Committee half-yearly reports must be submitted by the ozone unit manager to UNIDO, to serve as feedback on activities undertaken by the ozone unit and provide a transparent picture of funds used. When reviewing the reports, particular note is taken of two items, as the Multilateral Fund Secretariat accords special importance to them: *(a)* public awareness activities, and *(b)* legislative measures. In the latter regard, the new report may be counterchecked vis-à-vis an earlier one to follow up on the status of legislative measures under preparation and initiation.

The financial reports need to be supported by documentary evidence (i.e. bills, copies of travel tickets, etc.) for expenses claimed (formats attached in annex 8). In particular, items of expenditure need to be checked vis-à-vis the non-eligible items set out by the Executive Committee and, in the case of violation, explanation and/or rectification should be requested from the ozone unit.

Half-yearly reports should not only be checked for their adequacy at a given time, but they should also be counterchecked vis-à-vis earlier reports to verify "incremental" progress of the project made during the reporting period, as per the original approved action plan.

Queries regarding financial and activity reports should be brought to the attention of the Contracts Service, with the request that they be conveyed to the ozone unit manager.

Special attention should be paid to the documentary evidence (i.e. bills relating to expenditures) to ensure that the financial rules of the Multilateral Fund for institutional-strengthening projects are respected [see chapter III, section 2]).

Annual work programme

Ozone units are expected to provide an updated annual work programme.

Equipment purchases as part of the subcontract

Regarding equipment to be purchased, the ozone unit must provide at least three offers and a preliminary evaluation, indicating also their preferred choice and a justification. Clearance will be provided by the project manager through the Contracts Service.

5. Operational costs (MOD arrangement: budget line 51)

The operational costs of the ozone unit, as per the Multilateral Fund's grant, cover stationery and office supplies, and international communications.

6. Travel (MOD arrangement: BL 15)

6.1. Funds for local travel

These are essential due to the countrywide coverage by the ozone unit of the country's Montreal Protocol activities. Ozone unit staff are involved in the identification of companies requiring conversion to ozone-friendly substances, in conjunction with data collection, training and awareness activities, monitoring of conversion projects and destruction of equipment using ODSs. An estimate of requirements needs to be obtained from the ozone officer.

(Note: To provide national short-term consultants with travel funds, an estimate and an official request need to be submitted to UNIDO. The amount agreed upon can be included in the national expert contract, in addition to the fees.)

6.2. International travel

International travel by ozone unit staff is however not eligible for financing under institutional-strengthening projects. In the past, if an urgent request for financing of international travel was received for participation in a session of the Meeting of the Parties and/or in an Executive Committee meeting, sound justification and confirmation that UNEP financing would not be granted had to be provided by the ozone unit.

(Note: For international travel, UNIDO's prior agreement must be obtained. UNIDO will require a cost estimate for the flight costs, whereas DSA and terminal expenses will be calculated based on the valid UN rate.

If funds are available through a subcontract against the ozone unit's account, the ozone unit will be requested to use those funds and provide a copy of the flight ticket as part of the half-yearly reporting.

If funds are made available separately under budget line 51 – counterpart travel, then the appropriate administrative arrangements, i.e. travel request and MOD to the local UNDP office, will be issued by the project manager.)

7. Equipment purchase (MOD arrangement: BL 45)

7.1. Eligible equipment

The 7th Meeting of the Executive Committee granted funds for the following types of equipment, considered essential for installing or upgrading the office facilities of ozone units:

- Photocopier
- PC with disk drive, monitor, printer and necessary software
- Modem
- Typewriter
- Fax machine

Office furniture, as well as a project car, are not eligible items. These requirements should be covered by the recipient country's contribution in kind to the institutional-strengthening project.

Generally, the ozone officer is given a free hand in the purchase of equipment, in line with the above-mentioned Executive Committee decision. He/she should however make available to UNIDO at least three offers, indicating his/her preferred choice and the reasons for it.

7.2. Obsolete equipment

In the case of renewal of obsolete equipment, UNIDO needs to be informed, and its agreement needs to be requested for scrapping the old equipment.

7.3. Exceptional equipment

In the case of urgent equipment requirements relating rather to the technical/conversion part of the Montreal Protocol (namely, RMPs, TPMPs, including equipment for customs authorities), the ozone officer must provide a sound justification for the request to enable UNIDO to revert to the Multilateral Fund and obtain special permission for the purchase of such equipment within the flexibility recommendation (decision 24/23, in UNEP/OzL.Pro/ExCom/24/47, para. 46).

8. Awareness activities (MOD arrangement: BL 33)

A substantial amount of funding is made available for public awareness activities on depletion of the ozone layer, using budget line 33. The Multilateral Fund's Executive Committee from the outset of the Fund's activities considered awareness of the ozone layer problem to be a crucial factor. The ozone units may, in addition, receive support from UNEP, either monetary under the Compliance Assistance Programme (CAP) or through supply of special ozone layer-related publications produced by UNEP.

The national ozone units design their own country-specific programmes. The awareness needs to cover the following:

- The extent of ozone depletion
- Causes of ozone depletion
- The need to phase-out the ODSs
- The sectors in the country using ODSs
- Alternatives to ODSs in these sectors
- The timetable, according to the Protocol, for adopting the alternatives
- The technical and financial assistance available, and
- The institutions in the country responsible for implementation (so that they can be approached by those in need of assistance)

It has been noted from reports over the years that television, radio and the print media have been widely used for public awareness purposes. Also, visits to universities, technical high schools and even primary schools have been part of the public awareness programme.

Participants in the celebrations of International Ozone Day (16 September) may come from government institutions, industrial chambers and associations or NGOs, or be entrepreneurs.

Technical meetings and workshops with stakeholders and customs authorities, for the purpose of explaining alternatives to ozone-depleting substances, are essential to awareness-raising and subsequent implementation of the Montreal Protocol in a country.

As the years have gone by, the Multilateral Fund has underlined the crucial importance of public awareness, and special reporting on such activities by the individual countries receiving institutional-strengthening support is regularly requested by the Multilateral Fund Secretariat.

(Note: In the case of funds relating to the non-personnel component and disseminated through the local UNDP office, UNIDO requires a special financial report (format in annex 9), since UNDP no longer provides financial reports to the Organization directly.

9. Contingency funds (budget line 71):

A small portion of funds is set aside under BL 71. These funds may be used to cover unforeseen expenses, e.g., higher equipment costs, possibly local travel, and higher costs for public awareness. The utilization of these funds is carefully considered by the ozone unit manager and UNIDO.

CHAPTER IV

Review of support of institutional strengthening by the Executive Committee

The 47th Meeting of the Executive Committee decided:

(a) To note that in the compliance period specific measures had been taken to provide additional and guaranteed institutional support and to refocus the work of the Executive Committee on facilitating compliance;

(b) To agree that the measures already taken constituted an appropriate response to meeting the needs of Article 5 countries in regard to their compliance obligations under the Montreal Protocol up to and including 1 January 2010;

(c) To note that the anticipated actions by Article 5 countries that would be required for them to meet compliance obligations after 2010 gave an indication that funding support for institutional strengthening might need to be continued after 2010;

(d) That possible funding arrangements and levels for institutional-strengthening support beyond 2010 should be examined at the end of 2007.

The 53rd Meeting of the Executive Committee considered a possible funding arrangement for support of institutional strengthening beyond 2010, having in mind the new phase-out schedule related to HCFC adopted at the 19th Meeting of the Parties.

CHAPTER V

1. Reporting under the institutional-strengthening project

1.1. Organizational set-up

When was the project for institutional strengthening approved for the first time? Were there any subsequent extensions?

Staff
Officers in charge:
Name:
Function:
Duties:

Experts/consultants
Name, short CV, nationality, duration of contract and brief terms of reference

1.2. Legislation

Short list of the applicable and relevant laws and decrees (such as: ban on import of equipment, ban on import of substances, licensing system put in place, quotas, introduction of excise taxes) with date and number of the issue of the Official Gazette in which each one appeared.

1.3. Import permits

Import permits from the previous year

Substance	Import permits (MT)
R-12 (CFC-12)	
R-22 (HCFC-22)	
Other (specify)	

Add as many rows as needed.

1.4. Consumption

Consumption = production + imports - exports

Consumption by substance
Historical trend of consumption of CFCs, halons, MeBr, HCFCs and HFCs (by years and tonnes)

Year/MT	ODP	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
R-11 (CFC-11)	1.0						
R-12 (CFC-12)	1.0						
R-113 (CFC-113)	0.8						
Other – specify							
Total CFCs (MT)							
Total CFCs (ODP tonnes)							
Halon 1301	10.0						
Halon 1211	3.0						
Halon 2402	6.0						
Total halons (MT)							
Total halons (ODP tonnes)							
MeBr	0.7						
R-22 (HCFC-22)	0.055						
R-141b (HCFC-141b)	0.11						
Other – specify							
Total HCFCs (MT)							
Total HCFCs (ODP tonnes)							
Grand total (MT)							
Grand total (ODP tonnes)							

Add as many rows and columns as needed

Year/MT	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
R-134a (HFC-134a)							
R-404a (HFC-125-44%, HFC-134a-52%, HFC-143a-4%)							
R-407C (HFC-32-23%, HFC-125-25%, HFC-134a-52%)							
R-410A (HFC-32-50%, HFC-125-50%)							
R-507A (125-50%, 143a-50%)							
FM-200 (HFC-227ea)							
Other – specify							
Total HFCs (MT)							

Add as many rows/columns as needed.

Consumption of ODSs by sectors

Baseline consumption of ODSs (MT)	Aerosols	Foam	Refri-geration (manu-facturing)	Refri-geration (servi-cing)	Solvents	Halons	Fumi-gation (MeBr)	TOTAL (MT)	TOTAL (ODP tonnes)
1986									
1995									
1996									
1997									
1998									
Average (1995-1997)									
Average (1995-1998)									
1999									
2000									
2001									
2002									
2003									
2004									
2005									
2006									
2007									
2008									
2009									
2010									

Production

Production = gross production – amounts destroyed – amounts used as feedstock

2. Compliance

Baseline, current consumption and consumption allowed—compliance

Substance	Baseline (in MT)	Current consumption (in MT)	Consumption allowed (in MT)	Compliance Yes/No
CFCs-Annex A				
Halons				
Carbon tetrachloride				
Methylchloroform				
MeBr				

Training and public awareness activities, workshops and meetings, round tables, presentations, lectures

Other matters

3. Project implementation and reductions of ODSs

Completed projects

List of all projects implemented with the title, amount of ODSs phased out according to the project document and value

	Project title	Project number	ODSs phased out (MT)	Value (USD)
1.				
2.				
			Total	Total

Ongoing projects

Short description of the status of ongoing projects

	Project title	Project number	ODSs to be phased out (MT)	Value (USD)	Status of the project
1.					Description - narrative
2.					
			Total	Total	

Summary for amounts of refrigerants recovered, recycled and reclaimed from the reporting under R&R

Amounts recovered, recycled, reclaimed (in kg)

Year	CFCs	CFCs	CFCs	CFCs
	recovered	recycled	reclaimed	waste
1				
2				
3				
Total				
	HCFC-22	HCFC-22	HCFC-22	HCFC-22
	recovered	recycled	reclaimed	waste
1				
2				
3				
Total				

Summary for amounts of halons recovered, recycled and reclaimed

Year	Halons	Halons	Halons	Halons
	recovered	recycled	reclaimed	waste
1				
2				
3				
Total				

Promotions and media coverage
Short information for:
Printed materials—brochures, CDs, movies, etc.
Articles in printed media—daily newspapers and weekly magazines
Interviews in audiovisual media—TV and radio
Major problems encountered and the action planned or taken

Destruction of old equipment
The ozone officer should witness the destruction of the old equipment and/or retrofitted parts that have been replaced with new equipment or parts provided by the project.
In the reporting, explain in a narrative way when, where and for which project the equipment was destroyed.
Photos should be taken during the destruction.

Destruction of ODSs
If any ODSs were destroyed, explain in a narrative how this was done.

Please submit annual reports by 15 December at the latest.

4. Reporting under projects for recovery and recycling

RMP—refrigerant management plan
TPMP—terminal phase-out management plan
NPP—national phase-out plan (part for R&R)
SPP—sectoral phase-out plan (part for R&R)

Definitions

Recovery	Substances have been collected from machinery, equipment or a containment vessel.
Recycling	Substances have been reused after a basic cleaning process of filtering and drying.
Reclamation	Substances have been reprocessed and upgraded to a specified quality by means of filtering, drying, distillation and/or chemical treatment.

Training

Training materials

What kinds of training materials were produced (for service technicians, for customs officers, for vocational schools, etc.)?
Were the training materials produced in the local language?
Were the training materials translated into English?

How many university faculties and professors participated in the training?
Give the names of the faculties, names of professors, addresses and contact details.

How many vocational schools participated in the training?
How many trained and certified teachers?
Give the names of the vocational schools, names of teachers, addresses and contact details.

How many educational centres were used for training?
List the teaching staff that participated in the training with names of professors/teachers, addresses, contact details.

How many trained and certified customs officers took part?
How many identifiers? At how many entry points?

How many trained and certified service technicians took part?
Give the estimated total number of service technicians in the country.

Recovery and recycling scheme

How many reclamation centres were established according to the project context?
How many reclamation units were delivered to the end-users in the framework of the project?

How many recycling centres were established in accordance with the project context?

How many recycling units were delivered to the end-users in accordance with the project context?

How many recovery units were delivered to the end-users in accordance with the project context?
Please provide information about whether there is additional training for use of the equipment.

Did you have any request from service shops for servicing of the equipment during the supplier's warranty period? Please provide information on the warranty issue.

How many refrigeration service workshops are there in the country?

How many refrigeration service workshops have had R&R equipment distributed to them in accordance with the project context?

Indicate the geographical distribution of the equipment (number of units per city—a map could be a useful tool).

Please provide information on the technical specifications of the equipment and the name of the supplier.

Quantities of CFCs recovered (by years and tonnes)

Recovered				
Year	R-11 (CFC-11)	R-12 (CFC-12)	Other (specify)	Total
1				
2				
3				
Total				

Add as many rows/columns as needed.

Quantities of CFCs recycled (by years and tonnes)

Recycled					
Year	R-11 (CFC-11)	R-12 (CFC-12)	Other (specify)	Total	Waste (for further treatment)
1					
2					
3					
Total					

Add as many rows/columns as needed.

Quantities of CFCs reclaimed (by years and tonnes)

Reclaimed					
Year	R-11 (CFC-11)	R-12 (CFC-12)	Other (specify)	Total	Waste (for further treatment)
1					
2					
3					
Total					

Add as many rows/columns as needed.

Quantities of HCFCs recovered (by years and tonnes)

Recovered				
Year	R-22 (HCFC-22)	R-141b (HCFC-1141b)	Other (specify)	Total
1				
2				
3				
Total				

Add as many rows/columns as needed.

Quantities of HCFCs recycled (by years and tonnes)

Recycled					
Year	R-22 (HCFC-22)	R-141b (HCFC-141b)	Other (specify)	Total	Waste (for further treatment)
1					
2					
3					
Total					

Add as many rows/columns as needed.

Quantities of HCFCs reclaimed (by years and tonnes)

Reclaimed					
Year	R-22 (HCFC-22)	R-141b (HCFC-141b)	Other (specify)	Total	Waste (for further treatment)
1					
2					
3					
Total					

Add as many rows/columns as needed.

Quantities of HFCs recovered (by years and tonnes)

Recovered				
Year	R-134a (HFC-134a)	Different mixtures	Other (specify)	Total
1				
2				
3				
Total				

Add as many rows/columns as needed.

Quantities of HFCs recycled (by years and tonnes)

Recycled					
Year	R-134a (HFC-134a)	Different mixtures	Other (specify)	Total	Waste (for further treatment)
1					
2					
3					
Total					

Add as many rows/columns as needed.

Quantities of HFCs reclaimed (by years and tonnes)

Reclaimed					
Year	R-134a (HFC-134a)	Different mixtures	Other (specify)	Total	Waste (for further treatment)
1					
2					
3					
Total					

Add as many rows/columns as needed.

4.1. Reporting for monitoring under TPMP (or RMP) (or R&R part from the national phase-out plan)

INTRODUCTION

General information

Approval of the country programme, establishment of the ozone unit

Background
Terminal phase-out management plan (or RMP) (or R&R part from the national phase-out plan)
When was it prepared?
When was it approved by the Executive Committee?
Give a short description of the project:

Improvements of the certification/licensing system

Legislation

Activities undertaken in connection with legislative issues (narrative)
Laws in place, with text, numbers and dates
For example:
Ban on import of substances from Annex A, Group I (Official Journal/Gazette No. xxx of dd/mm/yy)

Workshops held with stakeholders concerned
Number of workshops and participants, dates and venues

Training programme
Narrative: Who is conducting the training?

Training of trainers
How many trainers from how many schools/centres were trained and certified?
What was the duration of the training course (how many hours)?

Training of service technicians
How many service technicians were trained and certified?
How many service shops received equipment?

Training of customs officers
How many customs officers were trained and certified?

Recovery and recycling scheme
Narrative: How is the scheme working?
Give tables indicating quantities of refrigerants recovered, recycled and reclaimed.

4.2. Reporting for verification of national consumption targets under multi-year agreements (MYAs) for CFCs

Under multi-year agreements, implementing agencies, including UNIDO, are required to submit verification reports on the achievement of the ODS reduction targets specified in the agreement as a prerequisite for the release of the next tranche of funds.

Since the multi-year agreements define their achievement targets in terms of the annual national maximum allowable consumption of an ODS, the verification of the national consumption targets under the multi-year agreements should use the Montreal Protocol definition of consumption as the basis for verification of the achievement of the targets, i.e.:

consumption = production + imports - exports.

The choice of the institution/consultant to conduct the verification should generate a reasonable level of confidence that there is no conflict of interest in the process and that the results of the verification are independent and objective.

The verification should review national legislation, policies and procedures on ODS import/export and quotas issued and/or import permits.
The verification should also review the official statistics on import/export and compare quotas issued versus actual quotas used.

Is the national ozone unit the competent national body under the ministry (of the environment) responsible for coordinating the country's action with respect to ozone protection and facilitation of ODS phase-out?
Is this office in charge of implementing the country programme under the Montreal Protocol?
Is the ODS database maintained by the national ozone unit?
If yes, give a narrative explanation regarding:
Import/export system, quotas, data recording, management and collaboration with the customs administration.
List the legislation in place.

Role of the customs administration
What do customs officers request from the importer?
Is the import permit issued by the ministry of the environment?
What quantity of the ODS is being imported?
What are its trade name and chemical formula?
What is the ten-digit tariff code?
What is the full title of the exporter and country?
What is the point of entry and place of customs clearance?
Was a customs declaration issued by the forwarding agency?
Is there a CMR (movement document)?
Is there an invoice?
Other

Does the customs administration have direct access to the ODS database maintained by the national ozone unit?

Government statistics for imports and exports of CFCs

Each Party is to submit data for consumption of ODSs to the UNEP Ozone Secretariat by 30 September (on a voluntary basis, 30 June) each year for the previous year.

When was Data Form 1 for the consumption of ODSs submitted to the UNEP Ozone Secretariat?

When was the country programme report submitted to the Multilateral Fund Secretariat?

Were copies of these two reports submitted to UNIDO?
If so, when?

Actual imports and exports by authorized importers, supported by customs declaration forms, and/or other supporting documentation

Comparison of the import permits issued and actual imports

4.3. Reporting for monitoring under chiller replacement projects

- What is the total number of CFC-based chillers in the country?
- What is the total number of HCFC-based chillers in the country?
- When was the inventory of chillers prepared?
- Does the inventory of chillers need to be updated ?
- Please provide information on raising awareness among stakeholders and/or owners of chillers.
- Give the number and types of chillers replaced.
- Give the number and types of chillers retrofitted.
- Please provide photos taken during dismantling (scrapping) of the old chillers.
- Give the amounts and types of quantities of refrigerants recovered.
- Where are these refrigerants kept?

CHAPTER VI

1. Phase-out plans for ozone-depleting substances (TPMPs, NPPs, RMPs, SPPs)

Subject to compliance by the country with its obligations under the Montreal Protocol, the Executive Committee of the Multilateral Fund provides funding to the country for complete phase-out of ozone-depleting substances.

Multi-year agreements have become a predominant funding modality of the Multilateral Fund to assist Article 5 countries in achieving the ODS phase-out targets under the Montreal Protocol.

A model agreement between "the Country" and the Executive Committee of the Multilateral Fund for the phase-out of ozone-depleting substances is given in annex A-1. Under these agreements, the implementing agencies are required to submit a verification report on the achievement of the ODS reduction targets specified in the particular agreement as a prerequisite for the release of the next tranche of funds.

The choice of the institution/consultant to conduct the verification should generate a reasonable level of confidence that there is no conflict of interest in the process and that the results of the verification are independent and objective. The selection of the candidates for the verification should be made by the implementing agency in consultation with the recipient country. An independent national auditing organization/consultant will be recruited to verify consumption/production.

The country will ensure that it conducts accurate monitoring of its activities under the agreement. The Government of "the Country" will carry out the overall management of the phase-out plan with the assistance of UNIDO. The ozone unit is usually responsible for monitoring the implementation of the phase-out plan and will assist UNIDO with the preparation of annual implementation plans and a progress report for the consideration of the Executive Committee (the terms of reference for monitoring are given in annex A-2). This monitoring will also be subject to independent verification. The country agrees to periodic evaluations, which will be carried out under the monitoring and evaluation work programme of the Multilateral Fund.

Guidelines for the verification of national consumption targets under multi-year agreements are given in annex A-3.

Guidelines and the standard format for verification of ODS production phase-out are given in annex A-4.

2. Flexibility conditions in phase-out agreements

While the funding was determined on the basis of estimates of what the country needs to carry out its obligations under the agreement, the Executive Committee agrees that the country may have the flexibility to reallocate the approved funds, or part of the funds, according to the evolving circumstances, in order to achieve the goals prescribed under the agreement.

Flexibility conditions in phase-out agreements are given in annex A-5.

TPMPs, NPPs, RMPs, SPPs
Training of trainers, service technicians and customs officers, as well as the recovery/recycling scheme are included in almost all phase-out plans.

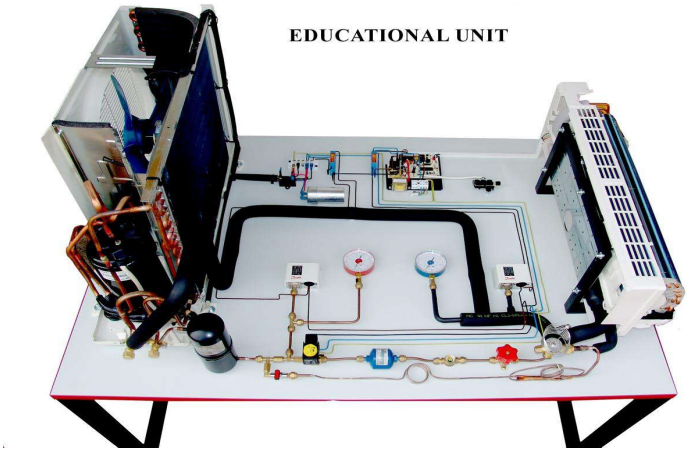
Because of the different situations and needs of countries, the purpose of this approach is to provide for general principles and procedures that should be followed in developing and implementing phase-out plans.

Training
The phase-out plan should establish continuous training in "good practice in refrigeration" for trainers, existing and future service technicians and customs officers.

Training may be organized in universities, faculties, vocational schools, service shops and/or educational centres. These institutions should be authorized by the relevant ministry (in most cases, the ministry of education) to issue certificates.

For the theoretical part, training materials for trainers, service technicians and customs officers must be produced in the local language adjusted to local circumstances.

For the practical part for service technicians, it is advisable to have a specially designed educational unit for conducting demonstrations.



The courses are to be carried out over two days, each with a group of 10 to 12 participants. Every participant must receive the Manual. The first day of the course will be devoted to theory and the second day to practice. At the end of the course, every participant must pass the examination in order to receive a certificate.

The concept of training of technicians should focus on eliminating gaps and insufficiencies and be adapted to the technologically innovative recovery and recycling equipment. Also, sustainability is a critical factor, having in mind newly qualified service technicians and the need to update the knowledge of existing trained technicians, if any.

For the practical part for the training of customs officers, identification equipment is useful in a demonstration unit for measuring CFCs, HCFCs and HFCs.

Recovery and recycling scheme
The recovery and recycling scheme depends on many factors (size of the country, number of service shops and their geographical distribution, number of service technicians, total consumption of CFCs, HCFCs and HFCs, level of knowledge, etc.).

Reclamation centres
This option could apply in cases of recovery of large quantities of refrigerants. The reclamation centre should have the possibility of checking the quality of the quantities reclaimed and of guaranteeing it. Usually, a gas spectrometer is needed for this purpose. The operator must be highly qualified and skilled.

To achieve a fully functioning and sustainable reclamation scheme, it is important to create a system that allows the reclamation facilities to operate over the long term under commercial conditions.

Recycling centres
This option could apply in cases of small countries having a good transportation infrastructure.

Recovery and recycling units
This is the most economic and feasible means of recovering and recycling refrigerants in low-volume ODS-consuming countries. Virtually every single service shop is a small recycling centre.

A standard type of equipment is available.

The most appropriate equipment for servicing mobile air-conditioning units (in cars, trucks and buses) and for large systems (commercial and industrial) consists of:

A multifunctional automatic unit for servicing air-conditioning and cooling systems (for R-12, R-22 and R-134a with three cylinders, 25kg), recovering and recycling the refrigerant and evacuating (vacuuming) and charging the system;

A portable vacuum station;

A manifold with service hoses;

Accessories (electronic leak detector, locking pinch-off and piercing pliers, tube cutter, tube bender and flaring tools, cylinders).

A combination of recovery and recycling units with a recycling centre is also an option for low-volume ODS-consuming countries.

Annex A-1

Agreement between "the country" and the Executive Committee of the Multilateral Fund for the phase-out of ozone-depleting substances-Template

1. This Agreement represents the understanding of (the "country") and the Executive Committee with respect to the complete phase-out of controlled use of the ozone-depleting substances set out in appendix 1-A ("The substances") prior to (date), in compliance with the schedules to the Montreal Protocol.

2. The country agrees to phase-out the controlled use of the substances in accordance with the annual phase-out targets specified in appendix 2-A ("The targets, and funding") and this Agreement. The annual phase-out targets will, at a minimum, correspond to the reduction schedules mandated by the Montreal Protocol. The country agrees that, by its acceptance of this Agreement and performance by the Executive Committee of its funding obligations described in paragraph 3, below, it is precluded from applying for or receiving further funding from the Multilateral Fund in respect of the substances.

3. Subject to compliance by the country with its obligations set out in this Agreement, the Executive Committee agrees in principle to provide to the country the funding set out in appendix 2-A ("The targets, and funding"). The Executive Committee will, in principle, provide this funding at the Executive Committee meetings specified in appendix 3-A ("Funding approval schedule").

4. The country will meet the consumption limits for each substance, as indicated in appendix 2-A. It will also accept independent verification by the relevant implementing agency of achievement of these consumption limits, as described in paragraph 8 of this Agreement.

5. The Executive Committee will not provide the funding in accordance with the funding approval schedule unless the country satisfies the following conditions at least 60 days prior to the applicable Executive Committee meeting specified in the funding approval schedule:

(a) The country has met the target for the applicable year;

(b) The meeting of the targets has been independently verified, if requested by the Executive Committee, consistent with paragraph *(d)* of its decision 45/54;

(c) The country has substantially completed all the actions specified in the last annual implementation programme;

(d) The country has submitted, and received endorsement from the Executive Committee for, an annual implementation programme in the form of appendix 4-A ("Format for annual implementation programme") in respect of the year for which funding is being requested.

6. The country will ensure that it conducts accurate monitoring of its activities under this Agreement. The institutions specified in appendix 5-A ("Monitoring institutions and roles") will monitor and report on that monitoring in accordance with the roles and responsibilities set out in appendix 5-A. This monitoring will also be subject to independent verification, as described in paragraph 8, below.

7. While the funding was determined on the basis of estimates of the needs of the country to carry out its obligations under this Agreement, the Executive Committee

agrees that the country may have the flexibility to reallocate the approved funds, or part of the funds, according to the evolving circumstances in order to achieve the goals prescribed under this Agreement. Reallocations categorized as major changes must be documented in advance in the next annual implementation programme and endorsed by the Executive Committee, as described in subparagraph 5*(d)*, above. Reallocations not categorized as major changes may be incorporated in the approved annual implementation programme that is under implementation at the time, and reported to the Executive Committee in the report on implementation of the annual implementation programme.

8. The country agrees to assume overall responsibility for the management and implementation of this Agreement and of all activities undertaken by it or on its behalf to fulfil the obligations under this Agreement. UNIDO has agreed to be the lead implementing agency ("lead IA"). The lead IA will be responsible for carrying out the activities listed in appendix 6-A, including but not limited to, independent verification. The country also agrees to periodic evaluations, which will be carried out under the monitoring and evaluation work programme of the Multilateral Fund. The Executive Committee agrees, in principle, to provide the lead IA with the fees set out in row 6 of appendix 2-A.

9. Should the country, for any reason, not meet the targets for the elimination of the substances specified in Appendix 1-A or otherwise not comply with this Agreement, then the country agrees that it will not be entitled to the funding in accordance with the funding approval schedule. At the discretion of the Executive Committee, funding will be reinstated according to a revised funding approval schedule determined by the Executive Committee after the country has demonstrated that it has satisfied all of its obligations that were due to be met prior to receipt of the next instalment of funding under the funding approval schedule. The country acknowledges that the Executive Committee may reduce the amount of the funding by the amounts set out in appendix 7-A in respect of each ODP tonne of reductions in consumption not achieved in any one year.

10. The funding components of this Agreement will not be modified on the basis of any future Executive Committee decision that may affect the funding of any other consumption sector projects or any other related activities in the country.

11. The country will comply with any reasonable request of the Executive Committee and the lead IA to facilitate implementation of this Agreement. In particular, it will provide the lead IA access to information necessary to verify compliance with this Agreement.

12. All of the agreements set out in this Agreement are undertaken solely within the context of the Montreal Protocol and as specified in this Agreement, and do not extend to obligations beyond this Protocol. All terms used in this Agreement have the meaning ascribed to them in the Protocol unless otherwise defined herein.

Appendices

Appendix 1-A: The substances

Annex A:	Group I	CFCs

Appendix 2-A: The targets, and funding

Year							2010	Total
Montreal Protocol reduction schedule (ODP tonnes)								
1. Maximum allowable total CFC consumption (ODP tonnes)								
2. Reduction of CFC consumption from ongoing projects (ODP tonnes)								
3. New reduction under the present plan (ODP tonnes)								
4. Total annual reduction of CFCs (ODP tonnes)								
5. Lead IA agreed funding (USD)								
6. Lead IA support costs (USD)								
7. Total agreed funding (USD)								

Appendix 3-A: Funding approval schedule

Funding other than the payments in (year) will be considered for approval at the (second/last) meeting of the year of the annual implementation plan.

Appendix 4-A: Format of annual implementation programme

1. Data
   Country _____
   Year of plan _____
   No. of years completed _____
   No. of years remaining under the plan _____
   Target ODS consumption of the preceding year _____
   Target ODS consumption of the year of the plan _____
   Level of funding requested _____
   Lead implementing agency _____

2. **Targets**

Indicators		Preceding year	Year of plan	Reduction
Supply of ODSs	Import			
	Total (1)			
Demand for ODSs	Manufacturing			
	Servicing			
	Stockpiling			
	Total (2)			

3. **Industry action**

Sector	Consumption preceding year (1)	Consumption year of plan (2)	Reduction within year of plan (1)-(2)	Number of projects completed	Number of servicing-related activities	ODS phase-out (in ODP tonnes)
Manufacturing						
Aerosol						
Foam						
Refrigeration						
Solvents						
Other						
Total						
Servicing						
Refrigeration						
Total						
Grand total						

4. **Technical assistance**

Proposed activity: _____

Objective: _____

Target group: _____

Impact: _____

5. **Government action**

Policy activity planned	**Schedule of implementation**

6. **Annual budget**

Activity	**Planned expenditures (USD)**
Total	

7. **Administrative fees**

Appendix 5-A: Monitoring institutions and roles

1. The overall management of the plan will be carried out by the Government of the "country", with the assistance of UNIDO.

2. The ozone unit will be responsible for monitoring the implementation of the phase-out plan and will assist UNIDO with the preparation of annual implementation plans and progress reports for the consideration of the Executive Committee.

3. An independent national auditing organization/consultant will be recruited to verify consumption.

Appendix 6-A: Role of the lead IA

1. The lead IA will be responsible for a range of activities specified in the project document, as follows:

(a) Ensuring performance and financial verification in accordance with this Agreement and with its specific internal procedures and requirements, as set out in the country's phase-out plan.

(b) Providing verification to the Executive Committee that the targets have been met and associated annual activities have been completed, as indicated in the annual implementation programme.

(c) Assisting the country in preparation of the annual implementation programme.

(d) Ensuring that achievements in previous annual implementation programmes are reflected in future annual implementation programmes.

(e) Reporting on the implementation of the annual implementation programme of the preceding year and preparing an annual implementation programme for the year for submission to the Executive Committee.

(f) Ensuring that technical reviews undertaken by the lead IA are carried out by appropriate independent technical experts.

(g) Carrying out required supervision missions.

(h) Ensuring the presence of an operating mechanism to allow effective, transparent implementation of the annual implementation programme and accurate data reporting.

(i) Verifying for the Executive Committee that consumption of the substances has been eliminated in accordance with the targets.

(j) Ensuring that disbursements are made to the country in a timely and effective manner.

(k) Providing assistance with policy, management and technical support when required.

Appendix 7-A: Reductions in funding for failure to comply

In accordance with paragraph 9 of the Agreement, the amount of funding provided may be reduced by $US (xxxxx) per ODP tonne of reductions in consumption not achieved in the year.

Annex A-2

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

TERMS OF REFERENCE

For the provision of monitoring services in implementation of the phase-out plan

Project MP/
Phase-out Plan for in

These terms of reference shall be used to specify activities related to the implementation of this project according to the provisions stipulated in the project document.

TERMS OF REFERENCE

1. GENERAL INFORMATION

The present terms of reference shall be used for the provision of services for conducting monitoring in implementation of the phase-out plan in (the country). These guidelines identify and specify the services required to carry out the monitoring.

2. BACKGROUND

The Government of (the country) prepared the phase-out plan. It will be implemented through a combination of investment and non-investment activities, mainly in the refrigeration and air-conditioning service sectors, over a period of (No. of years), and will result in the complete phase-out of CFCs by (dd/mm/yy).

The objective of the plan is to enable the Government of (the country) to phase-out its CFC consumption in the [servicing] sector.

(The country) will have to take actions to achieve the total phase-out of CFCs. Measures must be taken to increase the amount of refrigerants recovered and recycled through the use of suitable and efficient equipment, permanent training of service technicians and customs officers and awareness-raising among stakeholders and the public in general.

In order to tackle and resolve problems occurring in the current situation, (the country) will have to take the following measures:

- Improve the capability for training service technicians.
- Provide training on retrofitting possibilities and the use of alternative refrigerants.
- Build up the competence of technicians and the confidence of end-users and service technicians in retrofitting methods.
- Improve the functionality of the handling of refrigerants recovered through a recovery and recycling scheme, including training and the provision of equipment.
- Introduce a sustainable system of education for service technicians.

The reuse of the existing CFC stock will play an important role in the phase-out of CFCs in (the country). The existence of a functioning recovery and recycling system will be essential to enable (the country) to meet the needs for maintenance of the old equipment in the coming years. Necessary recovery and recycling equipment will be provided to major service workshops in the country. After distribution of the equipment, the recovery and recycling scheme will be monitored to ensure effective execution of the aim of the phase-out project.

Another component of the project is training of customs officers (inspectors, controllers and customs police officers) to enable them to identify controlled substances covered by the Montreal Protocol, and equipment using CFCs (refrigerators, freezers and other refrigeration and air-conditioning equipment).

3. SUBJECT OF THE MONITORING OF THE PHASE-OUT PLAN

3.1 Training programme for good practice in refrigeration – Training of (No.) trainers. The project should establish continuous training in "good practice in refrigeration" for future service technicians that will go on after the completion of the project.

3.2 Training programme for good practice in refrigeration—Training of (No.) service technicians.

3.3 Training of customs officers—Training of (No.) customs officers in proper recording and detection of ODSs. To improve the capability for detection of ODSs at the border, refrigerant identifiers will be supplied to the customs service.

3.4 Recovery and recycling scheme—In order to achieve a fully functioning and sustainable recovery and recycling scheme, it is important to create a system that can be operated in the long term under commercial conditions.

4. DESCRIPTION OF SERVICES REQUIRED

The contractor is expected to monitor the following activities in cooperation with the ozone office:

4.1 Training courses for trainers

Training courses for (No.) participants
Monitoring activities:

- Review of training materials
- Review of trainees selected
- Execution of the courses
- Report on the training and conclusions drawn from it.

4.2 Training of service technicians

Training courses for (No.) participants
Monitoring activities:

- Review of training materials
- Review of trainees selected
- Execution of the courses
- Report on the training and conclusions drawn from it.

4.3 Training of customs officers

Training courses for (No.) participants
Monitoring activities:

- Review of training materials
- Review of trainees selected from the customs headquarters
- Execution of the courses
- Report on the training and conclusions drawn from it.

4.4 Arrangement of recovery and recycling equipment

The equipment is procured through a UNIDO bidding procedure and delivered to the ozone office.
Monitoring activities:

- Review of the specifications of equipment delivered
- Review of service shops selected prior to delivery
- Review to ascertain that all parts and materials are supplied to the end-users selected

- Collection of necessary information from end-users to determine proper use of equipment
- Annual review of quantities and types of refrigerants recovered and recycled.

5. TIME SCHEDULE

Control Table I

Year	Item	Completion time in months of the year	Activities	Remarks
	1		Training materials for trainers	
	2		Training materials for service technicians	
	3		Training materials for customs officers	
	4	12	Reports	Due after completion of items 1, 2 and 3
	5		Training workshops for trainers	
	6		Training workshops for service technicians	
	7		Training workshops for customs officers	
	8	12	Reports	Due after completion of items 5, 6 and 7
	9		Arrangement of recovery and recycling equipment	
	10		Reports	Due after completion of item 9 and/or at the end of the year

6. REPORTS

All reports should be provided in English; the format and number of copies are given in the contract.

Annex A-3

Guidelines for the verification of national consumption targets of multi-year agreements (MYAs)

INTRODUCTION

1. Since 1999, multi-year agreements have become a predominant funding modality of the Multilateral Fund to assist Article 5 countries in achieving the ODS phase-out targets under the Montreal Protocol. Under these agreements, the responsible implementing agencies are required to submit a verification report on the achievement of the ODS reduction targets specified in the agreements as a prerequisite for the release of the next tranche of funds. The guidelines below are intended to achieve consistency and uniformity in the methodology for carrying out these verifications. They cover, among other things, data requirements and the procedure to be followed in carrying out the verification.

GUIDELINES FOR VERIFICATION OF NATIONAL CONSUMPTION TARGETS OF THE MYAS

Purpose

2. The purpose of the guidelines is to provide guidance for conducting verification of the national consumption targets of the MYAs, bearing in mind the specific reporting requirements in each of these agreements.

Applicability

3. These guidelines are intended for the verification of national consumption targets of multi-year agreements for CFCs, halons, CTC, TCA, and methyl bromide. They do not apply to ODS production sector phase-out agreements, which are governed by guidelines approved by the Executive Committee in the year 2000; sectoral plans may require additional verification procedures at the sectoral level.

Basis for verification of the national consumption targets of the MYAs

4. Since the MYAs define their achievement targets in terms of annual national maximum allowable consumption of an ODS, the verification of the national consumption targets of the MYAs should use the Montreal Protocol definition of consumption as the basis for the verification of the achievement of the targets (i.e. consumption = production+imports-exports). For those Article 5 countries which do not produce the ODS, the formula can be simplified to be consumption equals imports (minus exports where appropriate). For those countries where an ODS is produced, the verification of consumption should include the verification of production which was conducted following the guidelines approved at the Executive Committee's 32nd meeting. Imports and exports should be verified using the criteria defined herein.

Procedure for the verification

5. The verification should review national legislation, policies and procedures on ODS imports/exports, such as:

(a) Channel of communication between Government (the licensing authority) and customs;

(b) Authorized list of importers/exporters and, where available, distributors;

(c) Conditions for issuing licenses;

(d) Administrative procedures and documentation;

(e) System of monitoring and reporting on exports of ODSs;

(f) Sanctions or penalties to be imposed for violation of legal regulation;

(g) Mechanisms and capacity for prosecution and enforcement;

(f) National system of harmonized custom codes used to identify ODSs and ODS mixtures;

(g) Procedures to be applied in the case of suspicious shipments;

(h) Sampling or other identification methods used.

6. The verification should review official statistics on imports/exports: compare quotas issued versus actual quotas used.

7. The verification should review a representative sample of reports from importers/exporters, and where available from distributors.

8. The verification should review the follow-up on the recommendations from previous verifications.

9. The verification should conclude the exercise by discussing conclusions and recommendations.

Data needed for the verification

10. The following information should be available for the purpose of the verification:

(a) List of authorized importers/exporters, and where available, distributors;

(b) ODS import quotas and export licences issued;

(c) Actual ODS imports and exports;

(d) National policies and procedures on ODS imports and exports;

(e) Government enforcement structure for ODS imports and exports;

(f) Documents such as licences, trade names, code numbers, labelling, etc., to be presented to customs by importers and exporters of ODSs.

Verification document

11. The final verification document should:

(a) Describe the detailed steps and procedures taken to conduct the verification;

(b) Summarize all aspects of national legislation, policies and procedures designed to ensure achievement of the consumption targets in the multi-year agreement;

(c) Provide detailed data demonstrating and confirming that the consumption target in the multi-year agreement was achieved.

Institution/consultant to conduct the verification

12. The choice of the institution/consultant to conduct the verification should generate a reasonable level of confidence that there is no conflict of interest in the process and that the results of the verification are independent and objective.

13. The selection of the candidates for the verification should be made by the responsible implementing agency in consultation with the country concerned. The final selection of the institution/consultant should follow the rules and procedures of the contractor.

(UNEP/OzL.Pro/ExCom/46/47, para. 167— Decision 46/38).

(Supporting document: UNEP/OzL.Pro/ExCom/46/47, Annex XIII).

Annex A-4

Guidelines and standard format for verification of ODS production phase-out

The purpose

The purpose of the guidelines is to provide standard procedures to be followed in conducting verifications of ODS production phase-out (including gradual closures) financed by the Multilateral Fund. The guidelines include the questionnaire in annex I.*

The process

Before the field verification, the implementing agency responsible for the ODS production phase-out project should ensure that the plant(s) to be audited provide(s) the necessary information, using the questionnaire attached.

The implementing agency responsible should prepare terms of reference for the verification mission and make available to the verification team, prior to the field visit, the completed questionnaire(s) containing baseline enterprise information, annual data reported by the enterprise for the year and a copy of the sector agreement approved by the Executive Committee.

During the plant closure or production audit, the verification team should have full access to the daily production logs and the financial records to validate the data provided by the plant in the questionnaire.

Based on the field findings, as compared to the data provided by the plant in the questionnaire, the verification team should prepare its verification report for submission to the Executive Committee and attach the completed questionnaire to its report.

Questionnaire for data collection

The questionnaire should be filled out by each plant to be audited and made available to the audit team before the field visit to the plant. Thus the verification team would have in hand before departure:

(a) Names and locations of producers;

(b) Contact at each corporate headquarters and each plant site;

(c) Number of days in production (operational days) for each month, at each plant site, and for each ODS production monitored at the location;

(d) Monthly production data for the ODS production monitored at each plant site;

(e) Monthly consumption and procurement data for feedstock used for the production of the ODS production monitored (e.g., carbon tetrachloride (CTC) and anhydrous hydrogen fluoride (AHF) for CFC-11 and CFC-12 production);

(f) Monthly sales figures for the ODS product(s) monitored, as well as stock for each monitored ODS production at the beginning and end of each year.

*See the supporting document: UNEP/OzL.Pro/ExCom/32/33.

Verification steps before departure

(a) Review the data provided by the enterprise and ensure that the ODS production, sales figures and stock at the beginning and end of the years add up;

(b) Compare actual production to the annual quota assigned for each ODS production monitored and at each plant site;

(c) Review any quota trading or changes of quotas during the year. Also check whether ODS products monitored have been procured from other producers;

(d) Review and verify conformity of raw materials consumption with the ODS production monitored;

(e) Based on the questionnaire data, identify each campaign and distribute production and raw material consumption data per campaign;

(f) Ensure access to daily production logs and financial records for the ODS productions monitored, as necessary for the verification of information provided by the producer.

Verification steps at each producing location

(a) Confirm production quantities and raw material consumption from production logs;

(b) Verify sales and procurements of ODS products monitored against financial records;

(c) Verify stock at the beginning and the end of year against financial records.

To achieve these results, the production verification should include the following steps:

(a) Review the system of record-keeping for adequacy;

(b) Observe plant condition and apparent operational status;

(c) Audit daily production records for ODS production monitored and "key" feedstock consumption data;

(d) Confirm monthly and annual production of monitored ODSs:
(production = sales (from sales records) - change in inventory (from plant records));

(e) Confirm that cumulative change in inventory of ODSs monitored corresponds to annual production and sales data;

(f) Confirm that cumulative change in inventory of "key" raw material is consistent with production, both overall and per campaign;

(g) Integrate hourly in-plant flow-rate data (corrected for concentration if necessary) over time—either graphically or analytically—to derive an independent value for production;

(h) Compare the changes in reported feed and product tank levels, integrated with the appropriate correlating factor, to reported raw material usage and CFC production;

(i) On a spot basis, rationalize hourly plant logs with raw material consumption and, e.g., CFC production. In other words, match throughput, for example for a week, with raw material consumption and the ODS production monitored for the same week. Do this for at least two or three weeks during each campaign;

(j) Review logs for periods of high hourly throughput and compare to reported production. Investigate any possible inconsistency;

(k) Review hourly plant logs during non-campaign time periods to verify non-production.

Verification steps at completely closed location

(a) Observe plant condition and apparent operational status;

(b) Verify the data provided in the questionnaire;#

(c) Provide photographic documentation for the dismantling of the plant (e.g., photo and/or video).

Verification report

The verification report should provide the results of the team's findings and conclusions on the implementation of the annual ODS production phase-out programme. The report should include as annexes the completed questionnaires.

Field verification team

The verification team should consist of at least two persons.

At least one person should be fluent in the national language and one should be fluent in English. In addition:

(a) One of the verification team members should be familiar with accounting practice and financial auditing, and

(b) One of the verification team members should be a technical expert with experience relevant to the ODS production to be audited.

Questionnaire for ODS production phase-out verification (including gradual closure)

A. Plant identification

Name of enterprise	:
Plant ref. No.*	:
Sector plan No.*	:
Serial No. *	:
Address of the plant	:
Contact person(s) and functional title(s)	:
Telephone No.	:
Fax No.	:
E-mail address	:

B. Verification

Team composition	:
Leader	:
Name	:
Functional title	:
Member(s)	:
Name	:
Functional title	:
Date of plant visit	:
Duration of visit	:

#See the supporting document: UNEP/OzL.Pro/ExCom/32/33.
*As applicable, e.g., "serial No." China's CFC plants.

Plant History

Date of construction:					
ODS products	No. of lines	Capacity in baseline year*	Production**		
			Baseline year*	Year 1	Year 2
CFC-11					
CFC-12					
CFC-13					
CFC-113					
CFC-114/115					
Raw materials production***					
Hydrogen fluoride (HF)					
Carbon tetrachloride (CTC)					

*The year from which data is used for approving the ODS production phase-out project.

**Till the year prior to the verification.

***This applies to plants where production of either HF or CTC or both is integrated.

Plant activity in the year verified

I. Plant for complete closure

No. of CFC-11/12 lines closed	
Date when CFC production ceased	
Date on which dismantling was completed	
Verification of destruction of key components by	[Name of certifying body]
Reactor tank(s) dismantled and destroyed	Yes/No
Control and monitoring equipment dismantled and destroyed	Yes/No
Pipes dismantled and destroyed	Yes/No
Utilities dismantled and destroyed	Yes/No
Evidence of destruction (photos or videos)	
Chance of resuming production	Yes/No
Assessment by the verification team to be included in the verification report	

Annual CFC-11/12 quotas, production, sales and stocks since the baseline year*

(Please use one table for each CFC product)

CFC Products (CFC-11, CFC-12)	Baseline	Year 1	Year 2**

	Year*		
Quota			
Opening stock at beginning of year			
Production			
Sales			
Closing stock at end of year			

*The year from which data is used to approve the ODS production phase-out project.

**Till the year of the verification.

Annual HF/CFC and CTC/CFC ratios

Ratio	Baseline year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6*
CFC-11							
HF/CFC-11 ratio							
CTC/CFC-11							
CFC-12							
HF/CFC-12							
CTC/CFC-12							

* Till the year of the verification.

Operational days per year

Type of production	Baseline year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6*
CFC-11							
CFC-12							

*Till the year of the verification.

Monthly CFC-11/12 production and raw material consumption*

CFC production and CTC consumption:

Month	CFC-11	No. of operating days	CFC-11 Production	CTC/ CFC-11 Ratio	CTC Opening stock	CTC Procured/ or added to stock	CTC Closing stock
January							
February							
March							
April							
May							
June							
July							
August							
September							
October							
November							
December							

CFC production and HF consumption:

Month	CFC-11	No. of operating days	CFC-11 Production	HF/ CFC–11 Ratio	HF Opening stock	HF Procured/ or added to stock	HF Closing stock
January							
February							
March							
April							
May							
June							
July							
August							
September							
October							
November							
December							

* Similar tables should be provided for CFC-12 and CFC-113.

(UNEP/OzL.Pro/ExCom/32/44, para. 85, Decision 32/70)

Annex A-5

Flexibility conditions in phase-out agreements

The 45th Meeting of the Executive Committee decided to request the Secretariat, in consultation with the implementing agencies, to prepare a paper for consideration at the 46th Meeting defining the meaning of major changes in the use of funding and the need to document such changes in advance in the country's annual implementation programme.

(UNEP/OzL.Pro/ExCom/45/55, para. 81– Decision 45/15)

The 46th Meeting of the Executive Committee decided:

"(a) That consistent with the flexibility provisions in the relevant agreement, any annual implementation plan prepared and submitted to the Executive Committee for approval could include changes to the scope and nature of the activities foreshadowed in the project document, on which approval in principle of the overall phase-out plan was based;

"(b) To reiterate its expectation that each annual implementation plan would be implemented as approved and would achieve, as a minimum, the phase-out proposed in the project document and the agreement, where relevant;

"(c) That minor changes to a project or an annual implementation plan could be incorporated, as implementation proceeded during the year, and reported on in the annual report on implementation of the annual implementation plan;

"(d) That examples of minor changes included:

(i) Adjustments to the number of equipment items to be purchased (for example, plus or minus 20 per cent of the number of recovery and recycling machines in an annual investment plan);

(ii) Changes to the size or content of training programmes included in the current approved annual investment plan;

(iii) Financial adjustments between the levels of funding of activities in the current approved annual implementation plan (excluding transfers between agencies), provided that they did not affect the overall funding level of the approved annual investment plan;

"(e) That proposed major changes to the scope and nature of activities foreshadowed in the project document should be referred to the Executive Committee for approval as part of the annual implementation plan for the subsequent year;

"(f) That major changes could be defined as those presenting:

(i) Issues potentially concerning the rules and policies of the Multilateral Fund;

(ii) Reductions from the planned amount of phase-out to be achieved in the year;

(iii) Changes in the annual levels of funding allocated to individual bilateral or implementing agencies;

(iv) Provision of funding for programmes or activities not included in the current endorsed annual investment plan, or removal of an activity in the annual investment plan, with a cost greater than 30 per cent of the total cost of the tranche;

"(g) That it is the responsibility of the bilateral or implementing agency in the first instance to identify whether a proposed change to implementation of the current approved annual implementation plan would be considered major or minor according to the criteria above;

"(h) That, if the proposal could constitute a major change, the agency should defer the proposed change pending submission and endorsement by the Executive Committee as part of the subsequent annual investment plan;

"(i) That where there is doubt as to the nature of a proposed change, the agency should seek the views of the Secretariat as to whether the issues raised by the proposal were such that prior consideration by the Executive Committee should be required. If the Secretariat indicated that the proposed change did not raise issues that required reference to the Committee, consistent with the above criteria, the proposal would be deemed to be a minor change and could be incorporated in the annual implementation plan currently under implementation and reported to the Executive Committee in the annual report on implementation of the annual investment plan; and

"(j) That the guidelines for preparation, implementation and management of performance-based phase-out plans adopted by the Executive Committee at its 38th Meeting (decision 38/65) were amended by replacing paragraph 7 of the draft agreement...by the following revised wording and that this would be applicable to future agreements:

> "'While the funding was determined on the basis of estimates of the needs of the country to carry out its obligations under this agreement, the Executive Committee agrees that the country may have the flexibility to reallocate the approved funds, or part of the funds, according to the evolving circumstances to achieve the goals prescribed under this agreement. Reallocations categorized as major changes must be documented in advance in the next annual implementation programme and endorsed by the Executive Committee as described in sub-paragraph … Reallocations not categorized as major changes may be incorporated in the approved annual implementation programme, under implementation at the time, and reported to the Executive Committee in the report on implementation of the annual programme.'"

(UNEP/OzL.Pro/ExCom/46/47, para. 160 — Decision 46/37)

(Supporting document: UNEP/OzL.Pro/ExCom/46/43)

ANNEX 1. Data reporting to the Ozone Secretariat—Nairobi—with instructions

UNEP/OzL.Pro/Dataform06

Data Reporting Forms
Party: _____ Reporting Year:_____

Respondents are requested to read the Introduction in section 2, the General Instructions on in section 4 and the Definitions in section 5 carefully before proceeding to the questionnaire and to refer to them as necessary when completing the data forms.

Questionnaire

1.1. Did your country import CFCs, halons, carbon tetrachloride, methyl chloroform, HCFCs, HBFCs, bromochloromethane, or methyl bromide in the reporting year?

Yes [ ] No [ ]

If No, ignore data form 1 and go to question 1.2. If Yes, please complete data form 1. Please read Instruction I of this document carefully before filling in the form.

1.2. Did your country export CFCs, halons, carbon tetrachloride, methyl chloroform, HCFCs, HBFCs, bromochloromethane, or methyl bromide in the reporting year?

Yes [ ] No [ ]

If No, ignore data form 2 and go to question 1.3. If Yes, please complete data form 2. Please read Instruction II of this document carefully before filling in the form.

1.3. Did your country produce CFCs, halons, carbon tetrachloride, methyl chloroform, HCFCs, HBFCs, bromochloromethane, or methyl bromide in the reporting year?

Yes [ ] No [ ]

If No, ignore data form 3 and go to question 1.4. If Yes, please complete data form 3. Please read Instruction III of this document carefully before filling in the form.

1.4. Did your country destroy any ODSs in the reporting year?

Yes [ ] No [ ]

If No, ignore data form 4 and go to question 1.5. If Yes, please complete data form 4. Please read Instruction IV of this document carefully before filling in the form.

1.5. Did your country import from or export to non-Parties in the reporting year?

Yes [ ] No [ ]

If No, ignore data form 5. If Yes, please complete data form 5. Please read Instruction V of this document carefully, and, particularly, the definition of non-Parties before filling in the form.

Name of reporting officer: .....Signature: .....

Designation: .....

Organization:.....

Postal Address:.....

Country: .....

Phone: .....

Fax: .....

E-Mail: .....

Date: .....

UNEP/OzL.Pro/Dataform06

1. INTRODUCTION

1.1 The attached data forms have been designed to make reporting easier for the Parties. The reporting is prescribed by Article 7 of the Montreal Protocol and by various decisions of the Meeting of the Parties.

1.2 The major features of the forms are as follows:

(a) Five separate data forms are provided for imports, exports, production, destruction of ozone depleting substances (ODSs) and trade with non-Parties, respectively. Please use only those data forms applicable to your country and ignore the other forms, after ticking off the respective "No" box in the questionnaire. For example, many Parties only import and do not export, produce, destroy or trade with non-Parties in any of the substances. If this is the case, please use only the Imports Data Form 1 and ignore the other forms, after ticking off the "No" boxes for questions 1.2-1.5 on the questionnaire.

(b) A row has been provided for each of the substances in annex A. However, for categories of annex B CFCs and HCFCs, the form is made shorter by providing rows only for substances, which have been reported by Parties in the past. A few blank rows are provided for more substances, if needed. HBFCs and BCM (annex C, Groups II and III) have already been phased out by all Parties. Hence, only one blank row has been provided for them, as a formality. You can use the computerized forms supplied by the Secretariat or paper forms. Parties who use the computerized forms can easily add more rows as needed; if using paper forms, Parties are free to add pages as required.

(c) The following are the exempted categories of ODSs:

- Feedstocks for all the substances,
- Essential uses for substances as approved by a Meeting of the Parties from time to time,
- Quarantine and pre-shipment applications for Methyl Bromide, and
- Critical or emergency uses of Methyl Bromide as approved from time to time.

It is necessary for each Party to specify how much of its production, export or import is used for these exempted categories. The Secretariat will deduct these exempted quantities from the total figures. Provision is made in the data forms for these exempted categories.

For the essential and critical uses, provision has also been made for Parties to specify the Meeting of the Parties decision that approved the use or, in the case of uses covered by the global laboratory and analytical essential use exemption, the type of laboratory or analytical use.

(d) The same forms can be used for the base year and other years.

(e) The basis for reporting requirements and definitions are given in section 3 and section 5 below, respectively.

(f) A "comments" box has been provided at the end of each form for Parties to include any additional information that they believe would assist the Secretariat process their data report.

2. REPORTING REQUIREMENTS

Reporting requirements under the Montreal Protocol and pursuant to decisions on requests for data by Meetings of the Parties are as follows:

Basis for reporting	**Information to be provided**
Articles of the Protocol	
(a) To verify implementation	Increased (annual) production of each ODS to meet of Articles 2A-2H the basic domestic needs of Article 5 Parties.
(b) Article 7	- Production, imports and exports of each of the controlled substances. - Amounts used for feedstock. - Amounts destroyed by technologies approved by the Parties. - Imports from and exports to non-Parties. - Imports and exports of recycled halons and HCFCs.
(c) Article 9	Summary of activities (every two years).
(d) Article 2, paragraphs 5, 5 bis 6, 7	Transfer or addition of production (as and when it occurs).
Decisions of the Meetings of the Parties	
(e) Decision IV/11, paragraph 3	Report on statistical data on the actual quantities of ODS destroyed.
(f) Decision IV/17 A, paragraph 1	Information on the implementation of Article 4.
(g) Decision IV/24, paragraph 2	Import and export of recycled and used controlled substances.
(h) Decision V/15	Information relevant to international halon bank management (see the On-line Halon Trader, www.halontrader.org, a "business to business" web portal developed by the UNEP DTIE Ozone Action Programme under the Multilateral Fund, to contribute to the ozone protection by promoting halon banking and responsible halon management).
(i) Decision V/25 and VI/14 A	Parties supplying ODS to Article 5 Parties to provide annually summary of requests from importing Parties.
(j) Decision VI/19, paragraph 4	List of reclamation facilities and their capacities.
(k) Decision VII/30	Importing countries to report to the Secretariat on the volumes of controlled substances imported for feedstock.
(l) Decision VII/32	Report on measures taken to regulate import and export of products and equipment containing Annex A and Annex B substances and technology used in their manufacture.

(m) Decision X/14 and XVII/6	Report on use of ODS as process agents, resulting emission containment technologies employed and opportunities for emission reduction. Report on quantities of ODS produced or imported for process agent applications.
(n) Decision XVII/16, paragraph 4	Report on types, quantities and destinations of exports of all controlled substances.
Essential uses	
(o) Decision VIII/9, paragraph 9	Report on quantities and uses of ODSs produced and consumed for essential uses.
(p) Decision VI/9, paragraph 3	Reports on each controlled substance produced for laboratory and analytical uses.
(q) Decision XII/2, paragraphs 4, 5, 6	Report efforts to transition to CFC-free treatments for asthma and chronic obstructive pulmonary disease, and submit a national or regional strategy to achieve the transition.
(r) Decision XIV/5, paragraph 1	Report information on CFC and CFC-free asthma and chronic obstructive pulmonary disease treatments.
(s) Decision XV/5, paragraph 6	Parties not operating under Article 5 to report the specific dates for cessation of essential-use exemption nominations for CFCs for metered-dose inhalers (MDI) where the active ingredient is not solely salbutamol and where the MDIs are expected to be sold or distributed on the market of any Party not operating under Article 5.
(t) Decision XVII/12, paragraph 1	Parties not operating under Article 5 that supply CFC to Article 5 Parties to meet their basic domestic needs are to include in their annual reports copies of written affirmations from Article 5 Parties confirming CFC are required and would not result in Article 5 Party's non-compliance.
Methyl bromide	
(u) Decision Ex.I/3, paragraph 5	Parties that have a methyl bromide critical use exemption to report on the implementation of the requirement to ensure that the criteria in paragraph 1 of decision IX/6 are applied when licensing, permitting or authorizing the use of methyl bromide and that such procedures take into account available stocks.
(v) Decision Ex.I/4, paragraph 2	Parties seeking methyl bromide critical use exemptions and Parties that have ceased methyl bromide consumption to submit information on the alternatives available, listed according to their pre-harvest or post-harvest uses and the

	possible date of registration, if required, for each alternative; and on the alternatives which the Parties can disclose to be under development, listed according to their pre-harvest or post-harvest uses and the likely date of registration, if required and known, for those alternatives.
(w) Decision Ex.I/4, paragraphs 3 and 6	Parties seeking methyl bromide critical use exemptions to submit national methyl bromide phase-out strategy and describe methodology used to determine economic feasibility in the event that economic feasibility is used as a criterion to justify the critical use.
(x) Decision Ex.I/4, paragraph 9 *(f)* and Decision Ex.II/1 paragraph 3	Report on quantities and uses of methyl bromide produced, imported and export for critical uses in accounting framework.

4. GENERAL INSTRUCTIONS

4.1 Parties are requested to report the production and consumption of bulk ODSs in metric tonnes, without multiplying by the relevant ODPs (ozone depleting potentials).

4.2 In order to avoid duplication, quantities contained in manufactured products should not be included in a country's consumption, regardless of whether the end products are imported or exported.

4.3 The data reported in accordance with the data forms will be used to determine the calculated levels of production and consumption, upon which the control measures are based. It is, therefore, crucial that data be provided separately for each individual substance listed in the forms.

4.4 When calculating consumption, the Montreal Protocol allows countries to deduct amounts of ODS used for feedstock uses, exempted essential and critical uses and for quarantine and preshipment applications. However, when reporting data, Parties should not deduct these figures from their data. The Secretariat will make the necessary deductions.

4.5 It should be noted that both paragraphs 1 and 2 of Article 7 of the Montreal Protocol provide that the Parties may submit the best possible estimates of data for the base year if actual data are not available.

4.6 Parties producing or consuming controlled substances for approved essential uses should also report to the Secretariat using the form approved by decision VIII/9, paragraph 9.

4.7 Parties producing or consuming methyl bromide for approved critical uses should also report to the Secretariat using the form approved by decision Ex.I/4 paragraph 9 *(f)* and decision Ex.II/1 paragraph 3.

4.8 Parties might import or export mixtures containing controlled substances. If this is the case, the Parties should calculate the quantity of each substance in the mixtures and fill in the appropriate quantities of those substances in the data form and not the quantities of the mixtures. In case of, for example, R-502 (HCFC-22 48.8%; CFC-115 51.2%), please report the quantity of the individual controlled substances contained in the mixture by entering the appropriate data under each controlled substance (e.g. R-502 should be reported as CFC-115 and HCFC-22). An illustrative list of mixtures containing ODS with their compositions is given in section 11. For further information about the composition and commercial trade names of chemical products

containing ODS, visit the "Trade Names of Chemicals Containing Ozone Depleting Substances and their Alternatives" on the UNEP DTIE OzonAction at http://www.unep.fr/ozonaction/library/tradenames/main.asp. This worldwide database service is designed to help customs officials and National Ozone Units control imports and exports of ODS and prevent their illegal trade.

4.9 The Montreal Protocol stipulates, under paragraph 4 of Article 7, that the requirements in respect of statistical data on imports and exports shall be satisfied if a regional economic integration organization provides data on imports and exports between the organization and States that are not members of that organization. However, if any member of such an organization (the European Community) produces and exports substances to other Parties for exempted uses (e.g. feedstock, essential uses, critical uses, quarantine and pre-shipment applications for methyl bromide), such members should report these by completing the relevant columns in data form 2. This will enable the Secretariat to deduct their exports for exempted purposes from their levels of production, which they report in data form 3.

5. DEFINITIONS

5.1 "Consumption" means production plus imports minus exports of controlled substances (Montreal Protocol, Article 1).

5.2 "Controlled substance" means a substance in Annex A, Annex B, Annex C or Annex E to the Protocol, whether existing alone or in a mixture. It includes the isomers of any such substance except as specified in the relevant Annex, but excludes any controlled substance or mixture (blend) which is in a manufactured product other than a container used for the transportation or storage of that substance (Montreal Protocol, Article 1).

5.3 "Destruction process" is one which, when applied to controlled substances, results in the permanent transformation or decomposition of all or a significant portion of such substances (decisions I/12F, IV/11, V/26 and VII/35).

5.4 "Production" means the amount of controlled substances produced, minus the amount destroyed by technologies approved by the Parties and minus the amount entirely used as feedstock in the manufacture of other chemicals. The amount recycled and reused is not to be considered as production (Montreal Protocol, Article 1). The data forms prescribe reporting of feedstock use and of quantities destroyed separately, and reporting of total production without deduction. The Secretariat would make the necessary deduction.

5.5 The amounts recovered, reclaimed or recycled (or reused) are not to be considered as "Production", even though they are to be reported. "Recovery, Recycling and Reclamation" have been defined by the Parties (Decision IV/24) as follows:

(a) "Recovery": The collection and storage of controlled substances from machinery, equipment, containment vessels, etc., during servicing or prior to disposal;

(b) "Recycling": The reuse of a recovered controlled substance following a basic cleaning process such as filtering and drying. For refrigerants, recycling normally involves recharge back into equipment. It often occurs "on-site";

(c) "Reclamation": The re-processing and upgrading of a recovered controlled substance through such mechanisms as filtering, drying, distillation and chemical treatment in order to restore the substance to a specified standard of performance. It often involves processing "off-site" at a central facility.

5.6 "Quarantine and preshipment applications" have been defined by the Parties (decision VII/5) as follows:

(a) "Quarantine applications", with respect to methyl bromide, are treatments to prevent the introduction, establishment and/or spread of quarantine pests (including diseases), or to ensure their official control, where:

(i) Official control is that performed by, or authorized by, a national plant, animal or environmental protection or health authority;

(ii) Quarantine pests are pests of potential importance to the areas endangered thereby and not yet present there, or present but not widely distributed and being officially controlled.

(b) "Pre-shipment applications" are those treatments applied directly preceding and in relation to export, to meet the phytosanitary or sanitary requirements of the importing country or existing phytosanitary or sanitary requirements of the exporting country.

5.7 The Parties decided at their Fourth Meeting (Decision IV/14):
"To clarify Article 7 of the amended Protocol so that it is understood to mean that, in cases of transshipment of controlled substances through a third country (as opposed to imports and subsequent re-exports), the country of origin of the controlled substances shall be regarded as the exporter and the country of final destination shall be regarded as the importer. Cases of import and re-export should be treated as two separate transactions; the country of origin would report shipment of the country of intermediate destination, which would subsequently report the import from the country of origin and export to the country of final destination, while the country of final destination would report the import."

5.8 "The Parties decided at their Eighth Meeting (Decision VIII/14):
"To clarify decision I/12A of the First Meeting of the Parties as follows: trade and supply of methyl bromide in cylinders or any other container will be regarded as trade in bulk in methyl bromide."

5.9 "Regional Economic Integration Organization" means an organization constituted by sovereign States of a given region which has competence in respect of matters governed by the Vienna Convention or its protocols and has been duly authorized, in accordance with its internal procedures, to sign, ratify, accept, approve or accede to the instruments concerned. The only such organization for the purpose of the Montreal Protocol is the European Community.

The Montreal Protocol stipulates, under paragraph 8*(a)* of Article 2, that any Parties which are member States of a regional economic integration organization as defined above may agree that they shall jointly fulfil their obligations respecting consumption provided that their total combined calculated level of consumption under Articles 2, 2A and 2H of the Protocol does not exceed the levels required by these Articles.

6. INSTRUCTION I: Data on Imports of ODSs (Data Form 1)

6.1 For reporting data on imports of substances listed in Annex A (CFCs and halons), Annex B (other fully halogenated CFCs, methyl chloroform and carbon tetrachloride), Annex C (HCFCs, HBFCs or BCM) or Annex E (methyl bromide), please use data form 1.

6.2 In column 2 of Data Form 1, all substances of Annex A and Annex B (Groups II and III) have been listed.

For Annex B Group I (Other fully halogenated CFCs) and Annex C Group I (HCFCs), only substances which have been reported by Parties in the past are listed. HBFCs have already been phased out by all Parties and hence for HBFCs only one blank row has been provided as a formality. If you are importing controlled substances other than those listed, please use the blank space to report data on these substances, and use additional pages, if necessary.

6.3 If your country imported mixtures (blends) of controlled substances, e.g. R-502 (HCFC-22 48.8%; CFC-115 51.2%), please report the quantity of the individual controlled substances contained in the mixture by entering the appropriate data under each controlled substance (e.g. R-502 should be reported as CFC-115 and HCFC-22). An illustrative list of mixtures with their compositions is given in section 11. For further information about the composition and commercial trade names of chemical products containing ODS, visit the "Trade Names of Chemicals Containing Ozone Depleting Substances and their Alternatives" on the UNEP DTIE OzonAction at http://www.unep.fr/ozonaction/library/tradenames/main.asp. This worldwide database service is designed to help customs officials and National Ozone Units control imports and exports of ODS and prevent their illegal trade.

6.4 Please enter the number of metric tonnes imported in column 3 of Data Form 1 for each substance imported. If you did not import any of the substances listed, or if you have imported only recovered or reclaimed substances, please enter zero (0) in column 3 for "New" for each substance. If you imported any recovered or reclaimed substances, please enter the data in column 4.

6.5 When calculating a Party's consumption, substances used as feedstock for the production of other chemicals are exempted. Substances so used are completely transformed in the manufacturing process of the new chemical. In reporting total quantities of new substances imported in column 3, the quantities imported for feedstocks, reported in column 5, should not be deducted. Similarly, the quantities imported for essential and critical uses, reported in column 6, should not be deducted. The Secretariat will make the necessary deductions. With regard to column 7, provision has been made for Parties to indicate against each type of ODS imported for essential or critical uses, the Meeting of the Parties decision that approved the use or, in the case of uses covered by the global laboratory and analytical essential use exemption, the type of laboratory or analytical use. Should the column space be insufficient, further information can be provided in the "comments" box at the end of the form.

6.6 When calculating a Party's consumption of methyl bromide, the quantities used for quarantine and preshipment (QPS) applications are exempted. In data form 1, quantities of methyl bromide imported for quarantine and preshipment applications should be entered separately at the bottom of the form, and not deducted from the total quantity imported. The Secretariat will make the necessary deductions.

7. INSTRUCTION II: Data on Export of ODSs (Data Form 2)

7.1. For reporting data on exports, including re-exports, of substances listed in Annex A (CFCs and Halons), Annex B (other fully halogenated CFCs, methyl chloroform and carbon tetrachloride), Annex C (HCFCs, HBFCs or BCM) or Annex E (methyl bromide), please use data form 2.

7.2 Data on re-exports of the substances listed above should also be included in this form. Decision IV/14 clarified that cases of import and re-export should be treated as two separate transactions, so that the country of intermediate destination would report both the import from the country of origin and re-export to the country of final destination.

7.3. The first column ("SUBSTANCES") has been left blank because each Party may export different substances. Please add the names and relevant information of only those substances being exported by your country.

7.4. If your country exported mixtures (blends) of controlled substances, e.g. R-502 (which contains 48.8% HCFC-22 and 51.2% CFC-115), please report the quantity of the individually controlled substances contained in the mixture by entering the appropriate data for each controlled substance (e.g. R-502 should be reported as CFC-115 and HCFC-22). An illustrative list of mixtures with their compositions is given in section 11. For further information about the

composition and commercial trade names of chemical products containing ODS, visit the "Trade Names of Chemicals Containing Ozone Depleting Substances and their Alternatives" on the UNEP DTIE OzonAction at http://www.unep.fr/ozonaction/library/tradenames/main.asp. This worldwide database service is designed to help customs officials and National Ozone Units control imports and exports of ODS and prevent illegal trade.

7.5. Decision VII/9, paragraph 4, requests the Parties to report on the destination of Annex A and Annex B substances (new, recovered or reclaimed) that are exported. Decision XVII/16 paragraph 4 extended this arrangement to cover the export of all ozone depleting substances (ODS) contained in the annexes of the Protocol. Fill in column 2 on the destination of exports. Please ensure that, if a particular ODS is exported to more than one country, the quantity exported to each country is separately indicated. For example:

7.6. If your country is exporting new ODS, please provide in column 3 the quantity of metric tonnes for the chemical(s) you exported. If you exported any recovered or reclaimed substances, please enter the data in column 4.

7.7. When calculating a Party's consumption, the Montreal Protocol does not include ODSs used as feedstock for the production of other chemicals. ODSs so used are completely transformed in the manufacturing process of new chemicals. On reporting in column 3 the total quantities of new substances exported, the quantities exported to be used as feedstock reported in column 5, should not be deducted. Similarly, the quantities exported for essential and critical uses, reported in column 6, should not be deducted. The Secretariat will make the necessary deductions. With regard to column 7, provision has been made for Parties to indicate against each type of ODS exported for essential or critical uses, the Meeting of the Parties decision that approved the use or, in the case of uses covered by the global laboratory and analytical essential use exemption, the type of laboratory or analytical use. Should the column space be insufficient, further information can be provided in the "comments" box at the end of the form.

7.8. When calculating a Party's consumption of methyl bromide, quantities used for quarantine and preshipment (QPS) applications are exempted. In Data Form 2, quantities of Methyl Bromide exported for quarantine and pre-shipment applications should be entered separately, and not deducted from the quantity exported. The Secretariat will make the necessary deductions.

8. INSTRUCTION III: Data on Production of ODSs (Data Form 3)

8.1. For reporting data on production of substances listed in Annex A (CFCs and Halons), Annex B (other fully halogenated CFCs, methyl chloroform and carbon tetrachloride), Annex C (HCFCs, HBFCs or BCM), or Annex E (methyl bromide), use data form 3.

8.2. In column 2 of data form 3, all substances in Annex A and Annex B, Groups II and III, have been listed. For Annex B, Group I (other fully halogenated CFCs) and Annex C, Group I (HCFCs), only substances which have been reported by Parties in the past are listed. HBFCs have already been phased out by all Parties and hence for HBFCs only one blank row has been provided as a formality. If you are producing controlled substances other than those listed, please use the blank space to report data on these substances, or use additional pages, if necessary.

8.3. In column 3 of data form 3, please give the total production of your country without making any deductions for feedstock, destruction, export for feedstock uses, or any other use. The quantity of production used for feedstock within your country reported in column 4, and for essential and critical uses within your country reported in columns 5, should not be deducted from the total production. Similarly, production for supply to Article 5 Parties filled in the form in column 7 should not be deducted from the total production. Please report exports of ODS to be used for feedstock by the importing country in column 5 of data form 2 (Data on Exports) and not in data form 3 (this form). The Secretariat will make the necessary deductions. With

regard to production for essential or critical uses, provision has been made in column 6 for Parties to indicate against each type of ODS produced for essential or critical uses, the Meeting of the Parties decision that approved the use or, in the case of uses covered by the global laboratory and analytical essential use exemption, the type of laboratory or analytical use. Should the column space be insufficient, further information can be provided in the "comments" box at the end of the form.

8.4. When calculating a Party's consumption, the Montreal Protocol does not include ODS which is used as a feedstock for the production of other chemicals. ODS so used is completely transformed in the manufacturing process of the new chemical. If your country produced ODS for feedstock use within the reporting period, please provide data on the quantity of each ODS produced for feedstock purposes in column 4.

8.5. Producers of Annex A and Annex B substances are allowed to produce additionally, 10 per cent (prior to phase-out) or 15 per cent (after phase-out), of their base-year production to meet the basic domestic needs of Parties operating under Article 5 paragraph 1. If your country produced ODS for this purpose, please enter the amount so produced in column 7 on Data Form 3.

8.6. When calculating a Party's consumption of methyl bromide, quantities produced for quarantine and preshipment (QPS) applications are exempted. In data form 3, the total quantities of methyl bromide produced for quarantine and preshipment applications should be entered separately at the bottom of the form and not deducted from the total quantity produced. The Secretariat will make the necessary deduction.

9. INSTRUCTION IV: Data on Destruction of ODSs (Data Form 4)

9.1. Very few countries have the capacity to destroy ODSs using approved destruction technologies. If your country has destroyed any of the substances listed in Annex A (CFCs and Halons), Annex B (other fully halogenated CFCs, methyl chloroform and carbon tetrachloride), Annex C (HCFCs, HBFCs or BCM), or Annex E (methyl bromide) in the reporting period, please use data form 4.

9.2. The first column ("SUBSTANCES") has been left blank because each Party may destroy different substances. Please list only the names of those substances destroyed in the reporting year.

9.3. When calculating a Party's consumption, the Montreal Protocol does not include the amount of substances destroyed, if destruction occurred through the use of a Protocol-approved technology. If you have destroyed any substance in the reporting year, do not deduct the quantity destroyed reported in column 2 of Data Form 4 from the quantity produced reported in column 3 of Data Form 3. The Secretariat will make the necessary deductions.

10. INSTRUCTION V: Data on Imports from and Exports to Non-Parties (Data Form 5)

10.1. Please use Data Form 5 for reporting data on imports from and exports to non-Parties of substances of Annex A (CFCs and halons), Annex B (Other fully halogenated CFCs, methyl chloroform and carbon tetrachloride), Annex C (HCFCs, HBFCs or BCM) or Annex E (methyl bromide).

10.2. The first column "SUBSTANCES" has been left blank because each Party may import different substances from and/or export different substances to non-Parties. Please fill in only the names of those substances that were imported from and/or exported to non-Parties.

10.3. “Non-Party” means:

- With respect to Annex A substances, all countries that have not ratified the 1987 Montreal Protocol.
- With respect to Annex B substances, all countries that have not ratified the London Amendment.
- With respect to Annexes C and E substances, all countries that have not ratified the Copenhagen Amendment.

10.4. The status of ratification of the 1987 Montreal Protocol and of the London and Copenhagen Amendments to the Montreal Protocol, can be found in a document published by the Secretariat and updated four times a year. This information is also available on the website of the Ozone Secretariat, at: http://ozone.unep.org/Treaties_and_Ratification/index.asp

UNEP/OzL.Pro/Dataform06

11. ILLUSTRATIVE LIST OF MIXTURES CONTAINING ODS*

11.1: Zeotrope Mixtures

N Refrigerant Number (Trade Name) of
Mixture
Composition
Component 1 Component 2 Component 3 Component 4

No.	Refrigeration Number (Trade Name) of Mixture	Components							
		Component1		Component2		Component3		Component4	
1.	R401A (MP39)	HCFC22	53%	HFC152a**	13%	HCFC124	34%		
2.	R401B (MP66)	HCFC22	61%	HFC152A**	11%	HCFC124	28%		
3.	R401C (MP52)	HCFC22	33%	HFC152a**	15%	HCFC124	52%		
4.	R402A (HP80)	HFC125**	60%	HC290**	2%	HCFC22	38%		
5.	R402B (HP81)	HFC125**	38%	HC290**	2%	HCFC22	60%		
6.	R403A (69S)	HC290**	5%	HCFC22	75%	FC218**	20%		
7.	R403B (69L)	HC290**	5%	HCFC22	56%	FC218**	39%		
8.	R405A (G2015)	HCFC22	45%	HFC152a**	7%	HCFC142b	6%	C318	43%
9.	R406A (GHG-12)	HCFC22	55%	HC600a**	4%	HCFC142b	41%		
10.	R408A (FX10)	HFC125**	7%	HFC143a**	46%	HCFC22	47%		
11.	R409A (FX56)	HCFC22	60%	HCFC124	25%	HCFC142b	15%		
12.	R409B (FX57)	HCFC22	65%	HCFC124	25%	HCFC142b	10%		
13.	R411A (G2018A)	HC1270**	2%	HCFC22	88%	HFC152a**	11%		
14.	R411B (G2018B)	HC1270**	3%	HCFC22	94%	HFC152a**	3%		
15.	R412A (TP5R)	HCFC22	70%	FC218**	5%	HCFC142b	25%		
16.	R414B (Hotshot)	HCFC22	50%	HCFC124	39%	HCFC142b	9.5%	HC600a**	1.5%

* For more information about trade names for mixtures and pure substances, visit the "Trade Names of Chemicals Containing Ozone
Depleting Substances and their Alternatives" on the UNEP DTIE OzonAction at http://www.unep.fr/ozonaction/library/tradenames/main.asp . This worldwide database service is designed to help customs officials and
National Ozone Units control imports and exports of ODS and prevent their illegal trade.

11.2: Azeotrope Mixtures

No. Refrigerant Number (Trade Name) of Mixture
Composition
Component 1 Component 2

No.	Refrigeration Number (Trade Name) of Mixture	Composition			
		Component 1		Component 2	
1.	R500	CFC12	74%	HFC152a**	26%
2.	R501	HCFC22	75%	CFC12	25%
3.	R502	HCFC22	49%	CFC115	51%
4.	R503	HFC23**	40%	CFC13	60%
5.	R504	HFC32**	48%	CFC115	52%
6.	R505	CFC12	78%	HCFC31	22%
7.	R506	HCFC31	55%	CFC114	45%
8.	R507A (AZ50)	HFC125**	50%	HFC143a**	50%
9.	R509 (TP5R2)	HCFC22	46%	FC218**	54%

* For more information about trade names for mixtures and pure substances, visit the "Trade Names of Chemicals Containing Ozone
Depleting Substances and their Alternatives" on the UNEP DTIE OzonAction at http://www.unep.fr/ozonaction/library/tradenames/main.asp . This worldwide database service is designed to help customs officials and
National Ozone Units control imports and exports of ODS and prevent their illegal trade.

** Not ozone-depleting substances.

1.3: Unnamed Mixtures

No. Trade Name of Mixture
Composition
Component 1 Component 2 Component 3 Component 4

No.	Trade Name of Mixture	Composition							
		Component 1		Component 2		Component 3		Component 4	
1.	FX20	HFC125**	45%	HCFC22	55%				
2.	FX55	HCFC22	60%	HCFC142b	40%				
3.	D136	HCFC22	50%	HCFC124	47%	HC600a**	3%		
4.	Daikin Blend	HFC23**	2%	HFC32**	28%	HCFC124	70%		
5.	FRIGC	HCFC124	39%	HFC134a**	59%	HC600a**	2%		
6.	Free Zone	HCFC142b	19%	HFC134a**	79%	Lubricant	2%		
7.	GHG-HP	HCFC22	65%	HCFC142b	31%	HC600a**	4%		
8.	GHG-X5	HCFC22	41%	HCFC142b	15%	HFC227ca	40%	HC600a**	4%
9.	NARM-502	HCFC22	90%	HFC152a**	5%	HFC23**	5%		
10.	NASF-S-III*	HCFC22	82%	HCFC123	4.75%	HCFC124	9.5%		3.75%

11.4: Methyl Bromide Mixtures

No. Trade Name of Mixture Composition
Component 1 Component 2

No.	Trade Name of Mixture	Composition			
		Component 1		Component 2	
1	methyl bromide with chloropicrin**	methyl bromide	67%	Chloropicrin	33%
2	methyl bromide with chloropicrin**	methyl bromide	98%	Chloropicrin	2%

* A halon alternative

** Not ozone depleting substances.

Data reporting forms to the Ozone Secretariat - Nairobi

Data Reporting Forms

UNEP/OzL.Pro/Dataform06

Party:_____ Reporting Year:_____

Definitions in section 5 carefully before proceeding to the questionnaire and to refer to them as necessary when completing the data forms.

Questionnaire

1.1. Did your country import CFCs, halons, carbon tetrachloride, methyl chloroform, HCFCs, HBFCs, bromochloromethane, or methyl bromide in the reporting year?

Yes [ ] No [ ]

If No, ignore data form 1 and go to question 1.2. If Yes, please complete data form 1. Please read Instruction I of the document carefully before filling in the form.

1.2. Did your country export or re-export CFCs, halons, carbon tetrachloride, methyl chloroform, HCFCs, HBFCs, bromochloromethane, or methyl bromide in the reporting year?

Yes [ ] No [ ]

If No, ignore data form 2 and go to question 1.3. If Yes, please complete data form 2. Please read Instruction II of the document carefully before filling in the form.

1.3. Did your country produce CFCs, halons, carbon tetrachloride, methyl chloroform, HCFCs, HBFCs, bromochloromethane, or methyl bromide in the reporting year?

Yes [ ] No [ ]

If No, ignore data form 3 and go to question 1.4. If Yes, please complete data form 3. Please read Instruction III of the document carefully before filling in the form.

1.4. Did your country destroy any ODSs in the reporting year?

Yes [ ] No [ ]

If No, ignore data form 4 and go to question 1.5. If Yes, please complete data form 4. Please read Instruction IV of the document carefully before filling in the form.

1.5. Did your country import from or export or re-export to non-Parties in the reporting year?

Yes [ ] No [ ]

If No, ignore data form 5. If Yes, please complete data form 5. Please read Instruction V of the document carefully, and, particularly, the definition of non-Parties before filling in the form.

Name of reporting officer: .....Signature: .....

Designation: .....

Organization: .....

Postal Address:.....

Country: .....

Phone:.....

Fax:.....

E-Mail:.....

Date: .....

Data form 1: Imports

1. Fill in this form only if your country imported CFCs, HCFCs, HBFCs, halons, methyl chloroform, carbon tetrachloride, bromochloromethane, or methyl bromide

2. Please read Instruction I carefully before filling in this form.

Data Form 1

DATA ON IMPORTS

in metric tonnes (**not** ODP tonnes)

Annexes A, B, C and E substances

UNEP/OzL.Pro/Dataform06

Party : _____

Period : January - December 20____

Annex/Group	Substances	Total Quantity Imported for All Uses		Quantity of New Substances Imported as Feedstock	Quantity of New Substances Imported for Exempted Essential and Critical Uses*	
		New	Recovered and Reclaimed		Quantity	Decision / Type of Use*
1	2	3	4	5	6	7
A-Group I	CFC-11 ($CFCl_3$)					
	CFC-12 (CFC_2Cl_2)					
	CFC-113 ($C_2F_3Cl_3$)					
	CFC-114 ($C_2F_4Cl_2$)					
	CFC-115 (C_2F_5Cl)					
A-Group II	HALON 1211 (CF_2BrCl)					
	HALON 1301 (CF_3Br)					
	HALON 2402 ($C_2F_4Br_2$)					
B-Group I	CFC-13 (CF_3Cl)					
B-Group II	carbon tetrachloride (CCl_4)					
B-Group III	methyl chloroform i.e. 1,1,1-					
	trichloroethane ($C_2H_3Cl_3$)					

Comments:

* Against each species of ODS imported for essential or critical uses, please specify the Meeting of the Parties decision that approved the use or, in the case of uses covered by the global laboratory and analytical essential use exemption, the type of laboratory or analytical use. Should the column space be insufficient, further information can be provided in the "comments" box above.

Data Form 1 (continued) UNEP/OzL.Pro/Dataform06

Annex/Group	Substances	Total Quantity Imported for All Uses		Quantity of New Substances Imported as Feedstock	Quantity of New Substances Imported for Exempted Essential and Critical Uses*	
		New	Recovered and Reclaimed		Quantity	Decision / Type of Use*
1	2	3	4	5	6	7
C-Group I	HCFC-21 ($CHFCl_2$)					
	HCFC-22 (CHF_2Cl)					
	HCFC-31 (CH_2FCl)					
	HCFC-123 ($C_2HF_3Cl_2$)					
	HCFC-124 (C_2HF_4Cl)					
	HCFC-133 ($C_2H_2F_3Cl$)					
	HCFC-141b (CH_3CFCl_2)					
	HCFC-142b (CH_3CF_2Cl)					
	HCFC-225 ($C_3HF_5Cl_2$)					
	HCFC-225ca($CF_3CF_2CHCl_2$)					
	HCFC-225cb(CF_2ClCF_2CHClF)					
	Other					
C-Group II	HBFCs					
C-Group III	bromochloromethane(CH_2BrCl)					
E-Group I	methyl bromide (CH_3Br)					
					Quantity of New Methyl Bromide Exported to be used for Quarantine and Preshipment Applications	

Comments:

* Against each species of ODS imported for essential or critical uses, please specify the Meeting of the Parties decision that approved the use or, in the case of uses covered by the global laboratory and analytical essential use exemption, the type of laboratory or analytical use. Should the column space be insufficient, further information can be provided in the “comments” box above.

Data form 2: Exports

1. Fill in this form only if your country exported or re-exported CFCs, HCFCs, HBFCs, halons, methyl chloroform, carbon tetrachloride, bromochloromethane, or methyl bromide

2. Please read Instruction II carefully before filling in this form.

Data Form 2

UNEP/OzL.Pro/Dataform06

DATA ON EXPORTS*

in metric tonnes (**not** ODP tonnes)

Annexes A, B, C and E substances

Party : _____

Period : January - December 20____

Substances	Country of Destination of Exports**	Total Quantity Exported for All Uses		Quantity of New Substances Exported as Feedstock***	Quantity of New Substances Exported for Exempted Essential and Critical Uses****	
		New	Recovered and Reclaimed		Quantity	Decision / Type of Use****
1	2	3	4	5	6	7
methyl bromide (CH_3Br)						
					Quantity of New Methyl Bromide Exported to be used for Quarantine and Preshipment Applications	

Comments:

* Includes re-exports. Ref. decisions IV/14 and XVII/16(4)

** Applicable to all substances, including those contained in mixtures (blends)

*** Do not deduct from total production in column 3 of data form 3 (data on production)

**** Against each species of ODS exported for essential or critical uses, please specify the Meeting of the Parties decision that approved the use or, in the case of uses covered by the global laboratory and analytical essential use exemption, the type of laboratory or analytical use. Should the column space be insufficient, further information can be provided in the "comments" box above.

Data form 3: Production

1. Fill in this form only if your country produced CFCs, HCFCs, HBFCs, halons, methyl chloroform, carbon tetrachloride, bromochloromethane, or methyl bromide

2. Please read Instruction III carefully before filling in this form

Data Form 3

DATA ON PRODUCTION

in metric tonnes (**not** ODP tonnes)

Annexes A, B, C and E substances

UNEP/OzL.Pro/Dataform06

Party : _____

Period : January - December 20____

Annex/Group	Substances	Total Production for All Uses	Production for Exempted Uses within your Country			Production for Supply to Article 5 countries in accordance with Articles 2A-2H and 5
			Production for Feedstocks within your Country	Production for Essential or Critical Uses within your Country*		
1	2	3	4	5	6	7
				Quantity	Decision / Type of Use*	
A-Group I	CFC-11 ($CFCl_3$)					
	CFC-12 (CFC_2Cl_2)					
	CFC-113 ($C_2F_3Cl_3$)					
	CFC-114 ($C_2F_4Cl_2$)					
	CFC-115 (C_2F_5Cl)					
A-Group II	HALON 1211 (CF_2BrCl)					
	HALON 1301 (CF_3Br)					
	HALON 2402 ($C_2F_4Br_2$)					
B-Group I	CFC-13 (CF_3Cl)					
B-Group II	carbon tetrachloride (CCl_4)					
B-Group III	methyl chloroform i.e. 1,1,1-trichloroethane ($C_2H_3Cl_3$)					

Comments:

* Against each species of ODS produced for essential or critical uses, please specify the Meeting of the Parties decision that approved the use or, in the case of uses covered by the global laboratory and analytical essential use exemption, the type of laboratory or analytical use. Should the column space be insufficient, further information can be provided in the "comments" box above.

Data form 4: Quantity of Substances destroyed

1. **Fill in this form only if your country destroyed CFCs, HCFCs, HBFCs, halons, methyl chloroform, carbon tetrachloride, bromochloromethane, or methyl bromide**

2. **Please read Instruction IV carefully before filling in this form**

Data Form 4

UNEP/OzL.Pro/Dataform06

DATA ON QUANTITY OF SUBSTANCES DESTROYED

in metric tonnes (**not** ODP tonnes)

Annexes A, B, C and E substances

Party : _____

Period : January - December 20____

SUBSTANCES 1	QUANTITY DESTROYED 2

Comments:

Data form 5: Data on imports from/and/or exports to Non-parties

1. **Fill in this form only if your country imported or exported CFCs, HCFCs, HBFCs, halons, methyl chloroform, carbon tetrachloride, bromochloromethane, or methyl bromide to Non-Parties**

2. **Please read Instruction V carefully before filling in this form.**

Data Form 5

UNEP/OzL.Pro/Dataform06

DATA ON IMPORTS FROM AND/OR EXPORTS TO NON-PARTIES*

in metric tonnes (**not** ODP tonnnes)

Annexes A, B, C and E substances

Party : -_____

Period : January - December 20____

SUBSTANCES 1	QUANTITY OF IMPORTS FROM NON-PARTIES 2	QUANTITY OF EXPORTS TO NON-PARTIES 3

Comments:

* See definition of "Non-Parties" in Instruction V.

ANNEX 2. Country Programme reporting to the MLF Secretariat—Montreal—with instructions

The completed revised forms should be sent to the Secretariat by e-mail (secretariat@unmfs.org) or, where not feasible, by fax (1 514) 282-0068 no later than 1st of May

REPORTING OF DATA ON PROGRESS IN IMPLEMENTATION OF COUNTRY PROGRAMMES TO THE MULTILATERAL FUND SECRETARIAT

Practical Manual for Reporting

INTRODUCTION

Article 5 countries are required to report on the progress in the implementation of the country programmes (CP) to the Multilateral Fund Secretariat. The CP reporting format was revised in by the Executive Committee as per decision 46/39, and has been in use since 2006 for providing information for ODS consumption to the Multilateral Fund Secretariat.

This manual is developed in order to give Article 5 countries clearer advice and directions for completing these reporting forms, based on feedback received on their use of these forms to report 2005 data. It is a response to the request by the Parties at the 50th Meeting of the Executive Committee in decision 50/4, inter alia:

(d) To urge the Secretariat to provide a means of entering country programme data on its website, together with an explanatory manual on how to complete the new country programme data format to improve consistency in reporting.

This explanatory manual is designed to update the earlier instructions provided to the national focal points for the Montreal Protocol and/or Ozone Units of Article 5 Parties. It is also expected to offer more detailed explanation on each specific section of the form, through a question and answer format intended to reduce the difficulties that countries faced in completing and collecting the information needed.
Other than Article 5 parties, the manual will also be useful to Regional Network Coordinators and Implementing Agencies which provide assistance to National Ozone Units in the implementation of their institutional strengthening activities.

Country Programme Reporting Requirements

This section addresses the general reporting requirements under the current CP annual reporting format, and will illustrate how to fill in the data reporting forms provided by the Fund Secretariat.

Data reports have to be provided to the Fund Secretariat by 1 May of each year, to report annual consumption for the previous year. In many cases, Article 5 NOUs request the assistance of the UNEP CAP Programme or the Implementing Agency responsible for the implementation of the IS project to assist in checking the data and information contained in the forms, prior to submission.

The reporting form is divided into 5 sections:

- Section A: Data on controlled substances
- Section B: Regulatory, Administrative and supportive actions
- Section C: Quantitative Assessment of the Phase-out programme
- Section D: Qualitative Assessment of the implementation of the RMP
- Section E: Comments of bilateral/implementing agency(ies).

The following practical instructions are arranged according to each section, and will guide the user in collecting the information required for accurate and reliable reporting.

Section A: Data on controlled substances

This section requires countries to analyze the import data they have for the previous year, and identify the specific amounts used for each ODS category. The reason for requiring use data by sector is that the Multilateral Fund aims at assisting the phase-out of the use of ODS in Article 5 Parties. Information on use allows the analysis of trends in ODS consumption. This enables the Fund to tailor its assistance to the best way possible for cost effective phase-out of ODS. Such sector-specific data will also be useful to Article 5 countries for developing their phase-out strategies. This form is called the Data Sheet.

1. Countries are required to submit data for which year?

Data is required for the previous calendar year preceding the 1 May deadline. For example, in May 2006, a country shall submit data for January to December 2005.

2. When are countries required to provide these data?

Data reports have to be provided to the Fund Secretariat annually after the approval of the Country Programme, at the 1 May deadline required by the Fund Secretariat. Similar to the requirements under Article 7 of the Montreal Protocol, data for the baseline years for each controlled substance must also be indicated, i.e. data for 1995, 1996 and 1997 for Annex A substances, 1998, 1999, and 2000 for Annex B substances and 1995, 1996, 1997, 1998, for the Annex E substance.

3. Countries are to report on which controlled substances?

Data reporting is required for all controlled ozone depleting substances (ODS). As no use of HBFCs (Annex C II) is known and use of other fully halogenated CFCs (Annex B I) has been negligible in developing countries, the data should therefore focus on Annexes A, CI and E controlled ODS.

4. It is indicated above that this particular section of the report should specifically report on the amounts of ODS used for each ODS sub-sector. How is this different from consumption under Article 7?

- The Montreal Protocol has a definition for consumption, contained under Article 1 which specifies its meaning to be "production plus imports minus exports of controlled substances". For most Article 5 parties except for a few that are ODS producers, consumption therefore equals only ODS imports, which is the data required under Article 7 reporting.
- The CP report on the other hand requires information on the actual amount used for each substance, and also the breakdown of the ODS use by sector. Therefore, each controlled substance should be broken down into its specific use such as for aerosols, foam, fire fighting, refrigeration, solvent applications, process agent applications, MDI, laboratory uses, tobacco fluffing and methyl bromide. The form has a separate column for each of these specific uses that require information.
- The refrigeration sector is further divided into two categories; manufacturing and servicing. Manufacturing will refer to the specific assembly of original equipment, while servicing will consider the amounts used for maintenance, repair and checking already existing refrigeration and cooling equipment. This second category shall include those substances used also for topping up mobile and domestic air conditioners and large chillers.
- Methyl bromide use is also divided into two categories, quarantine and pre-shipment uses (QPS) and non-quarantine and pre-shipment uses. In most cases, methyl bromide used for QPS is often calculated based on the number of phytosanitary certificates issued by the plant, health and phytosanitary authority of each country, and the amount of methyl bromide used therein.
- All use per sub-sector should be added up to get a TOTAL for each substance.

5. Why are Article 5 countries also required to submit data on imports, exports and production, when this is already required under Article 7 for submission to the Ozone Secretariat?

- The columns for import, export and production have been included to facilitate cross-checking of data reported to both the Fund Secretariat and the Ozone Secretariat and where necessary identify and address any differences in the data with the country concerned.
- The import, export and production data reported to the Fund Secretariat should, to the extent possible, be consistent with the data reported to the Ozone Secretariat. Where there is a discrepancy, the country should provide a clarification in a separate note attached to the report explaining this difference.
- Please note that only a few countries (Argentina, Brazil, China, India, Democratic
- People's Republic of Korea, Mexico, Romania, and Venezuela) have production facilities or use ODS as feedstock and a limited number of countries export ODS. For most countries, therefore, the volume of imports reported to the Fund Secretariat should equal the amount of imports of new substances reported to the Ozone Secretariat. In the case of methyl bromide, the reported figure would be less the amount used for QPS.

6. Should the data in the TOTAL column of the Consumption per sector be equal to the amount indicated in Imports column?

These two columns should not necessarily match, since use figures for the year do not necessarily equate to the total amount imported for each substance for the same year. For instance, a country may register a use in the refrigeration servicing sector yet not import any CFCs. The amount used could have been from the previous year's imports.
However, in some cases this could be the same number, in the event that what was imported for the year was also consumed in the various use sectors.

7. How should the web-based data forms be completed?

The data forms have been designed in view of making the reporting of data to the Executive Committee on the progress of implementation of Country Programmes easier. It has also been designed to facilitate the update of the data at any time, for instance following implementation or completion of projects that have impacts on the ODS consumption of the country or any time an Ozone Office conducts an ODS survey. For many countries it should facilitate reporting of data to the Ozone Secretariat as required under Article 7 of the Montreal Protocol. The data form for reporting ODS consumption data is available in Microsoft Excel 5. This should be used for any given year that the report is made, unless otherwise revised through a decision of the Executive Committee.

Below are some useful tips to note when data is being analysed and the form is being completed:

- Data entry is needed only in unshaded cells.
- Please enter data only for the specific substance and its corresponding use. For example, halon use should only be under firefighting, and not other sectors. Note that the cells where data is not required have been shaded.
- Reported data shall not include quantities used as feedstock for producing other chemicals or quantities destroyed. However for countries using ODS as process agents, the quantities used should be included in the actual use (consumption) figures.
- Where the data involves a blend of two or more substances, the quantities of the individual components of controlled substances must be indicated separately. For example, R-502 is a blend made up of 51.2% CFC-115 and 48.8% HCFC-22. The amounts of each substance should be calculated based on the percentages from the composition, and the total quantity should be indicated in the appropriate row for each (i.e. CFC-115 and HCFC-22).
- Data should be provided in metric tons (tonnes) only and not in ODP tonnes.

- Conversion of the data to ODP will be done by the Fund Secretariat.
- Quantities contained in end-products either imported or exported e.g. mobile automobile air conditioners (MACs), domestic refrigerators and freezers etc. should not be included in the country's import, export or consumption figures.
- Methyl bromide data should differentiate between controlled uses of methyl bromide (non-QPS) and quantities used for QPS and feedstock applications. These amounts should be reported in the relevant column.

8. How is baseline data calculated for each substance?

(a) Annex A Substances:
For Annex A controlled substances baseline data is calculated as the average of the data for the years 1995, 1996 and 1997. If you have not reported on Annex A substances for any of these years, please complete and submit a data form for the missing year.

(b) Annex B Substances:
For Annex B controlled substances baseline data is calculated as the average of the data for 1998, 1999 and 2000. If the data for 1998 or 1999 for Annex B substances has not been reported, a data form should be completed and submitted for the missing year.

(c) Annex E Substances:
For the Annex E controlled substance (methyl bromide) baseline data is calculated as the average of the data for 1995, 1996, 1997 and 1998. As in the other cases, if the data for any of the four years has not been reported a data form should be completed for the missing year.

TIP: Countries should be careful though, to check and double check the figures to make sure that there is no discrepancy. Inconsistent figures could cause countries to face problems in the funding assistance they could avail of under the Multilateral Fund.

Section B: Regulatory, Administrative and Supportive Actions

9. What information is required for this form?

This section simply requires countries to identify the institutional measures in the form of regulations, legislation and policy and other actions taken by the country to support phase-out. This form is referred to as Adm-B. It is divided into two categories, and the information requires a YES or NO response and a date. The categories are:
1. Regulations
2. Enforcement of import controls

10. How shall I fill in this form?

Regulations

- Part 1 (Regulations) of column 1 lists some standard ozone regulations that are required for sustained ODS phase-out. If your country has enacted any of the regulations listed in this table, please mark Y (Yes) on the second column, and specify the date when these were enforced. If not, please write N (No), and leave the next column blank.
- If your country has additional regulations which are not part of this standard list, please fill in the row that specifies "Other regulations", and write down the title of this regulation, and date when this came into force.

Enforcement of Import Controls

- Part 2 (Enforcement of import controls) of column 1 requires specific information on the status of the enforcement of import controls in your country. Rows marked 2.1 and 2.2 again require a Y and N response, mark column 2 accordingly with the appropriate date this was in force on column 3.
- In row 2.3 (number of instances of unauthorized imports stopped), please indicate a specific number. If there were no cases of illegal imports for the year, leave this blank.

"Unauthorised imports" would mean those that have come into the country without the proper documentation (license, permit) from the authorities.

- In row 2.4 (estimated quantity and origin of unauthorized imports), please write the estimated amount of the illegal import, in metric tonnes in column 2, and the country of origin in column 3. Please add more rows as appropriate.

TYPE OF ACTION / LEGISLATION		Ongoing (Yes/No)	Since when (Date)
1.	**REGULATIONS:**		

Section C: Quantitative Assessment of the Phase-out progress

This form called Adm-C, requires countries to report amounts in metric tonnes of ODS imported and exported, the price of alternatives and numbers of people trained in training programmes and quantitative information that can measure the success of the recovery, recycling and end-user programmes of the country. It aims to gather brief but useful information on the status of the phase-out progress of the country.

Some sections of the form are reproduced below. The additional column shows a number that refers to explanatory text (below) for how part of the form can be completed.

C. Quantitative assessment of the phase-out programme

Description	Quantity/Unit	Explanatory Note reference
Import quotas/licenses issued (metric tonnes)		(1)
Export quotas/licenses issued (metric tonnes)		(2)
Average estimated retail price of ODS/substitutes (US$/kg)		(3)
Training programmes		(4)
Number of trainers for customs		
Number of customs officers trained		
Number of trainers for technicians		
Number of technicians trained		
Number of technicians certified		
Recovery/recycling/reused (metric tonnes where applicable)		(5)
Estimated CFC-11 recovered with equipment funded by Multilateral Fund		
Estimated CFC-11 reused with equipment funded by Multilateral Fund		
Estimated CFC-12 recovered with equipment funded by Multilateral Fund		
Estimated CFC-12 reused with equipment funded by Multilateral Fund		
Number of funded recovery machines in operation		
Number of funded recycling machines in operation		
Number of funded end-users converted		
Number of funded end-users retrofitted		

1. The information required here is whether the country has established an import quota for each ODS for the year being reported. If a quota was established, please specify the annual amount in metric tonnes. After which information on how much (in metric tonnes) of this quota was reflected in actual licenses issued for the year must also be written in the same column. For example, if your country has set an annual quota of 300 metric tonnes for CFC-12, and issued licenses during the reporting period to cover 295 metric tonnes for actual importation, the table should be filled in as follows:

	Quantity/Unit
Import quotas//Licenses Issued (metric tonnes)	
CFC-12	300 MT/295 MT

2. Information required under this is the same as above, except this time, it is for exports. The amount in metric tonnes of the export quota, and the actual amount issued in the form of licenses granted to exporters must be indicated. See example:

	Quantity/Unit
Annual Export quotas/Actual licenses issued as per quota (metric tonnes)	
CFC-12	200 MT/200 MT

3. Under this item, the average estimated retail prices of the listed alternatives have to be provided, in US dollars per kilogramme. Most suppliers of alternatives will have a price list, and this can be collected, and the average price calculated. If the amount available to the NOU is in local currency, please use official rates of foreign exchange when converting the prices to US dollars. It will also be helpful if the pricing gathered can be compared to existing global prices of CFCs to observe price differences.

4. Each RMP has a consequent training programme both for customs officers and refrigeration service technicians. This section refers specifically to the number of people trained under these programmes. Please indicate only the number of people trained within the calendar year being reported. The number of technicians certified would refer to those who have been accredited based on a regulated certification scheme (see Adm-B). If your country has no technician certification scheme in place, please leave this blank or write "not applicable".

Please note that this section does not refer to the number of certificates of attendance issued under the training programmes.

5. This item refers to the progress achieved in the implementation of the recovery/recycling programmes, and the end user programmes under the RMP or the NPP. The following information is required:

- The amount in metric tonnes, of CFC-11 and CFC-12 that have been recovered and reused with equipment provided under the Multilateral Fund ONLY. This information can be taken from a survey of the beneficiaries of the recovery and recycling machines in the country.
- The number of recovery and recycling machines that are OPERATIONAL (i.e. being used by the beneficiaries regularly, and have a corresponding amount of CFCs recycled or recovered). This should be compared with the original number of machines approved for the project.
- The number of end users funded under the Multilateral Fund that have converted.
- The number of end users funded under the Multilateral Fund that have retrofitted.

Section D: Qualitative Assessment of the implementation of the RMP

This section is to be filled in under the form Adm-D. The form is already structured in a question and answer format, and is easy to complete. Some tips to consider when filling in more substantive information (i.e. explanations are required for a NO response, for example) are listed below:

1. Milestones could include the following
   - date of approval of the legislation
   - date of Phase 1 training (Train the Trainers) for both customs and refrigeration service technicians
   - date of Phase 2 training (national training)
   - date of delivery of training equipment.

2. Problems in the implementation of the import licensing system could include any of the following:
   - lack of awareness of importers about the licensing system
   - insufficient political support for full implementation of this regulatory system
   - inadequate training of customs officers resulting in poor detection of illegal imports
   - very little cooperation between the regulatory agency (NOU) and the customs department in the country.

3. Some issues that could be potential reasons for problems in the full implementation of the recovery and recycling scheme include:
   - Machines are not fully operational due to high energy costs
   - Lack of training in the use of the R and R machines
   - Insufficient number of machines to respond to the need in the country
   - Recovery and recycling do not make good business sense as alternatives and even CFCs still cost less than recovered substances.

4. Under "additional measures that are needed and planned to assist in the implementation of the RMP and to achieve compliance", Article 5 parties should specify actions that they feel are required for them to meet compliance faster. This question is important, as it allows the countries to identify the gaps in implementation, list these down and suggest proposals for how this can be met. Actions listed here can be divided between those that the country can do on its own, and those that require further assistance.

Section E: Comments of the bilateral/implementing agency(ies)

This section is very important. It allows the NOU to discuss with the bilateral or implementing agency the problems faced in the implementation of the RMP, and enables both parties to look at effective solutions to expedite its implementation and thus phase-out.

Countries should send the completed forms to the relevant bilateral or implementing agency, and request them to provide comments on the overall implementation of the RMP.

Bilateral and implementing agencies are also urged to provide substantive and specific comments with regard to the RMP implementation, citing successes, delays, problems and issues, and providing alternatives for faster implementation. This section allows a one stop review of the RMP, and gives opportunities for greater cooperation between the country and the agency.

FURTHER INFORMATION

- For further information contact the Multilateral Fund Secretariat at secretariat@unmfs.org or by telephone or fax to the Chief Officer, Multilateral Fund Secretariat at Tel: (514) 282-1122 or Fax: (514) 282-0068.
- A Handbook on Data Reporting Under the Montreal Protocol prepared by UNEP Division of Technology, Industry and Economics (DTIE) OzonAction Programme in cooperation with the Ozone Secretariat, Multilateral Fund Secretariat and others is available for reference. This can be obtained from UNEP DTIE, Tel: (33) 1-4437-1450; Fax: (33) 1-4437-1474; e-mail unepie@unep.fr. It may also be obtained from its web site at http://www.unepie.org/ozonaction.html.

DATA FORMS

- The data forms are posted on the Fund Secretariat web site at http://www.multilateralfund.org in on the main page "Country Programme and Institutional Strengthening" and can be downloaded. The completed data forms should be submitted to the Fund Secretariat.
- Data may be submitted in one of the two ways listed below:
  1. Through email or fax. After completing all data forms, this can be sent through email or through fax, with a cover letter from the responsible authority in the country.
  2. Through the online web-based format. Using a user name and password, each NOU can now fill in the data online, and submit the whole report online. Please click on the following link: http://209.167.130.87:8008/

II. INSTRUCTIONS FOR ENTERING DATA IN THE ELECTRONIC FORMAT

WORKSHEET TITLE	REQUIRED ACTION
Baseline Data – Groups of Substances (1995-2000)	1. Enter Country field in the cell "XXXX" 2. Enter year field in the cell "YYYY". 3. Enter data in the cells for Annex A Group I (CFCs) Annex A Group II (Halons), Annex B and Annex E (methyl bromide) only. It is not required to enter any data in the cells for Annex C (HCFCs). Ignore those cells.
Data on Controlled Substances	1. Enter Country field in the cell "XXXX" 2. Enter year field in the cell "YYYY" 3. Enter applicable data in the applicable cells. All the Annexes should be considered. These represent the current data for all the controlled substances used in the country in the respective year.
Sheet Adm B Regulatory, administrative and supportive actions	1. Enter Country field in the cell "XXXX" 2. Enter "y" for "yes" and "n" for "No" in "ongoing" column (3) and date mm-dd-yy in "since when" column (4)
Sheet Adm C Quantitative assessment of the phase-out programme	1. Enter Country field in the cell "XXXX" 2. Enter the quantity per unit in metric tonnes
Sheet Adm D and E Qualitative assessment of the operation of RMP and Comment by bilateral/implementing agency(ies)	1. Double click on form and type in information directly on the form

Note: • Cells in which data is required are blank
• Cells which are shaded do not require data.

REVISED** COUNTRY PROGRAMME REPORT FORMAT

COUNTRY: XXXX

YEAR: January to December of the year YYYY

A. Data on Controlled Substances (in Metric Tonnes)

NOTE: Data entry is required in UNSHADED cells only

Substance[1]	Use by Sector: Aerosol	Foam	Fire Fighting	Refrigeration: Manu-facturing	Refrigeration: Servi-cing	Solvent	Process agent	MDI	Lab Use	Methyl bromide*: QPS	Methyl bromide*: Non-QPS	Tobacco fluffing	TOTAL	Import	Export[2]	Produc-tion[2]	Remarks (e.g., stockpiling if use is different from consumption)
Annex A, Group I																	
CFC-11													0,00				
CFC-12													0,00				
CFC-113													0,00				
CFC-114													0,00				
CFC-115													0,00				
Sub-Total	0,00	0,00		0,00	0,00	0,00	0,00	0,00	0,00			0,00	0,00	0,00	0,00	0,00	
Annex A, Group II																	
Halon 1211													0,00				
Halon 1301													0,00				
Halon 2402													0,00				
Sub-Total			0,00										0,00	0,00	0,00	0,00	
Annex B, Group I																	
CFC-13													0,00				

Sub-Total					0,00								0,00	0,00	0,00	0,00	
Annex B, Group II																	
Carbon tetrachloride													0,00				
Sub-Total						0,00	0,00		0,00				0,00	0,00	0,00	0,00	
Annex B, Group III																	
Methyl chloroform													0,00				
Sub-Total						0,00	0,00		0,00				0,00	0,00	0,00	0,00	
Annex C, Group I																	
HCFC-22													0,00				
HCFC-141b													0,00				
HCFC-142b													0,00				
HCFC-123													0,00				
Other[3]													0,00				
Sub-Total		0,00	0,00	0,00	0,00								0,00	0,00	0,00	0,00	
Annex E																	
Methyl bromide													0,00				
Sub-Total										0,00	0,00		0,00	0,00	0,00	0,00	
TOTAL	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	

* QPS = Quarantine and pre-shipment; Non-QPS = Non-quarantine and pre-shipment.

1 Where the data involves a blend of two or more substances, the quantities of individual components of controlled substances must be indicated separately,

e.g.: For R502 consisting of 51.2% CFC-115 and 48.8% HCFC-22, indicate the total quantity of each controlled substance (i.e.., CFC-115 and HCFC-22) in the appropriate row.

2 Where applicable.

3 Indicate relevant controlled substances.

*revised April 2008 by the Fund Secretariat in accordance with decision 54/4(f)

B. Regulatory, administrative and supportive actions

TYPE OF ACTION / LEGISLATION		Yes/No	Since when (Date)	Remarks
1.	**REGULATIONS:**			
1.1	***Establishing general guidelines to control import (production and export) of ODSs***			
1.1.1	ODS import/export licensing or permit system in place for import of bulk ODSs			
1.1.1.1	ODS import licensing system in place for import of bulk ODSs			
1.1.1.2	ODS export licensing system in place for export of bulk ODSs			
1.1.1.3	Permit System in place for import of bulk ODSs			
1.1.1.4	Permit System in place for export of bulk ODSs			
1.1.2	Regulatory procedures for ODS data collection and reporting in place			
1.1.2.1	Regulatory procedures for ODS data collection in place			
1.1.2.2	Regulatory procedures for ODS data reporting in place			
1.1.3	Requiring permits for import or sale of bulk ODSs			
1.1.3.1	Requiring permits for import of bulk ODSs			
1.1.3.2	Requiring permits for sale of bulk ODSs			
1.1.4	Quota system in place for import of bulk ODSs			
1,2	***Banning import or sale of bulk quantities of:***			
1.2.1	Banning import of bulk quantities of:			
1.2.1.1	CFCs			
1.2.1.2	Halons			
1.2.1.3	CTC			
1.2.1.4	TCA			
1.2.1.5	Methyl Bromide			
1.2.2	Banning sale of bulk quantities of:			
1.2.2.1	CFCs			
1.2.2.2	Halons			
1.2.2.3	CTC			
1.2.2.4	TCA			
1.2.2.5	Methyl Bromide			
1,3	***Banning import or sale of:***			
1.3.1	Banning import of:			

1.3.1.1	Used domestic refrigerators using CFC			
1.3.1.2	Used freezers using CFC			
1.3.1.3	MAC systems using CFC			
1.3.1.4	Air conditioners using CFC			
1.3.1.5	Chillers using CFC			
1.3.1.6	CFC-containing aerosols except for metered dose inhalers			
1.3.1.7	Use of CFC in production of some or all types of foam			
1.3.2	Banning sale of:			
1.3.2.1	Used domestic refrigerators using CFC			
1.3.2.2	Used freezers using CFC			
1.3.2.3	MAC systems using CFC			
1.3.2.4	Air conditioners using CFC			
1.3.2.5	Chillers using CFC			
1.3.2.6	CFC-containing aerosols except for metered dose inhalers			
1.3.2.7	Use of CFC in production of some or all types of foam			
1,4	***Training and certification programmes***			
1.4.1	Training programmes:			
1.4.1.1	Requiring training of customs officers			
1.4.1.2	Requiring training of refrigeration service technicians			
1.4.1.3	Requiring certification of refrigeration service technicians			
1.4.1.4	System for monitoring and evaluation of training programmes			
1.4.2	Certification programmes:			
1.4.2.1	Requiring training of customs officers			
1.4.2.2	Requiring training of refrigeration service technicians			
1.4.2.3	Requiring certification of refrigeration service technicians			
1.4.2.4	System for monitoring and evaluation of training programmes			
1,5	***Recovery and recycling of CFCs***			
1.5.1	Mandatory recovery and recycling of CFCs			
1.5.2	Monitoring system for reporting on recovered and recycled CFCs			
1,6	*Other regulations (please specify)*			
1.6.1				
1.6.2				
2.	**ENFORCEMENT OF ODS IMPORT CONTROLS**			
2,1	Registration of ODS importers (Yes/No)			
2,2	A shared database on import quotas and actual imports between ozone office and customs (Yes/No)			
2,3	Number of instances of unauthorized ODS imports stopped			
2,4	Estimated quantity (in metric tonnes) and origin of unauthorized ODS imports (country)			

C – Quantitative Assessment of the Phase-out Programme

Description	Quantity/Unit	Remarks
Import quotas/licenses issued (metric tonnes)		
CFC-11		
CFC-12		
CFC-113		
CFC-114		
CFC-115		
Halon 1211		
Halon 1301		
Carbon tetrachloride		
Methyl chloroform		
Methyl bromide		
HCFC-22		
HCFC-141b		
HCFC-142b		
Export quotas/licenses issued (metric tonnes)		
CFC-11		
CFC-12		
CFC-113		
CFC-114		
CFC-115		
Halon 1211		
Halon 1301		
Carbon tetrachloride		
Methyl chloroform		
Methyl bromide		
HCFC-22		
HCFC-141b		
HCFC-142b		
Average estimated retail price of ODS/substitutes (USD/kg)		
CFC-11		
CFC-12		
CFC-113		
CFC-114		
CFC-115		
R-502		
HCFC-22		
HCFC-141b		
HCFC-142b		
HFC-134a		
R-404A		
R-507A		
R-410A		
R-407C		
HFC-245fa		
HFC-356mfc		
HFC-227ea		
Isobutane (HC-600a)		
Propane (HC-290)		
Pentane		
Cyclopentane		

Methyl formate		
MDI (for production of foam)		
Training programmes		
Number of trainers for customs		
Number of customs officers trained		
Number of trainers for technicians		
Number of technicians trained		
Number of technicians certified		
Recovery/recycling/reused (metric tonnes where applicable)		
Estimated CFC-11 recovered with equipment funded by Multilateral Fund		
Total CFC-11 recovered		
Estimated CFC-11 reused with equipment funded by Multilateral Fund		
Total CFC-11 reused		
Estimated CFC-12 recovered with equipment funded by Multilateral Fund		
Total CFC-12 recovered		
Estimated CFC-12 reused with equipment funded by Multilateral Fund		
Total CFC-12 reused		
Number of funded recovery machines in operation		
Number of funded recovery machines not in operation		
Number of funded recycling machines in operation		
Number of funded recycling machines not in operation		
Number of funded end-users converted		
Number of funded end-users retrofitted		

D. Qualitative assessment of the operation of RMP/NPP/TPMP

1. Is the RMP/NPP/TPMP and its components (recovery and recycling programmes, training of technicians and customs, and legislation) proceeding as scheduled:

   ☐ Yes
   ☐ No
   ☐ N/A RMP/NPP/TPMP already completed
   If not, please specify milestones and completion dates with delays, and explain reasons for the delay and measures taken to overcome the problems: _____
   _____

2. The ODS import licensing scheme functions:

   ☐ Very well
   ☐ Satisfactorily
   ☐ Not so well
   Please specify problems encountered: _____
   _____

3. The CFC recovery and recycling programme functions:

   ☐ Very well
   ☐ Satisfactorily
   ☐ Not so well
   Please specify problems encountered: _____
   _____

4. The RMP/NPP/TPMP will enable the Government to achieve:

   ☐ the 50% CFC reduction target in 2005
   ☐ the 85% CFC reduction target in 2007
   ☐ the complete phase-out of CFC in 2010

5. Additional measures that are needed and planned to assist in the implementation of the RMP/NPP/TPMP and to achieve compliance:

_____
_____

E. Comment by bilateral/implementing agency(ies)

_____
_____

ANNEX 3. List of responsible government ministries in the countries where projects are currently being implemented by UNIDO

BIH - Bosnia and Herzegovina	Ministry of Foreign Trade and Economic Relations
EGY - Arab Republic of Egypt	Cabinet of Ministers, Egyptian Environmental Affairs Agency
LIB - Libyan Arab Jamahiriya	Environment General Authority
MCD - The former Yugoslav Republic of Macedonia	Ministry of Environment and Physical Planning
MEX - Mexico	Ministry of the Environment and Natural Resources
MNE - Montenegro	Ministry of Tourism and Environmental Protection
OMA - The Sultanate of Oman	Ministry of Environmental and Climate Affairs
QAT - The State of Qatar	Ministry of Municipal Affairs and Agriculture
ROM - Romania	Ministry of the Environment and Water Management
SYR - Syrian Arab Republic	Ministry of Local Administration and the Environment
YUG - Republic of Serbia	Ministry of Environmental Protection

ANNEX 4. Terminal report for institutional strengthening

Terminal report for institutional-strengthening projects
(Sections 1-18 to be completed by the country concerned prior to sending the report to the implementing agency for its comments in Section 19)

1. Country:

2. National implementing agency / ozone unit:

3. Implementing agency:

4. List of previous project phases:

Phase	Duration	MLF funding (approved)	MLF funding (disbursed)

5. Indicate the main project objective and the detailed objectives as defined in the action plan for the phase being reported on:

6. Describe the results achieved by category and compare them with the results foreseen in the action plan:

Year	Activities	Results expected	Results achieved
Year 1			
Year 2			
Describe additional results not foreseen in the action plan:			

7. Breakdown of approved costs, actual expenditures and government funding as pertinent:

	Approved	Spent	Government funding	Other sources
(a) Equipment component				
(b) Professional staff				
(c) Support staff				
(d) Consultants				
(e) Operational costs				
(f) Funds for public awareness				
(g) Contingency				
(h) Others including in kind (specify)				
Total amount				

8. Personnel employed:

Category and numbers	Functional titles/expertise	Main tasks	Time period
Professional staff			
Support staff			
Consultants			

9. Were resources (staff, budget, equipment) used for activities in addition to those approved in the action plan? If so, please specify:

_____

_____

_____

_____

_____

_____

10. Describe the role and position of the national ozone unit within the national administration, the way its work is supervised and its access to senior decision-makers; this may include the cooperation with steering committees, advisory groups or inter-ministerial bodies:

_____

_____

_____

_____

_____

_____

11. Describe how the action plan for the institutional-strengthening project has been integrated into the national authorities' planning process:

12. Title and date of reports submitted:

To whom:	Title of report	Submission (year/quarter)	
		Planned	Actual
1. Government departments			
2. Reports to Multilateral Fund Secretariat			
3. Reports to Ozone Secretariat			
4. Implementing agency			
5. Other implementing agency/agencies			
6. Bilateral donor(s)			
7. Others			

13. Were adequate advice and/or technical support received from:

	Yes	No	Please specify
(a) Implementing agency			
(b) Other implementing agency/agencies			
(c) Bilateral donor(s)			
(d) Government departments			
(e) National steering committee			
(f) Others (please specify)			

14. Support received from the regional network (network coordinator/manager and network members) and input provided to the network:

Support received from the regional network	Input provided to the network

15. Was the national ozone unit subject to an audit by the beneficiary government or by the implementing agency? If yes, what were the results?

16. Lessons learnt (What were the main successes and difficulties and what can be learnt from them for improving effectiveness and impact during the next phase?):

17. Terminal report prepared by:

Name of officer responsible for preparing the terminal report:	
Title:	
Organization/agency/ministry:	
Date:	

18. Government authority with oversight responsibility for the institutional-strengthening project/national ozone unit:

Name of officer responsible:	
Title:	
Organization/agency/ministry:	
Date:	
Comments:	

19. Implementing agency:

Name of officer responsible:	
Title:	
Organization/agency/ministry:	
Date:	
Comments:	

ANNEX 5. Proposal for renewal of institutional-strengthening project

PROJECT PROPOSAL - EXTENSION

COUNTRY:	
PROJECT TITLE:	Establishment of an ozone unit – extension/phase II (III, IV)
NATIONAL COORDINATING BODY:	Ministry of ……
IMPLEMENTING AGENCY:	UNIDO
SECTORS COVERED:	All sectors
ODS CONSUMPTION:	Metric tonnes (ODP tonnes) in the previous year
PROJECT DURATION:	Two years
PROJECT IMPACT:	Improved capacity of government structures responsible for ODS phase-out; Contribution of the country to the protection of the ozone layer;
CONTRIBUTION OF THE GOVERNMENT:	US**$**
REQUESTED MULTILATERAL FUND CONTRIBUTION:	US$

INTRODUCTION

Who prepared the country programme and when?
When was the national ozone unit established?
Is the ozone unit the national focal point?
What is the role of the national ozone unit?

Status of implementation of activities
Summary of the activities of the ozone unit during the period (dd/mm/yy – dd/mm/yy)

- Progress in project implementation and reduction of ODSs
- Approved and ongoing projects
- Legislative framework
- Consumption of ODSs (consumption of ODSs by sector and by substance)
- Training and public awareness
- Experts/consultants
- Inventory of non-expendable equipment

Name of the equipment	Date of purchase:	Present condition	Price (USD)	Serial number	Remarks
Total			USD		

Project rationale
Why is financial assistance being requested from the Multilateral Fund for an extension of two years?

Activities and scope of the project
List the activities that the ozone unit is going to develop and execute (for example):

- Monitoring and collection of data for ODS consumption, import and export.
- Control of imports (import permits for substances that deplete the ozone layer and that are controlled under the Montreal Protocol, import permits for used equipment containing ozone-depleting substances).
- Accurate and timely annual reporting for consumption of ozone-depleting substances to the UNEP Ozone Secretariat and to the Multilateral Fund Secretariat of the Montreal Protocol.
- Submission of reports to UNIDO on progress in implementation of the institutional strengthening project.
- Initiation, preparation and introduction of legislative and administrative measures supporting the phase-out of ozone-depleting substances.
- Supervision of the overall ODS phase-out activities and of progress in the country.
- Co-ordination of the provision of technical assistance to the enterprises.
- Provision of liaison for government agencies involved in ODS phase-out.
- Assessments for the industries and enterprises affected by ODS phase-out.
- Training and public awareness activities [Establishment of a large-scale information programme for public awareness regarding the importance of ozone-layer preservation (publishing of brochures, booklets, leaflets, posters, CDs, videos, movies, etc.); dissemination of information on TV and radio and in the newspapers; organization of round tables, seminars, workshops and meetings; education of the people in the country].
- Formulation and implementation of the projects approved (list the projects that are going to be formulated and/or implemented).

- Communication with the Montreal Protocol Executive Committee, the Multilateral Fund and the Ozone Secretariat and UNIDO as the implementing agency of the institutional-strengthening project.
- Participation in meetings (Open-Ended Working Group of the Parties, Meeting of the Parties, Regional Ozone Network).

Project budget

Table 1. A breakdown of the budget provided by the Government

		Year 1	Year 2	Total
1.	**Recurrent expenses**			
	Professionals			
	Support staff			
	Sub-total			
2.	**Operating costs**			
	Office space			
	Public utilities			
	Maintenance			
	Domestic communication costs			
	Sub-total			
3.	**Contingencies** (10%)			
	Grand total			

Table 2. A breakdown of the budget requested from the Multilateral Fund

		Year 1	Year 2	Total
1.	**Recurrent expenses**			
	Staff incentives			
	Consultants			
	Sub-total			
2.	**Operating costs**			
	Information programme			
	Travel costs			
	Telecommunication			
	Office supplies			
	Sub-total			
3.	**Miscellaneous and contingencies** (10%)			
4.	**GRAND TOTAL**			

ANNEX 6. Plan of action

Extension of institutional-strengthening projects
Plan of action
(Sections 1-16 to be completed by the country concerned prior to sending the plan to the implementing agency for its comments in Section 17)

1. Country:

2. National implementing agency / ozone unit

3. Implementing agency:

4. Period of extension: from (month/year) to (month/year)
(Based on the guidelines approved)

5. Amount of MLF funding requested:

6. Status of ratification:

Amendment	Ratification date	or projected date
London Amendment		
Copenhagen Amendment		
Montreal Amendment		

7. Consumption by group of substances and by sector. This is identical to the annual report that the ozone units submit to the Fund Secretariat on the progress of implementation of country programmes. Please attach the form with data for the most recent year, or indicate when you sent it to the Secretariat if this has already been done.

8. Indicate the main project objective for the next phase in relation to the country's compliance with the provisions of the Montreal Protocol:

9. Objectives, planned activities each year and results expected:

Year	Objectives	Planned activities	Results expected
Year 1			
Year 2			

10. Describe the modalities by which regular access of the ozone unit to senior decision-makers will be assured. Such modalities may include steering committees, advisory groups or inter-ministerial bodies:

11. Describe how the action plan for the institutional-strengthening project will be integrated into the national authorities' planning process:

12. Planned project cost:

	Planned project cost	MLF funding	Counterpart funding	Other sources
(a) Equipment component				
(b) Professional staff				
(c) Support staff				
(d) Consultants				
(e) Operational costs				
(f) Funds for public awareness				
(g) Contingencies				
(h) Others, including in kind (specify)				
Total amount				

13. Personnel required:

Category and numbers	Functional titles/expertise	Main tasks	Time period
Professional staff			
Support staff			
Consultants			

14. Titles and schedule of reports to be submitted:

To whom:	Title of report	Planned submission (year/quarter)
1. Government departments		
2. Reports to Multilateral Fund Secretariat		
3. Reports to Ozone Secretariat		
4. Implementing agency		
5. Other implementing agency/agencies)		
6. Bilateral donor(s)		
7. Others		

15. Action plan prepared by:

Name of officer responsible for preparing the action plan:	
Title:	
Organization/agency/ministry:	
Date:	

16. Government endorsement:

Action plan authorized by:	
Title:	
Supervising organization/agency/ministry:	
Date:	

17. Submission of action plan:

Name of implementing agency:	
Name of project officer:	
Date:	
Comments of implementing agency:	

ANNEX 7. IOM format

UNIDO ONUDI

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
ORGANISATION DES NATIONS UNIES POUR LE DEVELOPPEMENT INDUSTRIEL

INTEROFFICE MEMORANDUM MEMORANDUM INTERIEUR

DATE:

TO: [Name and title of the procurement officer]

FROM: [Name and functional title of the project manager]

SUBJECT: MP/xxx/xx/xxx - Renewal of institutional strengthening project, phase XXXX

The above-mentioned project was approved by the ..th Meeting of the Executive Committee on ……. It has been agreed with the ozone unit to implement this project under a subcontracting arrangement. The terms of reference for a two-year contract are attached hereto.

Furthermore, please find attached the following:
- The detailed budget breakdown for …… and the counterpart's written acceptance thereof,
- An e-mail of ……., indicating the staff of the ozone unit,
- The work programme of the national ozone unit for …….

The project document was recently signed by all the parties concerned, and a copy is attached. The revised PAD, based on the recent clearance of the budget breakdown, is also attached.

The justification for the award to be made to the ozone unit is the following and, in principle, applies to all projects of this type:

The Executive Committee, at its 5th meeting, in November 1991, recognized the need to provide limited funding from the Multilateral Fund for institutional strengthening of Article 5 countries, since this may be an essential element in achieving the objectives of the Fund and the Montreal Protocol. The main objective of such support should be to provide necessary resources to an eligible country to enable it to strengthen a mechanism within the country to facilitate expeditious implementation of projects for speedy and effective phase-out of the controlled substances in the country, as well as to ensure effective liaison between the country on the one hand, and the Executive Committee, the Fund Secretariat, and the implementing agencies on the other hand.

Three elements of institutional support were approved for funding, namely office equipment (to provide basic infrastructure for information processing and dissemination, as well as to improve the communication facilities), personnel costs and operational costs. (Reference: Guidelines for Renewal of Institutional Strengthening Projects, document UNEP/OzL.Pro/ExCom19/52).

The support for institutional strengthening is available exclusively to the ozone protection units that are also the direct counterparts (beneficiaries) in the institutional-strengthening projects, as well as in any other Montreal Protocol-related activities, such as the investment projects carried out by the implementing agencies in the countries. In this connection, it has to be noted that any ozone unit, and also the ozone unit in……, plays a key role, not only in identifying projects for execution by the implementing agencies, but also during implementation, by facilitating the delivery of inputs. The ozone unit is also a co-signing party of the working agreement between UNIDO and the recipient enterprise. Furthermore, the destruction of the old equipment (ODS-based equipment) is another issue that requires close follow-up by the ozone unit. The role of the ozone unit has been further enhanced through increased involvement in the implementation of national phase-out plans, refrigerant management plans, and sectoral phase-out plans. In addition, the ozone units act as intermediary between the government and the implementing agencies in case of problems regarding such matters as customs duties and taxes; they also represent the country vis-à-vis the Multilateral Fund and its Executive Committee. The ozone units' major tasks relate to public awareness activities concerning ozone depletion and the monitoring of ODS consumption.

This generally means that the aforementioned type of subcontract between UNIDO and an ozone unit can only be issued to the counterpart (ozone unit). As provided in the project document, the ozone unit for …… is the beneficiary of an institutional-strengthening project, and is therefore entitled to be awarded the subcontract.

Kindly issue a subcontract to the ozone unit of …… as soon as possible.

Thank you for your usual cooperation.

ANNEX 8. Financial report formats

CASH ADVANCE STATEMENT

Statement of cash advance as at----------

And cash requirements for the half-year of----------

Name of the supporting organization----------

Project No. ----------

Project title ----------

I. Cash statement

1. Opening cash balance as at: ----------/US$----------
2. Add: cash advances received: ----------

Date	Amount

---	

3. Total cash advanced to date: US$----------
4. Less: total cumulative expenditures incurred: US$----------
5. Closing cash balance as at ----------/US$----------

II. Cash requirements forecast

6. Estimated disbursements for half-year ending: ----------/US$----------
7. Estimated disbursements for the following half-year (lead time) ending: ----------/US$----------
8. Less: closing balance (see item 5, above): US$----------
9. Total cash requirements for the half-year: ----------/US$----------

Prepared by ----------

Request approved by: ----------
(Authorized official)

FORMAT OF HALF-YEARLY PROJECT EXPENDITURE REPORTS FOR SUPPORTING ORGANIZATIONS

Half-yearly project statement of allocation (budget), expenditure and balance covering the period from..... to .....

Project No. .....

Supporting organization .....

Project title .....

Project period .....

Expenditure by object of expenditure in accordance with the project budget	Project budget allocation (Year....)		Expenditure incurred				Unspent balance of budget allocation for year.....	
			For the half-year		Cumulative this year			
	m/m	Amount	m/m	Amount	m/m	Amount	m/m	Amount
(Use objects of expenditure in accordance with the project budget and subcontract)								
GRAND TOTAL								

Signed (by duly authorized official of supporting organization):

.....

ANNEX 9. Special financial report

Half-yearly project statement of allocation, expenditure and balance covering the period from _____ to _____

Project No: Supporting organization:

Project title:

Project started: Expected completion:

Allocation			Expenditures incurred		Balances
Obligation No.	BL	(1) Obligation amount (US$)	For the period covered (US$)	(2) Cumulative this year (US$)	(3) = (1-2) Obligation unspent balance (US$)
Grand total					

Signed (by duly authorized official of supporting organization):

ANNEX 10/1. Covering letter to the MLF Secretariat

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
P.O. BOX 300
A-1400 VIENNA, AUSTRIA

PLEASE DELIVER IMMEDIATELY TO ADDRESSEE

FACSIMILE TRANSMISSION

IN CASE OF INCOMPLETE TRANSMISSION, PLEASE CALL THE CONTACT PERSON BY PHONE, FAX OR E-MAIL LISTED BELOW

To: Ms. Maria Nolan
Chief Officer
Multilateral Fund
Montreal, Canada
Fax: (1514) 282 0068

Copy:

Drafted by: **Cleared by: G. Anestis**
Multilateral Environmental Agreements Branch
Programme Development and Technical Cooperation Division

Contact Person: **E-mail address**

Our reference **Tel: +43-1-26026-**
Fax: +43-1-26026-6804
+43-1-2692669

Date: (dd/mm/yy) **Page 1 of** **Page(s)**

Subject: (COUNTRY): Renewal of institutional-strengthening project - phase (XXXX)

Dear Ms. Nolan,

We have received from the ozone unit in (name of the country) a request for renewal of institutional-strengthening support, phase (XXXX). The renewal phase is included in the (year) UNIDO business plan and corresponding work programme.

The relevant documentation will be sent to the Multilateral Fund Secretariat by electronic mail and will consist of the following:

1. Terminal report on phase (previous);
2. Project concept for phase (XXXX);
3. Plan of action for the extension of IS support, phase (XXXX);
4. Milestones for phase (XXXX);
5. Progress in implementation of the country programme for (year);
6. Executive summary, a summary of the terminal report and a summary of the action plan.

You will find below a statement of the financial status of the ongoing IS project XXX/XXX/XX/INS/XXX, based on financial figures as at (dd/mm/yy):

Component	Disbursements for (year 1) US$	Disbursements for (year 2) US$	Obligations for (year 1 + year 2) US$
Administrative assistance			
Local travel			
National experts (incentives)			
Subcontract			
Equipment			
Sundries			
Total			

GRAND TOTAL (disbursements and obligations): US$
Funds approved: US$

Funds available to date (uncommitted): US$

We are herewith submitting the request for renewal of the institutional-strengthening project of (country) for approval by the **(XXXX) Executive Committee Meeting.**

Yours sincerely,

[Name and functional title]

ANNEX 10/2. Executive summary from the Executive Committee for (country): Renewal of institutional strengthening, Phase XXXX

Executive summary

The Executive Committee has reviewed the report presented with the institutional-strengthening project renewal request for (country) and notes with appreciation that (country) reported data to the Ozone Secretariat, as at the end of (year) that was lower than its average CFC compliance baseline. The Executive Committee also notes that, within the framework of the institutional-strengthening project, (country) has achieved in (year) a remarkable phase-out of its ODS consumption vis-à-vis (year). Specifically, the lion's share is attributable to
(a), … (b).

The Executive Committee expects that the ongoing regulatory efforts will be further enhanced by the implementation of ……

The Executive Committee acknowledges with appreciation the ratification of
……

The Executive Committee strongly supports the efforts of (country) to reduce its consumption of CFCs. The Executive Committee is therefore hopeful that, in the next two years, (country) will continue with the implementation of its country programme and the other activities with outstanding success in the further reduction of current CFC consumption levels.

Terminal report

The programme of activities relating to the Montreal Protocol forms part of (country's) commitment to phase-out the consumption of ODSs in a controlled and cost-effective manner. The national ozone unit is part of the …… and the ozone unit is the focal point for Montreal Protocol activities. The national ozone unit mainly coordinates the whole Montreal Protocol programme in the country and lays the groundwork for legislative and regulatory measures to be adopted by the responsible government authorities. The major legislative measures achieved in the framework of phase (XXXX) are:
(a), (b), and (c)

Consumption in (year) (CFC, halons, CCl4, MeBr, HCFC - in metric tonnes):

Action plan

The national ozone unit is the nucleus of the ODS management structure and was established as a specialized body within the Ministry of ……..… to ensure the execution and follow-up of the ODS phase-out strategy as laid down in the action plan of the country programme. Regular access of the ozone unit to senior decision-makers is assured by the integration of the ozone unit's action plan into the government system through inter-ministerial and steering committee meetings. The national ozone unit is responsible for monitoring the ODS import and consumption data.
The country is planning a number of measures to achieve ……
In the framework of phase-out projects, it is planned to ……

ANNEX 10/3. Milestones (EXCEL document)

Milestone	Month	Results			Disbursements in US$ as at:	Remarks
		Achieved	Not achieved	Delay (months)		
Legal Arrangements						
Grant agreement submitted to beneficiary	2 months after approval by Executive Committee					
Grant agreement signature	3 months after approval by ExCom					
Bids requested	3 months (TOR for subcontract) after approval by ExCom					
Waiver of bidding	4 months after approval by ExCom					
Contract(s) awarded	1st half-yearly contract: 4 months after approval by ExCom					
Initial stages of project implementation begins						
Start-up of project activities at country level as stated by Article 5 Party concerned	4 months after approval by ExCom (1st contract)					
Intermediate goals achieved						
Reporting by beneficiary	On half-yearly basis (1st report 8 months after approval by ExCom)					
Equipment delivery/upgrading						
Recruitment of national expert	4 months after Grant agreement signature					
Project completion and follow-up						
Principal activity completed by I.A.						
Submission of completion report						

ANNEX 11. Project Document

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

PROJECT DOCUMENT

Section 1
Project Identification

1.1	**Title of subprogramme:**	Environment, energy and industry	
1.2	**Title of project:**	Extension of institutional strengthening, Phase XXX	
1.3	**Project number:**	MP/XXX/XX/XXX	
1.4	**Geographical scope:**	Country	
1.5	**Implementation:**	Ministry of ……., ozone unit, in cooperation with UNIDO	
1.6	**Duration of the project:**	Two years	Approved: (month/year) Completion: (month/year)
1.7	**Cost of the project:**	(expressed in US$)	(%)
	Fund for implementation by UNIDO (excluding 7.5% UNIDO support cost = US$ ……)		
	Total cost of the project		**100 %**

Signatures:

For the Government of (country)

For the United Nations Industrial Development Organization

[Name and title of delegated official]
Programme Development and Technical Cooperation Division

SECTION 2

Background and project contribution to overall subprogramme implementation:

2.1 Background

The Montreal Protocol on Substances that Deplete the Ozone Layer came into force in January 1989 and (XXX) countries have ratified the Protocol as of (month/year). The Montreal Protocol fixes a timetable for phasing out a number of ozone-depleting substances (ODSs) and requires Parties to report on their production and consumption of such substances. The Montreal Protocol furthermore provides for a Financial Mechanism with a Multilateral Fund governed by an Executive Committee consisting of seven members from developed countries and seven members from developing countries. Developing countries that are Parties to the Protocol (Article 5 countries) are eligible for financial and technical support through the Multilateral Fund in order to assist them to fulfil their obligations under the Protocol.

The preparation of a country programme is generally the first step towards obtaining assistance from the Multilateral Fund; the programme expresses the commitment by the Government to take appropriate actions to ensure compliance with the Protocol. The country programme contains an analysis of the current situation with regard to the production and consumption of ODSs, together with a statement of strategy and a plan of action to be implemented by the Government. The approval of the country programme is a precondition for financial assistance from the Fund for investment projects and institutional-strengthening projects.

At its (XXX) Meeting in (month/year), the Executive Committee of the Multilateral Fund under the Montreal Protocol (hereinafter referred to as the Executive Committee) approved the extension of institutional strengthening, phase (XXXX), for (country), based on UNIDO's (year) work programme.

The level of funding for institutional strengthening is determined on a case-by-case basis, based on each request from an Article 5 Party. This is because of the differences in the volumes of consumption of the controlled substances in Article 5 countries, as well as in the countries' levels of socio-economic development and their institutional capacities for meeting their obligations under the Montreal Protocol.

Funding is initially made available for a three-year period, subject to review, with the possibility of renewal for further two-year periods on the basis of the performance of the country programme, the continuing needs of the country and the policy of the Executive Committee.

Funding is normally made available for:

- Capital expenditure, including office equipment, such as a photocopier, a computer, a fax machine, etc., and
- Recurrent expenditures, including salary incentives, local travel, information dissemination, communication costs, etc.

The Government has requested the United Nations Industrial Development Organization (UNIDO) to be the implementing agency, and the present project document constitutes the legal instrument between the Government and UNIDO for the implementation of this project.

2.2 Project contribution to overall subprogramme implementation

The need to strengthen institutional capacity in Article 5 countries has been recognized by the Executive Committee as a critical factor in achieving successful phase-out of ODSs in these countries.

SECTION 3

Needs and results

3.1 Needs

The need for provision of financial support for institutional strengthening in Article 5 countries is underscored by the following factors:

- There is a need to raise awareness of the phenomenon of ozone depletion and its potential impacts and of the complexity of the fast changing nature of technical and scientific issues involved in protecting the ozone layer.
- There is a need to use ODS-substitute technology.
- There is a need to strengthen institutional infrastructure for dealing with ODS phase-out and technology transfer.
- There is a need to establish commitment by countries to earlier phase-out schedules than the one provided for under the Protocol (UNEP/OzL.Pro/ExCom/7/20).

The Government aims to meet the compliance targets set by the Montreal Protocol.

3.2 Results

Institutional strengthening in Article 5 countries is designed to provide the capacity for:

- expeditious phase-out of ODSs.
- Increased coordination, promotion and monitoring of the country's activities for the phasing out of ODSs.
- Improved systems for collection, analysis and dissemination of information on issues involved in protection of the ozone layer.
- Enhanced facilitation of the exchange of information with other Parties and organs established by the Protocol.
- Improved liaison between the country and the relevant organs under the Protocol.
- Improved systems for reporting on national data on ODS consumption.

SECTION 4

Outputs, activities, work plans and timetable, budget and follow-up

4.1 Outputs

(i) Ozone unit established and functioning effectively;

(ii) ODS-alternative technologies adopted;

(iii) A reliable system established to collect and monitor data on imports, exports and (where relevant) production of ozone-depleting substances;

(iv) Annual reports produced on the consumption and use of ODSs;

(v) Timely phase-out of national ODS consumption.

4.2 Activities, work plan and timetable

The ozone unit, which was established/supported under phase I of this project, will be responsible for the following activities carried out under the phase-II project:

- Co-ordination and management of the activities of the implementing and bilateral assistance agencies.
- Provision of day-to-day technical assistance to public and private counterparts, including small and medium-sized enterprises, end-users and customs offices.
- Regular updating of the inventory and the database, including development of an electronic database.
- Provision of assistance to, and co-ordination of, the phase-out project applications.
- Organization, implementation and monitoring of training sessions for local authorities in connection with emission control.
- Development of a public awareness programme.
- Promotion and improvement of existing subsidiary legislation.
- Liaison between the Government and the responsible international organizations (Multilateral Fund Secretariat, implementing agencies, etc.).
- Exchange of information with other Parties.
- Submission of an annual report on consumption data to the Ozone Secretariat of UNEP, as per the reporting requirements contained in Article 7 of the Montreal Protocol (a copy of the report is to be provided to UNIDO).
- Submission of an annual report on progress on implementation of the country programme to the Multilateral Fund Secretariat and UNIDO, as per the decision adopted at the 13th Meeting of the Executive Committee (see UNEP/OZL.Pro/ExCom/13/46, para. 193 following the format annexed to the same document (Annex II).
- Submission to UNIDO of a progress report on the implementation of the institutional-strengthening project, in accordance with the objectives of this project.

The work plan and timetable are attached as Annex 1.

4.3 Budget

The budget for the UNIDO component (Multilateral Fund contribution) is attached as Annex II and amounts to US$……

4.4 Cash advance requirements

An adequate cash advance will be made by UNIDO to the Ministry of ……./ ozone unit, which will open an account for this purpose, after signature of this project document by both parties. The first advance will be based on expenditures expected to be incurred by the Ministry of ……./OU during the first six months following the UNIDO contribution.

Subsequent advances are to be made on a half-yearly basis, subject to:

(i) Confirmation by the Ministry of ……./OU, at least one month before the payment is due, that the expected rate of expenditure and actual cash position necessitate the payment, including a reasonable advance to cover six months' lead time for the next remittance. This confirmation and advance request will be submitted to UNIDO using the format given in Appendix 1;

(ii) Submission of:

1. Timely and satisfactory financial reports showing expenditures incurred for the past half year, using the format given in Appendix 2;
2. Timely and satisfactory progress reports on project implementation, as defined in Section 6.1.

4.5 Follow-up action

During the lifetime of the project, UNIDO will provide technical guidance, information and feedback to the Government. UNIDO will review the progress being made under the project and provide substantive comments and recommendations on the progress and expenditure reports submitted. UNIDO will provide facilitation and ensure that the Government fulfils its data-reporting obligations under Article 7 of the Montreal Protocol.

SECTION 5

Institutional framework and evaluation

5.1 Institutional framework

The Ministry of ……/OU is directly responsible for the implementation of this project and will provide:

- Office space, furniture, basic equipment, etc.
- Public awareness activities
- Other miscellaneous requirements (operational costs)
- Salaries for professional and support staff.

The provisions made by the Ministry of ……/OU are estimated to amount to US$ …….

UNIDO will provide:

(i) The financial support from the Multilateral Fund, stated in Section 1;

(ii) Guidance to the Ministry of ……/OU on the implementation of activities that are complex and require external assistance; and a response to their specific requirements;

(iii) A review of project progress reports.

5.2 Correspondence

All correspondence regarding this project should be addressed to:

In (country):

with copies to those mentioned below:

At UNIDO (on substantive and technical matters):

Mr. S. M. Si Ahmed
Director
Montreal Protocol Branch
Vienna International Centre
P. O. Box 300
1400 Vienna, Austria
Telephone: (43-1) 26026-3782
Telefax: (43-1) 26026-6804

5.3 Evaluation

An internal desk evaluation will be carried out by the Ministry of …… at the end of the project. Further evaluation may be carried out as part of the overall project evaluation process of the Multilateral Fund and/or within the evaluation process of UNIDO.

SECTION 6

Monitoring and reporting; other terms and conditions

6.1. Project progress reports

The Ministry of ……/OU shall submit to UNIDO the following reports within thirty (30) days of the end of each half year, i.e. as of 30 June and 31 December:

- An operations progress report on this project using the format given in Appendix 3.
- A progress report on project implementation and reduction of ODSs, using the format given in Appendix 4.
- A half-yearly progress report using the format given in Appendix 5, as applicable.
- An inventory of non-expendable equipment purchased (as defined in section 6.4.2), indicating description, date of purchase, cost and present condition of each item, Appendix 5.
- As of 31 December of each year, a copy of the report on ODS consumption data provided to the Ozone Secretariat for the previous year (defined in section 4.2).
- As of 30 June of each year, a copy of the report on progress on country programme implementation sent to the Multilateral Fund Secretariat (defined in section 4.2).

Please note that the reporting performed under this project does not fulfil the country's reporting requirements under the Montreal Protocol.

6.2 Terminal report

The Ministry of ……/OU shall submit to UNIDO the following reports within sixty (60) days of completion of this project:

- A terminal operations report on the project, using the formats provided in Appendices 3 and 4, amended to cover the full period.
- A terminal report for institutional-strengthening projects, using the format provided in Appendix 6 (UNEP/OzL.Pro/ExCom/30/7).
- A final inventory of all non-expendable equipment purchased, as defined in section 6.4.2.

Appendix 7 provides definitions of key terms (based on United Nations terminology).

Annex IV provides a table of milestones in accordance with Executive Committee Decision 23/7.

6.3 Financial reports

A. Project expenditure accounts

1. The Ministry of ……/OU will report half-yearly and provide cumulative annual details of project expenditure to UNIDO in line with the budget objects of expenditure, as set out in the project budget (Annex II), as at 30 June and 31 December, in accordance with the standard format given in Appendix 2 to this project.

All expenditure reports will be dispatched to UNIDO within thirty (30) days of the end of the period they refer to, certified by a duly authorized officer of the Ministry of ……/OU.

2. The expenditure accounts as at 31 December, certified by a duly authorized official, should be dispatched to UNIDO within 30 days, as for other half years.

In addition, UNIDO requires that the end-of-year expenditure accounts shall be certified by, or supported by, an opinion of the (country) auditors, which shall be dispatched to UNIDO by 31 March. In particular, the auditors should be asked to report whether in their opinion:

(a) Proper books of account and records have been maintained;

(b) All project expenditures are supported by vouchers and adequate documentation;

(c) Expenditures have been incurred in accordance with the activities outlined in the project document.

3. Within 90 days of the completion of the project, the Ministry of ……/OU will supply UNIDO with a final statement of account in the same format as for the half-yearly statement certified by, or supported by, an opinion of the (country) auditors. If requested, the Ministry of …….. /OU shall facilitate an audit (by the United Nations Board of Auditors and/or the Audit Service) of the accounts of the project, if so required.

4. Any portion of cash advances remaining unspent or uncommitted by the Ministry of ……/OU on completion of the project will be reimbursed to UNIDO within one month of the presentation of the final statement of accounts. In the event of any delay in such reimbursement, the Ministry of ……/OU will be financially responsible for any adverse movement in the exchange rates.

B. Cash advance accounts

A statement and request for advances of cash to be provided by UNIDO shall be submitted by the Ministry of ……./OU half-yearly in the format shown in Appendix 1, as at 30 June and 31 December.

6.3.1. Reporting to the Executive Committee

Reports on measures taken and problems encountered shall be directed to the Secretariat of the Multilateral Fund and/or UNIDO as and when required by the Executive Committee.

6.4 Other terms and conditions

6.4.1 General terms and conditions

(a) The ozone unit (OU) is given a clear mandate and responsibility to carry out work in order to prepare, coordinate and, where relevant, implement the Government's activities to meet its commitments under the Montreal Protocol.

(b) Annual work plans for the OU are prepared and integrated into the authority's internal planning process.

(c) The OU is given the necessary access to decision-makers and enforcement agencies in the country.

(d) The ozone unit's position, capacities and continuity of officers, resources and lines of command within the authority in charge of ozone issues are such that the OU can carry out its tasks satisfactorily.

(e) A specified high-level officer or a post within the authority is given overall responsibility for supervising the work of the OU and ensuring that action taken is adequate to meet commitments under the Protocol.

(f) Necessary support structures, such as steering committees or advisory groups, are established, involving other authorities, the private sector and non-governmental organizations as appropriate.

(g) Financial support is provided for other activities in the country programme.

(h) The Ministry of ……/OU and UNIDO shall collaborate fully to ensure that the objectives/results of this project are accomplished. To that end, the Parties shall exchange views with regard to matters relating to the project and provide each other with all such information as can reasonably be requested with regard to matters in question.

(i) The Ministry of ……/OU shall secure the timely import and clearance through customs of goods covered by this project. The funds allocated shall not be used for payment of any import duty, tax, or national or other public charge in connection with equipment covered by this project document, whether imported or purchased within (country).

(j) Personnel and financial resources and equipment provided by the Multilateral Fund shall be fully allocated to the task of eliminating ODS consumption and production and made available to the ozone unit (OU).

6.4.2 Non-expendable equipment

The Ministry of ……/OU will maintain records of non-expendable equipment (items costing US$ 1,500 or more and having a serviceable lifetime of five years or more, as well as items of attraction, such as pocket calculators, cameras, etc. costing US$ 500 or more) purchased with UNIDO funds (or with Trust Fund or counterpart contribution funds administered by UNIDO), and will submit an inventory of all such equipment to UNIDO twice a year, as per section 6.1 above, indicating description, date of purchase, cost and present condition of each item. Non-expendable equipment purchased with funds administered by UNIDO will remain the property of UNIDO until its disposal is authorized by UNIDO, in consultation with the Ministry of ……/OU. The Ministry of ……/OU shall be responsible for any loss of or damage to equipment purchased with UNIDO funds. The proceeds from sale of equipment (duly authorized by UNIDO) shall be credited to the accounts of the UNIDO budget (Annex II) or of the counterpart contribution (Annex III).

The ozone unit (OU) shall attach to the terminal report, as per section 6.2, a final inventory of all non-expendable equipment purchased under this project, indicating the following:

Date of purchase, description, serial number, quantity, cost, location and present condition, together with a proposal for the disposal of said equipment.

6.4.3 Responsibilities for cost overruns

Any cost overrun, defined as expenditure in excess of the amount budgeted at the sub-component level of the project budget, shall be met by the organization responsible for authorizing the expenditure, unless written agreement has been received in advance from UNIDO. In cases where UNIDO has indicated its agreement to a cost overrun by transfer of funds from one sub-component to another, a revision to the project document will be issued by UNIDO.

6.4.4 Rate of exchange and responsibility for losses in exchange

UNIDO will provide all cash advances in US dollars and the Ministry of ……/OU will maintain project accounts and report all expenditure correspondingly in US dollars. Any funds converted to and expended in another currency will be reported in US dollars, using the actual rate of exchange prevalent at the time of converting the US dollar cash advance received, or part of it, into another currency.

The Ministry of ……/OU will be solely responsible for any loss in exchange and may not charge any such losses towards project costs. Should the Ministry of ……/OU wish to safeguard project funds provided by UNIDO against losses in exchange, it may, inter alia, instruct UNIDO in writing to transfer cash advances to

an appropriate US dollar account or, alternatively, negotiate an arrangement with the local UNDP office for this purpose and inform UNIDO accordingly in writing.

6.4.5 Claims by third parties against UNIDO

The Government shall be responsible for dealing with claims which may be brought by third parties against UNIDO, its officials and the persons performing services on their behalf and shall hold them harmless in respect of claims and liabilities arising from operations under this project document, including those carried out by the Ozone Unit. The foregoing provision shall not apply where the Government and UNIDO have agreed that a claim or liability arises from gross negligence or willful misconduct of the above-mentioned individuals.

ANNEX I. Work plan and timetable

Activities and scope of project (see also the timetable)

The Ministry of ……/OU shall attain the above-mentioned objectives by undertaking several activities, comprising the following:

- Continuing to support the Government to meet the compliance targets set by the Montreal Protocol.
- Developing and regularly updating a register of ODS importers and consumers, including maintenance of a database.
- Collecting data and information from the customs department, bureau of statistics, importers and consumers of ODSs.
- Advising the Government on restrictions on imports and/or other methods for taxing ODSs and equipment containing them, if necessary.
- Monitoring the progress and effectiveness of projects identified in the country programme, funded by the Multilateral Fund, and implemented by the implementing agencies.
- Coordinating and implementing the remaining phase-out project applications.
- Analysing and reporting periodically to the Government on the trends in imports and consumption and the effectiveness of the action plan.
- Submitting annual reports on ODS consumption to the Ozone Secretariat of UNEP, as per the requirements of Article 7 of the Montreal Protocol.
- Submitting annual progress reports on implementation of the country programme to the Multilateral Fund Secretariat.
- Submitting project progress reports to implementing agencies.
- Facilitating the exchange of information with other Party countries.

Project rationale

The Ministry of ……/OU is envisaged to be the nucleus of the ODS management structure. In carrying out its assignments described above, it will need substantial human and material resources. Therefore, financial assistance is being requested from the Multilateral Fund so that the provisions of the Montreal Protocol can be complied with. It is planned to continue institutional-strengthening support to the Ozone Unit as soon as the Multilateral Fund's Executive Committee has provided the sums required for this funding.

A budget for a two-year period has been proposed to cover the capital expenditure and operating costs of the ozone unit. It should be noted that the Government of (country) will contribute significantly to the project costs.

Public awareness and standardization of an ozone logo

In (country), a large-scale information programme designed to increase public awareness regarding the importance of ozone-layer preservation is of the utmost importance. This information campaign will include the dissemination of information concerning the progress of ODS phase-out, both worldwide and in (country), as well as the regular publication of newsletters and information leaflets on, among other things, progress made at the enterprise level with respect to ODS phase-out.

Furthermore, as the ODS country programme for (country) and the action plan that is part of it is being implemented, each stage will include awareness measures consisting of:

- The dissemination of information on steps taken. This activity will be undertaken in close collaboration between the government agencies, industries and NGOs involved in ODS phase-out, using the media and other means of information dissemination.
- An inventory and analysis of the difficulties encountered, with the aim of finding solutions and informing the parties concerned.
- Promotion of the production of goods that do not contain ODSs and implementation of a system of compulsory identification of goods with the "DOES NOT HARM THE OZONE LAYER" logo, thereby involving consumers in the protection of the ozone layer.

Market control

The Government of (country) will implement a set of administrative instruments, economic instruments and additional measures to support ODS phase-out. These instruments and measures are described in detail in the action plan that is part of the ODS country programme for (country).

The following are some of the instruments and measures contemplated:

- Sector-specific bans on ODS consumption and bans on the import of selected ODS-based goods corresponding to the domestic sector-specific bans.
- Introduction of ODS production licences.
- Bans on the re-export of ODSs.
- Improvement of customs sub-classifications and ODS import licences;
- Non-compliance measures.
- Economic support for ODS phase-out activities.
- Monitoring of arrangements.
- Introduction of an accreditation system (certificates) for refrigeration servicing technicians.

Monitoring arrangements

The Ministry of ……/OU will be responsible for developing and implementing an operational system for effectively monitoring ODS phase-out in accordance with the action plan.

The following monitoring arrangements will be implemented, possibly with the assistance of specialized ODS consultants from (country):

- Reporting regularly on ODS consumption (types and amounts), broken down by user sectors.
- Reporting regularly on progress in the implementation of specific transformation processes and other projects identified in the action plan.
- Collecting information that will become available from customs offices in relation to the import of ODSs and products containing ODSs.
- Making independent and regular inspections and assessments in order to confirm reports and review and establish financial and technical support needs for those sectors, industries and enterprises affected by ODS phase-out.

General information

The budget amounts approved by the Multilateral Fund provide for the components listed below. For details, see Annex II: Budget approved by the Multilateral Fund.

Component 1. Project personnel component covering the ozone unit staff

Job description: Coordinator

Degree in management. Minimum of five years of direct work experience within a government agency in the area of programme development and project implementation and monitoring under the Montreal Protocol, with knowledge of the Montreal Protocol Handbook and the Montreal Protocol/Multilateral Fund policies. Should have demonstrated the ability to advise on data, substantive and policy issues, as well as to determine training and capacity-building requirements under the Montreal Protocol. Familiarity with the operational procedures of UN implementing agencies. Should have good organizational skills, strong initiative, be a team player and be able to work under pressure and without constant supervision. His/her main responsibilities will include, but not be limited to, the following:

- Coordination of overall project implementation
- Preparation of policies, regulations and agreements
- Provision of advice on alternatives to ministries involved in Montreal Protocol implementation, and of guidance to local authorities
- Liaison with the Multilateral Fund Secretariat and participation in meetings of the Open-Ended Working Group of the Parties and Meetings of the Parties
- Exchange of information with ODS officers in other countries.

Job description: Technical consultants

To be defined at a later stage, as per requirements

Job description: Support staff (secretary)

The tasks of the secretary will consist mainly of office management and data entry.

Component 2. Conduct of workshops as part of the information programme
Component 3. Provision of office equipment
Component 4. Miscellaneous, to cover communication costs and operational maintenance equipment
Component 5. Contingency provision for unforeseen expenses that might be incurred during project implementation, including higher prices of equipment specified.

The amounts foreseen for personnel, an information programme, expendable equipment for small office items, such as supplies, software, etc., and miscellaneous will be provided in the form of either a subcontract under which the Ministry of ……/OU will provide the services, or through non-UNDP payment requests/authorizations via UNDP (country). The incentives to staff will be provided based on the job descriptions.

Annex II: Budget for the UNIDO component (Multilateral Fund contribution)

Annex III: Breakdown of budget provided by (country)

Annex IV: Timetable (indicative)

Project activities	Year 1				Year 2			
	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4
Inventory of CFC users	x	x	x	x	x	x	x	x
Help to CFC users in preparing project applications	x	x	x	x	x	x	x	x
Reporting on CFC consumption				x				x
Dissemination of information to all CFC users		x	x	x	x	x	x	x
Preparation of reports to the Ozone Secretariat				x				x
Preparation of reports to the Multilateral Fund Secretariat		x				x		
Organizing of a workshop for end-users			x			x		
Follow-up to project implementation			x	x	x	x	x	x
Drafting of an act banning CFCs, halons and methyl bromide				x				
Drafting of an act on tax on CFC use				x				
Participation in *ad hoc* committee meetings		x		x		x		x
Progress reports		x		x		x		x
Final report								x

Appendix 1

CASH ADVANCE STATEMENT

Statement of cash advance as at----------

And cash requirements for the half-year of----------

Name of the supporting organization----------

Project No. ----------

Project title----------

I. Cash statement

1. Opening cash balance as at: (date)----------US$----------
2. Add: cash advances received:

Date	Amount

3. Total cash advanced to date: US$----------
4. Less: total cumulative expenditures incurred: US$----------
5. Closing cash balance as at (date) ---------- US$----------

II. Cash requirements forecast

6. Estimated disbursements for half-year ending (date)---------- US$----------
7. Estimated disbursements for the following half-year (lead time) ending: (date)---------- US$----------
8. Less: closing balance (see item 5, above): US$----------
9. Total cash requirements for the half-year: US$----------

Prepared by ----------

Request approved by:----------
(Authorized official)

Appendix 2

FORMAT OF HALF-YEARLY PROJECT EXPENDITURE REPORTS FOR SUPPORTING ORGANIZATIONS

Half-yearly project statement of allocation (budget), expenditure and balance covering the period
---------- to ----------
Project No .---------- Supporting organization ----------
Project title ----------
Project period ----------

Expenditure by object of expenditure in accordance with the project budget	Project budget allocation (year....)		Expenditure incurred				Unspent balance of budget allocation for year.....	
			For the half-year		Cumulative this year			
	m/m	Amount	m/m	Amount	m/m	Amount	m/m	Amount
(Use objects of expenditure in accordance with the project budget and subcontract)								
GRAND TOTAL								

Signed: by duly authorized official of supporting organization):

.....

Appendix 3

FORMAT OF HALF-YEARLY OPERATIONS PROGRESS REPORT

Implementing organization:

Project No.:

Project title:

Period covered:

1. Status of implementation of the activities listed under Section 4.2, especially:

(a) Organization put in place or planned, including names of officers in charge at various levels and their responsibilities;

(b) The legislative framework in place or planned;

(c) The system in place or planned to monitor the use of ODSs, by sector of application;

(d) Training and public awareness activities;

(e) Other activities.

2. Major problems encountered and the action planned or taken.

3. Needs identified for amendments to the country programme, if any.

Project implementation and reductions achieved within the various sectors of ODS application should also be summarized in the attached table (Appendix 4).

Appendix 4

PROGRESS IN PROJECT IMPLEMENTATION AND REDUCTIONS OF ODSs

GIVEN BY THE ..... of .....
.....
(ODS unit) (Department) (Country)

covering the period from....., to .....

for onward transmission to the Secretariat of the Multilateral Fund

I. ODS consumption

	Aerosols	Foam	Refrigeration	Solvents	Halons	Other	TOTAL
Baseline consumption of ODSs by (year)..... (in metric tonnes)							
ODS consumption by (year)..... (in metric tonnes)							

II. The report provided to the Ozone Secretariat on import, production and export by chemical is attached (indicate if confidentiality has been requested for any specific figures in this report).

(Date and signature by officer in charge)

(The last calendar year before the date of the report)

Appendix 5

FORMAT OF HALF-YEARLY PROGRESS REPORT as at

Implementing organization: _____
Project No.: _____
Project title: _____
_____
Reporting period: _____

1. Experts/consultants required, including duration of contract:
   Name, nationality, duration of contract, fee and brief terms of reference

2. Items of equipment ordered:
   Please attach to the half-yearly progress report an inventory of all non-expendable equipment, indicating date of purchase, description, serial number, quantity, location, cost and remarks; for vehicles, give mileage report.

3. Status of the implementation of the activities listed under WORKPLAN in the project document, and status of documents, reports, manuals, guidelines, etc.:

(a) List actual activities/outputs* completed/produced under the following headlines, where appropriate:
(Please tick appropriate box.)

(i) MEETINGS (envisaged under the project)

☐ Intergovernmental (IG) mtg ☐ Expert group mtg
☐ Training seminar/workshop ☐ Others

Title: _____
Venue and dates: _____Convened by: _____
Organized by: _____Report issued as doc. _____
No./symbol: _____
Languages: _____ Date:_____

For a training seminar/workshop, please indicate: No. of participants _____ and attach annex giving names and nationalities of participants.

(ii) PRINTED MATERIALS

☐ Report to IG mtg. ☐ Technical publication
☐ Technical report ☐ Others

Title: _____
Author(s)/editor(s): _____
Publisher: _____
Symbol (UN/UNEP/ISBN/ISSN): _____

Date of publication:_____

(When the above reports have been distributed, attach the distribution list.)_____
* Please see attached definitions.

(iii) ☐ Technical information ☐ Public information

Description: _____
_____
_____
_____
_____

Dates:
_____

(iv) TECHNICAL COOPERATION

☐ Grants and fellowships ☐ Advisory services
☐ Others (describe)

Purpose:
_____
_____
_____
_____

Place and duration:
_____

For Grants/fellowships, please indicate:

Beneficiaries:	Countries/nationalities:	Cost (in US $):
_____	_____	
_____	_____	
_____	_____	
_____	_____	

(b) Status of activities/outputs under way:

(i) Meetings, seminars, workshops, study tours, training courses, fellowships

(ii) Status of documents, reports, manuals, guidelines being prepared

(iii) Status of studies, surveys under way

(iv) Status of implementation of other activities

4. Summary of the problems encountered in project delivery (if any):

5. Actions taken or required to solve the problems identified in (4) above:

Appendix 6

Terminal report for institutional-strengthening projects

(Sections 1-18 to be completed by the country concerned prior to sending the report to the implementing agency for its comments in Section 19)

1. Country:

2. National implementing agency / ozone unit:

3. Implementing agency:

4. List of previous project phases:

Phase	Duration	MLF funding (approved)	MLF funding (disbursed)

5. Indicate the main project objective and the detailed objectives as defined in the action plan for the phase reported on:

6. Describe the results achieved by category and compare them with the results foreseen in the action plan:

Year	Activities	Results expected	Results achieved
Year 1			
Year 2			
Describe additional results not foreseen in the action plan:			

7. Breakdown of approved costs, actual expenditures and government funding, as pertinent:

	Approved	Spent	Government funding	Other sources
(a) Equipment component				
(b) Professional staff				
(c) Support staff				
(d) Consultants				
(e) Operational cost				
(f) Funds for public awareness				
(g) Contingencies				
(h) Others, including in kind (specify)				
Total amount				

8. Personnel employed:

Category and numbers	Functional titles/expertise	Main tasks	Time period
Professional staff			
Support staff			
Consultants			

9. Were resources (staff, budget, equipment) used for other activities in addition to those covered by the approved action plan? If so, please specify:

_____

_____

_____

_____

_____

_____

10. Describe the role and position of the national ozone unit within the national administration, the way its work is supervised and its access to senior decision-makers; this may include the cooperation with steering committees, advisory groups or inter-ministerial bodies:

_____

_____

_____

_____

_____

_____

11. Describe how the action plan for the IS project has been integrated into the national authorities' planning process:

12. Title and date of reports submitted:

To whom:	Title of report	Submission (year/quarter)	
		Planned	Actual
1. Government departments			
2. Reports to Multilateral Fund Secretariat			
3. Reports to Ozone Secretariat			
4. Implementing agency			
5. Other implementing agency/agencies			
6. Bilateral donor(s)			
7. Others			

13. Were adequate advice and/or technical support received from:

	Yes	No	Please specify
(a) Implementing agency			
(b) Other implementing agency/agencies			
(c) Bilateral donor(s)			
(d) Government departments			
(e) National steering committee			
(f) Others (please specify)			

14. Support received from regional network (network coordinator/manager and network members) and input provided to the network:

Support received from regional network	Input provided to network

15. Was the national ozone unit subject to an audit by the beneficiary government or by the implementing agency? If yes, what were the results?

16. Lessons learnt (what were the main successes and difficulties and what can be learnt from them for improving effectiveness and impact during the next phase):

17. Terminal report prepared by:

Name of officer responsible for preparing the terminal report:	
Title:	
Organization/agency/ministry:	
Date:	

18. Government authority with oversight responsibility for the institutional-strengthening project/national ozone unit:

Name of officer responsible:	
Title:	
Organization/agency/ministry:	
Date:	
Comments:	

19. Implementing agency:

Name of officer responsible:	
Title:	
Organization/agency/ministry:	
Date:	
Comments:	

Appendix 7

DEFINITIONS: (Based on UN terminologies)

ACTIVITY: In general terms, activity denotes a programme, subprogramme, programme element or project. Specifically, it refers to action taken to transform inputs into outputs.

OUTPUTS: These are specific products or services which an activity is expected to produce in order to achieve its objectives; e.g. trained personnel, meetings serviced, reports, publications or advisory, editorial, translation and security services. Activities may also have intermediate outputs, which in turn may serve as inputs to other activities or final outputs.

INTERGOVERNMENTAL MEETING: A meeting is intergovernmental when the participants are representatives of governments.

EXPERT GROUP MEETING: The objective of an expert group meeting is to advise the Secretariat on a specific subject. Participants in these meetings act in their individual capacities, even when they are nominated by their governments.

REPORTS SUBMITTED TO INTERGOVERNMENTAL MEETINGS: These are official documents brought for the consideration of intergovernmental meetings. These reports are identified by a United Nations symbol, e.g. the 1988 Annual Report of the Executive Director of UNEP bears symbol UNEP/GC.15/4. The United Nations systemwide medium-term environment programme (SWMTEP) for 1990-1995 bears symbol UNEP/GCss.I/7/Add.1.

TECHNICAL PUBLICATIONS: These include *(i)* sales publications, published internally or externally, or *(ii)* technical or scientific bulletins, journals, newsletters and similar publications distributed free of charge when they are intended primarily for users external to the Secretariat. A technical publication is generally identified by an international standard book number (ISBN) or an international standard serial number (ISSN) for periodical publications.

TECHNICAL REPORTS: These include reports of a technical nature which are not widely distributed outside the Secretariat. Generally, technical reports are intermediate outputs which are used as inputs into other activities.

TECHNICAL INFORMATION: This includes information of a technical nature provided to recipients outside the Secretariat. Typical technical information in UNEP is provided by INFOTERRA, the International Register of Potentially
Toxic Chemicals (IRPTC) and the UNEP Industry and Environment Programme Activity Centre (IE/PAC), and may take the form of responses to queries of a technical nature.

PUBLIC INFORMATION: This category includes all material which is generally of a non-technical nature, whether free of charge or sold, that is distributed by the United Nations directly or through intermediaries to the general public. The material falls into two main groups of outputs:

1. Publications:

(a) Books, reports, yearbooks, chronicles and biographical notes

(b) Periodical bulletins, newsletters, magazines and booklets

(c) Pamphlets, brochures, fact sheets and wall sheets

2. Other public information services:

(d) Press releases

(e) Exhibits and other visual materials

(f) Films and videotapes

(g) Radio broadcasts and tapes of news, documentary and feature programmes

(h) Guided tours, group briefings, lectures and seminars

(i) Organization of special events.

GRANTS AND FELLOWSHIPS: These are funds awarded to individuals, organizations, etc. for specific activities or training. Grants and fellowships are considered final outputs.

ADVISORY SERVICES: These refer to assistance provided to developing countries on environmental matters through the provision of consultants and/or UN staff expertise.

OTHER TECHNICAL COOPERATION: This includes, among others, materials and equipment donated to developing countries for the implementation of certain projects.

ANNEX 12. A brief overview of all steps involved in the implementation of institutional-strengthening projects

National ozone units and institutional strengthening, step-by-step

1. Identification

- The recipient of institutional-strengthening support was defined by the Multilateral Fund's Executive Committee at the outset of the Montreal Protocol Programme (5th Meeting of the Executive Committee, November 1991); therefore no identification is required by the implementing agency of the institutional-strengthening project.
- Consequently, institutional-strengthening support is limited to a government institution assigned to act as focal point for the Montreal Protocol programme in the country, namely, the national ozone unit.
- The Executive Committee assigns an implementing agency of the Montreal Protocol Programme, in line with the request of the recipient country.
- The major tasks to be performed by the national ozone unit were identified by the Multilateral Fund, namely:
  - *(i)* Initiation of legal measures to enable the country to comply with its commitments under the Montreal Protocol;
  - *(ii)* Public awareness activities regarding depletion of the ozone layer by ODSs;
  - *(iii)* Effective liaison between the country and the Executive Committee, the Multilateral Fund and the implementing agencies in the implementation of the country's Montreal Protocol programme.

2. Preparation of institutional-strengthening support projects (duration of each phase—two years)

Based on the financial status of the project, UNIDO will draw the attention of the ozone officer to the need to request a new phase. This entails the following steps:

- The national ozone unit prepares and submits to UNIDO a detailed ACTION PLAN, which serves as the unit's basic work programme for a duration of two years. The action plan should spell out:
  - *(i)* Planned activities relating to the major tasks assigned by the MLF/Executive Committee (legal measures, public awareness); and
  - *(ii)* Expected activities relating to the general phase-out programme in the country.
- The implementing agency and the national ozone unit prepare together the TERMINAL REPORT on the ongoing/expiring institutional-strengthening support phase.
- The national ozone unit prepares and submits to UNIDO a PROJECT CONCEPT which describes in a general way the requirements for a renewal phase and the activities to be carried out under the Montreal Protocol programme in the country. (The action plan and the project concept must be seen as interrelated documents which will eventually be integrated into the formal PROJECT DOCUMENT between UNIDO and the ministry of the environment/national ozone unit).
- Along with the submission of these documents to the MLF, the implementing agency must provide the following:
  - *(i)* A covering letter requesting project renewal and giving the valid financial status of the ongoing/expiring phase;
  - *(ii)* Milestones for the renewal phase;

(iii) A progress report on the implementation of the country programme (this report is due to be submitted by the national ozone unit to the Ozone Secretariat by 30 September of each year at the latest, and to the MLF by 1 May of each year);

(iv) An executive summary;

(v) A summary of the terminal report;

(vi) A summary of the action plan.

NOTE (1):
The following formats have been designed by the MLF and are to be used in the submission of the renewal request:
Action plan;
Country programme report;
Terminal report on ongoing/expiring phase.

NOTE (2):
Funding for each phase has been basically determined by the 17th Meeting of the Executive Committee and various subsequent Executive Committee Meetings. It is, however, reviewed by the MLF Secretariat on the occasion of submission of the renewal request, and should be in line with UNIDO's annual Montreal Protocol Business Plan.

3. Establishing the formal basis for implementation of an institutional-strengthening project

Following approval of the renewal phase on the basis of the action plan and the project concept, the formal project document must be prepared based on a format approved by the 33rd Meeting of the Executive Committee. THE PROJECT DOCUMENT DOES NOT NEED TO BE SUBMITTED TO THE MULTILATERAL FUND/EXECUTIVE COMMITTEE; IT IS A MANDATORY IMPLEMENTATION AGREEMENT BETWEEN THE IMPLEMENTING AGENCY AND THE MINISTRY OF THE ENVIRONMENT/OZONE UNIT.

PREREQUISITES for the project document/agreement, to be obtained/ascertained from the recipient country:

- Institutional setting of the national ozone unit and its location
- Official designation of the ozone officer = ozone unit manager
- Detailed government contribution in kind
- Preliminary breakdown of funds per actual year (funding requirements are indicated in general for the two-year duration).

4. Project implementation

Following signature of the project document/agreement by the govenrment authorities and UNIDO, the implementation modality is determined together with the ozone officer.

Note: Due consideration has to be given by UNIDO to the recommendations of the External Auditors of April 1997, concerning in particular the incentive payments to ozone unit staff who are at the same time and primarily government employees.

4.1. Subcontract

Funds can be made available through a subcontract between UNIDO and the ozone unit, covering either all the components (incentive payments to ozone unit staff, operational costs [such as local travel, office supplies and communication costs], public awareness activities, and specific equipment purchases in line with the decision by the Executive Committee on eligible office equipment), or else part of the components (i.e., without incentive payments, which would be handled through national expert contracts).

NOTE:
1. Equipment items eligble for funding under institutional-strengthening support projects were determined by the 19th Meeting of the Executive Committee, namely, items to provide basic infrastructure for information processing and dissemination as well as to improve communication facilities. Office furniture and project cars are not eligible!

2. While funds for local travel of the ozone unit staff may be required in connection with implementation of the overall Montreal Protocol programme in the country, international travel should be considered with great care, because it is in principle not eligible under this type of project, and because the ozone officer receives support through UNEP. It is necessary to check with the ozone officer and UNEP before agreeing to international travel charged to the project.

The Contracts Service issues contracts for the lifetime of the project (two years), under which half-yearly activity and financial reports must be submitted by the national ozone unit to UNIDO. Upon their clearance, the instalment payments will be released.

4.2. Miscellaneous obligation documents (MODs)

Funds can be made available through MODs to the local UNDP office (or imprest account of a local UNIDO office) for the aforementioned components. UNIDO's Financial Service requires special reporting in connection with MODs provided through UNDP. The format must be completed by the ozone officer and sent to UNIDO annually.

4.3. Contracts under the national expert regime (BL 17) and administrative support (BL 13)

The 5th Meeting of the Executive Committee recommended the payment of incentives to ozone unit staff, and this recommendation was reconfirmed by subsequent Executive Committee Meetings. In line with the recommendation of April 1997 by UNIDO's External Auditors, incentive payments can be made through regular contracts directly with UNIDO. While technical staff would be recruited under BL 17, administrative staff would be recruited under BL 13.

NOTE: For administrative staff, an additional authorization must be issued requesting UNIDO's Administration to waive the obligatory break in service, based on the fact that the recipient is a government employee.

PART TWO

STOCKHOLM CONVENTION ON PERSISTENT ORGANIC POLLUTANTS

Purpose

The purpose of part two of this manual is to assist UNIDO project managers and POPs units at the respective ministries in developing countries with practical guidelines for the preparation of national implementation plans (NIPs) and for post-NIP activities.

A conceptual approach would be to develop a strategy for the phase-out of persistent organic pollutants (POPs) from the very outset, i.e., during the preparation of the national implementation plan, setting out the priorities, and transforming these priorities into activities through action plans that could be funded through the Global Environment Facility (GEF), provided that co-financing sources are available. Eligibility for funding from GEF is contingent on a country's ratification of the Stockholm Convention on Persistent Organic Pollutants.

Priority areas are to be identified bearing in mind GEF cyclic priorities in respect of the persistent organic pollutants (POPs) focal area. Since this publication is being prepared during the fourth replenishment cycle of GEF (GEF-4), the strategic programming for POPs as listed in GEF-4 is quoted below:

> *(a)* Strengthening capacities for NIP development and implementation, including assisting those countries that lag farthest behind to establish basic, foundational capacities for sound management of chemicals. This programme will remain a priority for the small number of eligible countries that have not yet prepared their NIPs (nominal GEF allocation: US$ 112 million);
>
> *(b)* Partnering in investments needed for NIP implementation to achieve impacts in reduction and elimination of POPs, in conformity with the priorities identified in countries' respective NIPs (nominal GEF allocation: US$ 125 million); and
>
> *(c)* Generating and disseminating knowledge to address future challenges in implementing the Stockholm Convention. GEF will support projects that demonstrate and promote the replication of environmentally sound alternative products to POPs or the substitution of materials and processes to prevent the formation of POPs. GEF will support a limited number of targeted research activities where this would increase the quality and effectiveness of a significant portion of ongoing and future GEF-funded POPs activities (nominal GEF allocation: US$ 45 million).

Cost-effectiveness is one of the core principles of the GEF operational strategy. A cost-effective POPs project is one that achieves the requisite outcomes generating global benefits at the least cost, promotes replication and is sustainable. Cost-effectiveness is one of the qualitative tools that are used during project development to support the

analysis of, and ultimately the choice between, different project approaches. Cost-effectiveness can also be a most useful tool for fixing priorities in the context of limited resources and implementation capacity.

In order to achieve the long-term success of the Stockholm Convention on POPs, strong emphasis will be placed on the sustainability of GEF interventions, focusing especially on countries whose policies and actions demonstrate their firm intention to follow through on their commitment to the Convention. Projects addressing unintentionally produced POPs are expected to be mostly in the nature of planning and strategy development under GEF-4, thereby laying the groundwork for the more systematic efforts that will be required in future phases of the GEF. Considering that UNEP has developed and issued an interim guidance for developing a national implementation plan (NIP) for the Stockholm Convention in general, the present Manual stresses the preparation of the inventory part of an NIP and, thus, it should be seen as complementary to the aforementioned document issued by UNEP. Finally, the present Manual does not address issues pertaining to any regulatory, legislative and institutional matters, since those fall under UNEP's mandate.

1. Reporting under the Stockholm Convention

STOCKHOLM CONVENTION ON PERSISTENT ORGANIC POLLUTANTS
NATIONAL REPORT PURSUANT TO ARTICLE 15 OF THE CONVENTION

Annex to decision SC-1/22

Format for reporting under Article 15 of the Stockholm Convention

INSTRUCTIONS

Pursuant to Article 15 of the Convention, each Party to the Stockholm Convention on Persistent Organic Pollutants shall report to the Conference of the Parties on the measures it has taken to implement the provisions of the Convention and on the effectiveness of such measures in meeting the objectives of the Convention.

Parties are requested to use the attached format in order to submit the above-mentioned report. The electronic version of the format is available for download at the Convention's home page: www.pops.int. Hard copies and electronic versions in CD format are also available upon request from the Secretariat. (See below for contact details).

Part A of the format requires the respondent to provide general information on the Party submitting the report, such as contact details and the name of the officer submitting the report. It is important that all the relevant information be provided in order to assist the Secretariat in identifying the report.

Part B of the format requires the respondent to provide information on the measures taken by the Party to implement the relevant provisions of the Stockholm Convention and on the effectiveness of such measures in meeting the objectives of the Convention. When the information is not available, you are requested to indicate this.

Should you desire to provide further information than that requested, you may do so by attaching it at the back of your report.

All reports must be submitted to the Conference of the Parties through the Stockholm Convention Secretariat. Should you have any questions or require further assistance, please do not hesitate to contact the Secretariat at:

Secretariat for the Stockholm Convention on Persistent Organic Pollutants
United Nations Environment Programme
International Environment House
11-13, chemin des Anémones
CH-1219 Châtelaine
Geneva – Switzerland
Tel.: +41-22-917-8191
Fax.: +41-22-797-3460
E-mail: ssc@chemicals.unep.ch
Internet home page: www.pops.int

PART A.

Stockholm Convention on Persistent Organic Pollutants National Report pursuant to Article 15	
1. Information on the Contracting Party	
Name of Contracting Party	
Date on which its instrument of Ratification/ Accession/ Approval or Acceptance was deposited	
2. Information on National Focal Point	
Full name of the institution	
Name and title of contact officer	
Mailing address	
Telephone number	
Fax number	
E-mail	
Web page	
3. Information on contact officer submitting the national report if different to the above	
Full name of the institution	
Name and title of contact officer	
Mailing address	
Telephone number	
Fax number	
E-mail	
Web page	
4. Period reported	*1st (2nd, 3rd) Report for the period: (day/month/year)*
5. Date the report was submitted	(day/month/year)

_____

Signature of reporting officer

PART B.

INFORMATION ON THE MEASURES TAKEN BY THE PARTY TO IMPLEMENT THE PROVISIONS OF THE STOCKHOLM CONVENTION AND ON THE EFFECTIVENESS OF SUCH MEASURES IN MEETING THE OBJECTIVES OF THE CONVENTION
Section I. Article 7: Implementation Plans
1. Has your country developed an Implementation Plan Pursuant to Article 7 of the Stockholm Convention? □ Yes □ No (*If no, state why and go to the next section)* If your country is a developed country please go to question 3, if not please go to question 2.
2. If your answer to question 1 above is yes, did your country receive financial assistance from the Global Environment Facility to develop the implementation plan? □ Yes (*please state name of implementing agency*) UNIDO □ No *(please state why)*
3. Has your country encountered any difficulties in the implementation of the above-mentioned Implementation Plan? □Yes (please specify) □ No □ Other (*please provide the relevant information*)

2. Preliminary inventory

Basic instructions

The preliminary inventory of the equipment containing PCBs (transformers, capacitors, hydraulic equipment, etc.) should show the approximate amounts of PCBs in the country (oils, equipment, waste, contaminated soil, etc.). For this purpose, a questionnaire needs to be prepared and distributed to all the companies that may possibly possess this type of equipment. In addition, an inventory number should be assigned to every piece of equipment by the ministry concerned. The questionnaire should cover the following data:

	QUESTIONNAIRE	
1.	Name and location of the company	
2.	Kind of equipment: (transformer, capacitor, etc.)	
3.	Type	
4.	Inventory number	
5.	Serial number	
6.	Year of production	
7.	Power (kVA, kVAr, V)	
8.	Weight of oil (in kg)	
9.	Gross weight (in kg)	
10.	Working status of the equipment (in use/out of use)	
11.	Physical condition (good/bad, leaking/not leaking)	
12.	Liquid contains PCBs (yes/no/unknown)	
13.	Maintenance of equipment (refill – when?, name of oil, by which company)	
14.	Source of data (nameplate/declaration)	
15.	Photo taken (date)	
16.	Form filled in on (date) by (name)	

The presence of PCBs in the equipment can be determined on the basis of these data, but when this is not possible, a sample should be taken from the liquid and analysed. For the needs of the preliminary inventory, the item of equipment should be selected according to categories: type, manufacturer and year of production, and a representative number of samples should be taken from each category in order for the results obtained from the analyses (by deduction) to count for the entire item of equipment, i.e. to give a clear picture of the real situation. In the hermetically closed systems (capacitors), it is advisable that a photo be made of the device. The purpose of this is to ensure easier identification in case the data from the producer's plate are missing. A database should also be prepared, containing the necessary data from the questionnaire, and after the processing it will be possible at all times to locate equipment containing PCBs and determine its condition, the amounts, etc.

Certified laboratories

It is of great importance to know whether analysis can be performed at the local level. Give a list of all the institutions in the country with laboratory equipment capable of

analysing POPs, in particular PCBs, DDT (DDE), dioxins/furans and lindane, including the type and kind of equipment (with the time of purchase). Trained staff is crucial.

3. Post-NIP activities

3.1. Detailed inventory of capacitors and transformers

Inventory task teams

Task teams for inventorying are to be established and trained in methods of preparing the inventory of capacitors and transformers. Adequate equipment and supplies are recommended: digital cameras, labels with identification numbers for capacitors and transformers, labels showing PCB contamination, inventory forms for capacitors and transformers, instructions for the inventory, flash lamps and folding rulers, as well as gas spectroscopy (GS) tools and instruments.

Analysis of the samples

Analysis of the samples can be performed either by specific or by non-specific methods.

The specific methods involve gas chromatography (GC) and mass spectrometry (MS), while the non-specific methods include tests for field screening of PCBs, as for example, the Clor-N-Oil and Clor-N-Soil test kits, as well as the L2000DX field analyser. The L2000 DX analyser uses an ion-specific electrode to quantify the chlorine concentration.

Nevertheless, it has to be considered that these methods test for the presence of chlorine in the sample being examined. As a result, other chlorinated compounds that might be part of the sample could cause false positive results because the analysis method reads all chlorinated compounds as PCBs. False negative results are not possible, because if no chlorine is present, PCBs cannot be present either. Thus, if a screening test shows a negative result (PCB below 50 ppm), it is true in any case, so there is no need for verification by another method.

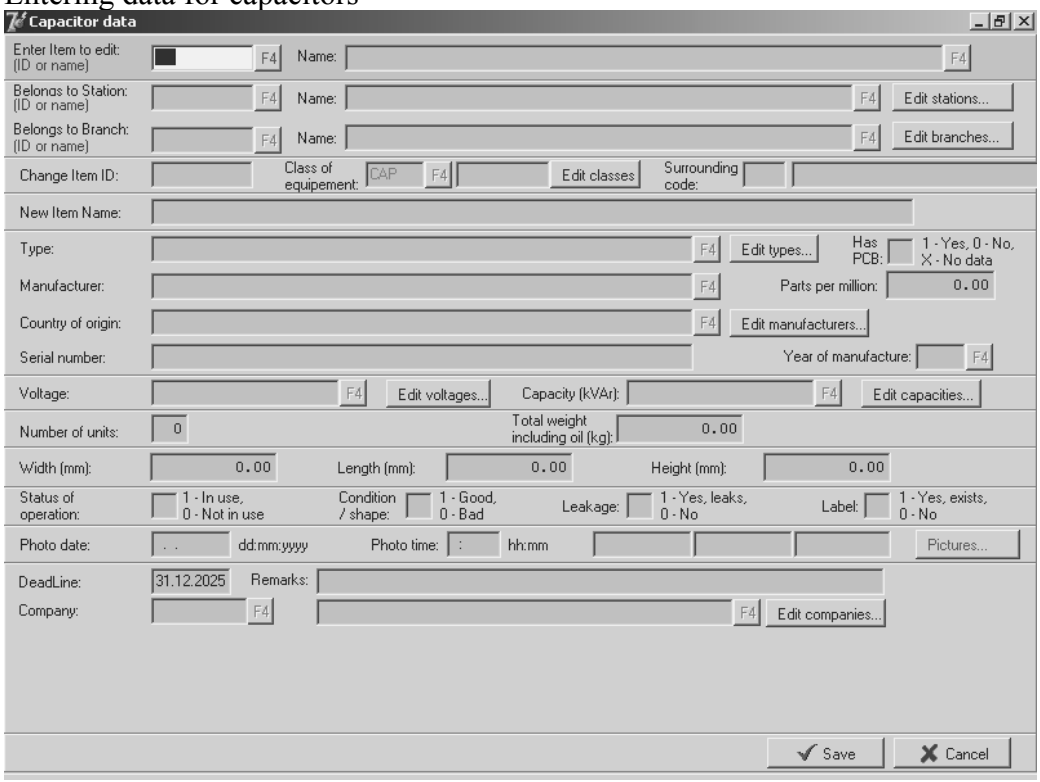
If a test kit shows a positive screening result (PCB > 50 ppm), verification by gas chromatography is always necessary.

Database

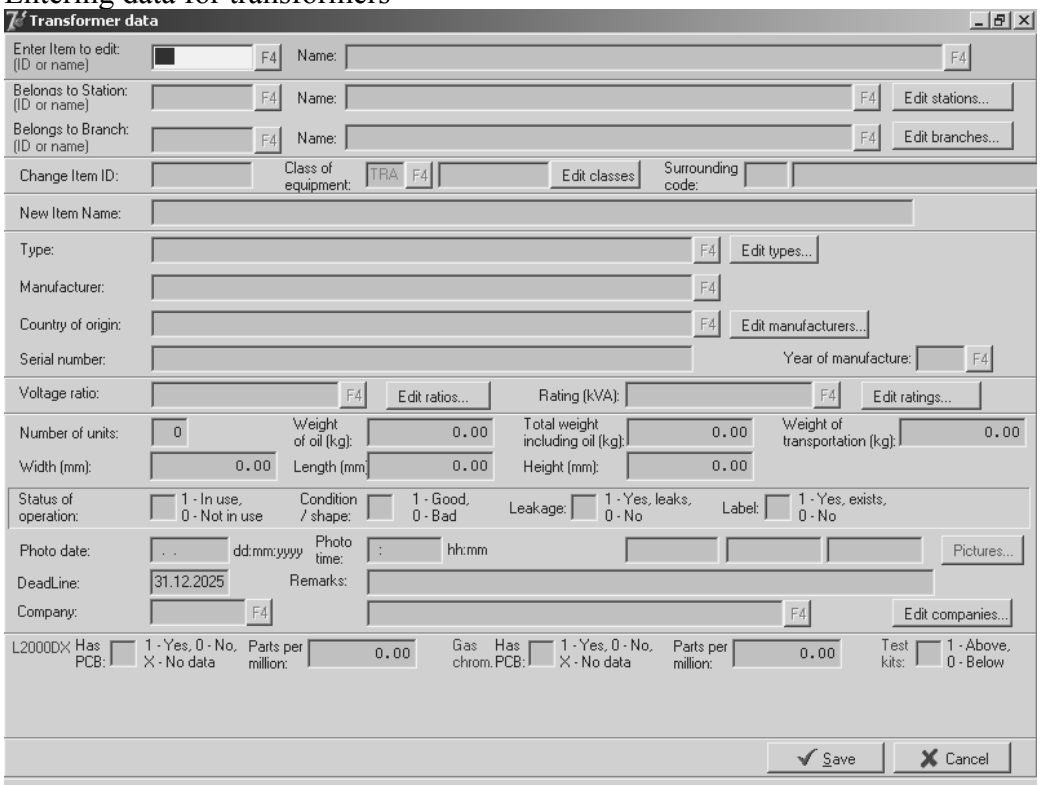
Software must be prepared for data collection and processing.

The information on equipment containing PCBs and its owners must be recorded in a database for capacitors and transformers (An example of capacitor and transformer templates for entering data and searching through needed parameters is given below).

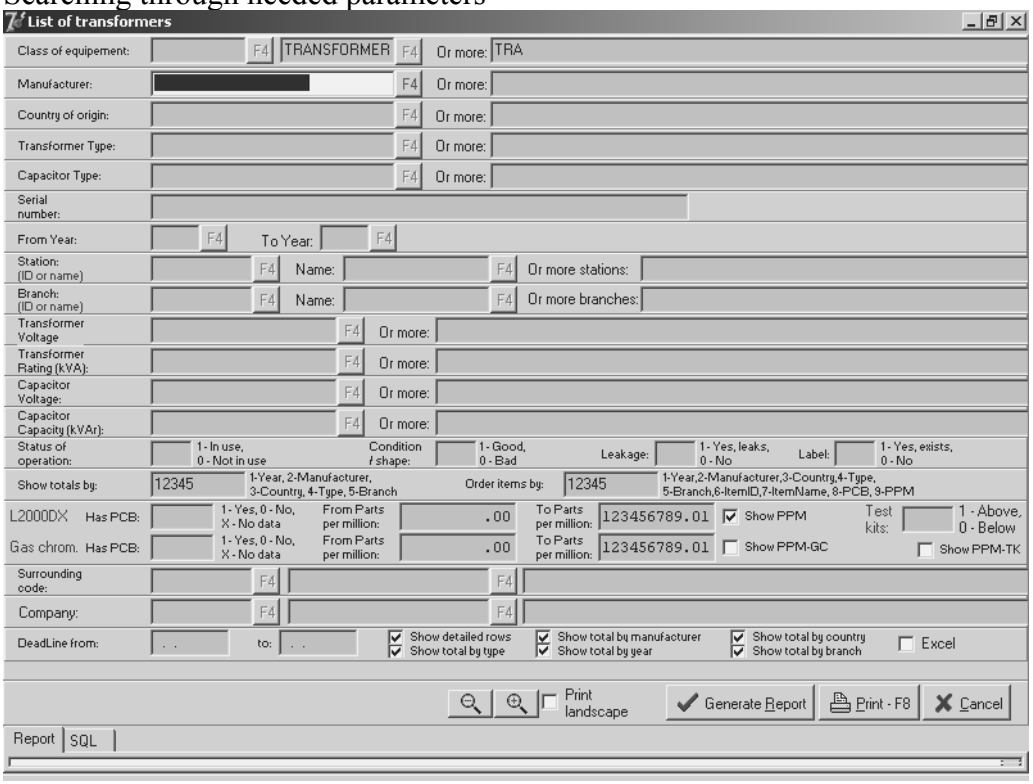
Entering data for capacitors



Entering data for transformers



Searching through needed parameters



Therefore, the software can produce reports on the capacitors and transformers, grouped according to their type, manufacturer, capacity, distributions, substations, year of production, leakages, physical appearance, status of operation, PCB content, quantity in ppm, etc. Such software is a significant tool when developing a strategy for the identification and elimination of equipment containing PCBs. A PCB database should not only be considered as a repository for all information gathered, but also as a tool which will be continually updated, assessed and adapted, until the last device containing PCBs has been eliminated. The above criteria are linked to a search or output function in the database, which makes it possible to control and monitor each piece of equipment that has to be eliminated by a given deadline.

Reporting to UNIDO

The following should be reported:

- Data collection and processing
- Sampling and analysis
- Inventory of equipment and storage tanks contaminated with PCBs

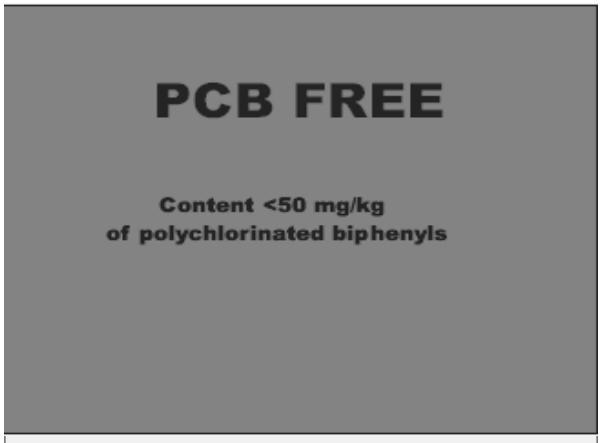
List of capacitors/transformers (Is the equipment in use or disused?)

ID, location, type, serial number, manufacturer, year, ratio (kV/kV), rating (kVA), capacity (kVAr), status of PCB, weight in kg (with/without oil).
Is the concentration of PCB <500mg/kg or >500mg/kg?
Is the technical condition of the equipment good or bad?
Is the equipment located near places of higher risk (e.g., hospitals, medical centres, food industries, water and sanitation services, intensively frequented buildings, etc.)?

Labelling of equipment

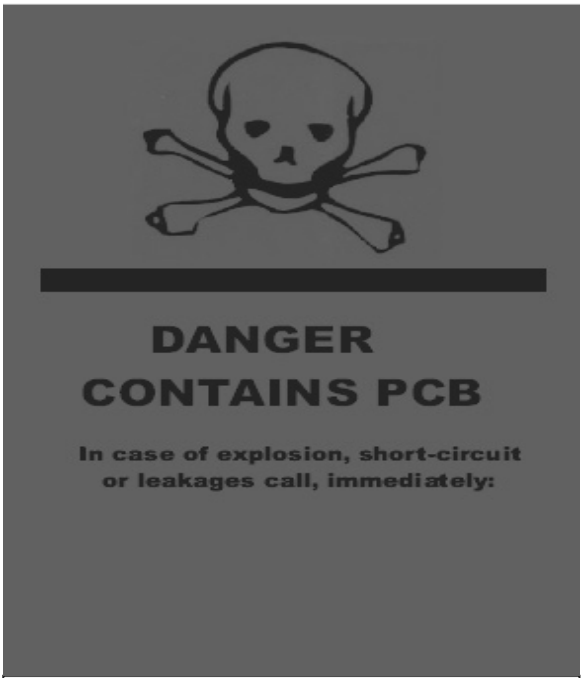
When compiling the inventory, the equipment inspected is to be marked with labels as a precautionary measure. In accordance with the result of the analysis of a sample or with the examination of the manufacturer's plate on a capacitor, a label as specified below will be affixed to the equipment.

Label for PCB-free equipment



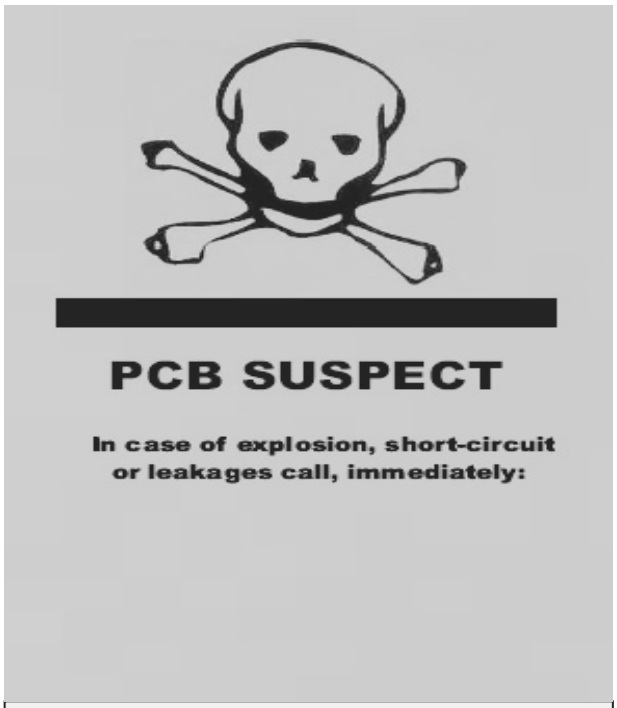
The equipment has been checked.
Either the analysis of a sample has shown a PCB content of < 50 ppm or it has been possible to definitely determine that the equipment does not contain any PCB, e.g., by the manufacturer's plate, nameplate, etc.
(Applicable only for capacitors).

Label for equipment containing PCBs



The red label is affixed to equipment where a PCB concentration of > 50 ppm has been analytically proven or if the equipment could clearly be identified as containing PCBs by means of manufacturer's information, e.g., the name of the cooling fluid.
(Applicable for transformers and capacitors).

Label for equipment suspected of containing PCBs



The equipment has been recorded, but not yet tested for PCBs, e.g., if a sampling is only possible after a phase-out.
Such labelled equipment remains suspected of containing PCB, and a sample must be analysed after dismantling, or before disposal, as appropriate.

The following items must be identified and labelled with their PCB classification:

- PCB containers
- PCB transformers
- Large, high- and low-voltage PCB capacitors when they are removed from service
- Electric motors using PCB coolant
- PCB hydraulic systems
- PCB heat-transfer systems
- PCB storage areas
- PCB transport vehicles

If the manufacturer did not originally label items, the owner must label any that may contain PCBs.

When analytical results identify an item's PCB concentration, the concentration should be written in permanent ink on the label. When the equipment is determined to have a concentration of less than 5 ppm PCBs, a “Non-PCB” label should be affixed to the equipment. Labelling is also required for materials that do not contain PCBs. Large, low-voltage capacitors, small capacitors that are normally used in alternating circuits, and fluorescent light ballasts that do not contain any concentration of PCBs should be marked “No PCBs” by the manufacturer if manufactured after 1 July 1978.

Once an item containing PCBs is removed from service, the article or container should also be labelled with the date on which it was removed from service. In addition, other regulatory labelling requirements apply, depending on the contents of the container.

CAUTION: Old labels on electrical equipment may not accurately reflect the PCB concentration of the equipment's contents. For example, sealed transformers labelled as containing non-PCB oil may have become contaminated with PCBs during servicing.

Site monitoring

The aim of a site monitoring exercise is to identify all materials that could have been contaminated by equipment containing PCBs during their whole lifetime, as a result of leaks, bad working practices, spills, inappropriate storage or incidents. The places to investigate are concrete floors or gravel formerly under equipment containing PCBs, concrete floors in workshops or storage sites, soil in the area of former incidents or dumping places, etc.

A site monitoring covering the area of an entire company can be regarded as the last step after the disposal or decontamination of all equipment containing PCBs in that company. Nevertheless, it is also recommended that site monitoring on a smaller scale should be performed after the disposal or decontamination of a single piece of equipment. In this case, the monitoring would only refer to the area covered by the device concerned.

Land register of areas with possible PCB contamination

In a land register, all spots are recorded that might possibly be contaminated by PCBs. This includes all locations where PCBs or equipment containing PCBs have been in use, repaired or stored. It must also be investigated where and in what circumstances PCBs had been used earlier. Company archives about material flow or documents about former equipment can be a source of useful information. It is also worthwhile to interview employees of the company who are or were in charge of the acquisition or maintenance of equipment that might have contained PCBs. Interviews should cover the types of equipment purchased, maintenance practices, possible refills, storage of drums containing PCBs for topping-up, places of storage and workshops, incidents, etc. The information obtained must be checked visually to substantiate the suspicion of presence of PCBs. The places that need to be visited are:

- Current and former sites of equipment that might have contained PCBs (in particular, check the ground underneath the equipment for leaks).
- Current and former workshops.
- Current and former storage sites for equipment that might contain/have contained PCBs or spare insulation fluid.
- Sites of incidents (spills, internal failures, etc.).
- Dumping sites.

Risk assessment

To optimize the further proceedings, it is advisable to assess the associated risks of the sites that are listed in the land register. The questions to be considered are:

- Is the suspected PCB contamination secured or is it currently still spreading?
- Is the contamination endangering drinking water (groundwater)?

- Is the location intensively frequented by workers or by passers-by (residential area)?
- Quantification: What is the size of the potential contamination or quantity of the goods endangered?
- Storage: Are the goods suspected of containing PCBs stored appropriately (in drums or trays, sheltered, locked) or inappropriately (no trays, in the open air)?

Sites that present an increased risk for humans or the environment have a higher priority for immediate action.

Handbook on electrical equipment containing PCBs

Training on the identification and inventorying of PCBs is very important for the whole process, and therefore, a PCB manual/handbook for safe handling of equipment containing PCBs is of the utmost importance.

A handbook on electrical equipment containing PCBs is needed for staff who professionally handle equipment and products suspected of containing or known to contain PCBs, and for the management team of the companies and POPs units responsible for coordination of national actions.

This handbook could also be used for the overall campaign on environmentally sound management of electrical equipment containing PCBs during all stages of its life cycle, and readers will have the opportunity to learn how to protect themselves and the environment from the harmful effects of PCBs.

The handbook should provide assistance on aspects ranging from identification to maintenance of relevant equipment, the phase-out of contaminated installations, as well as the transport, interim storage and final disposal of materials or wastes containing PCBs. Furthermore, safety aspects and emergency actions should be an integral and essential part of the document.

The handbook will therefore be a valuable instrument to support a country's commitment to fulfil its obligations under the Convention.

The contents of the handbook could be as follows:

International conventions and laws
(Basel, Stockholm and Rotterdam)
National laws
General information and potential hazards of POPs/PCBs
Impact of PCBs on human health and the environment
Application
Identification
Inventorying (transformers and capacitors)
Sampling of transformers, capacitors, construction materials and soil
Screening
Laboratory analysis
Database
Labelling of equipment
Risk assessment
PCB management

Maintenance of equipment
Safety
Emergency actions
First aid
Clean-up
Phase-out
Packing
Temporary storage
Transport
Documentation
Disposal

3.2. Proposed priorities for disposal

According to the Stockholm Convention provisions related to PCB disposal and elimination can be summarized as follows:

- The equipment containing greater than 0.005 per cent polychlorinated biphenyls and volumes greater than 0.05 litres should be identified, labelled and removed from use by 2025;
- Use only in intact and non-leaking equipment and only in areas where the risk from environmental release can be minimised and quickly remedied;
- When used in populated areas, including schools and hospitals, all reasonable measures should be undertaken to protect from electrical failure which could result in a fire, and regular inspection of equipment for leaks.

However, the Stockholm Convention provisions do not foresee more strict measures for the equipment containing higher concentrations of polychlorinated biphenyls and equipment in a bad condition that could be of high risk for the environment. Thus, the risks that a PCB containing equipment poses to humans or the environment should be considered in order to determine priorities leading to different deadlines for its elimination, as follows:

- PCBs that are stored as spare oil, as waste or as electrical devices out of service have to be disposed of no longer than one year after their identification in the frames of the inventory process.
- All Devices containing PCBs with PCB concentrations higher than 0.005 mass percentages (50 mg/kg) that are in a poor technical condition situated near places of a higher risk for people (hospitals, medical centres, commercial centres, schools and universities, food industries, water and sanitation services, highly frequented buildings) have to be disposed of in a shortest possible period of time in accordance with the national legislation.
- Devices containing PCBs with PCB concentrations higher than 0.05 mass percentage, an effort should be made to be removed earlier than 2025 due to its higher concentration and a higher possibility of contamination.
- All other electrical equipment with a PCB concentration between 0.005 and 0.05 mass percentage (50 and 500 mg/kg) can remain in service until the end of their useful life, but no longer than the year 2025

4. Destruction

4.1. Destruction—high temperature incineration

Total destruction is a proven process and is a technology generally accepted by many countries (incinerator types: rotary kiln incinerators, liquid injection incinerators, static kiln incinerators, fluidized bed incinerators, cement kilns).

4.2. Destruction—plasma arc

Plasma systems technology uses a plasma arc device (often called a plasma torch) to create extremely high temperatures of up 10,000 degrees centigrade for destruction of highly toxic wastes such as PCBs and POPs.

4.3. Destruction—in situ vitrification

In situ vitrification (ISV) is a commercially available technology used for contaminated site remediation and waste treatment. It is a mobile, thermal treatment process that uses electricity to heat and melt contaminated soils, sludge and other earthen materials.

5. Decontamination

5.1. Decontamination of PCBs by autoclaving

Autoclaving is a technology that has been in existence for many years now and is well proven. In general, for PCBs, only the oil and transformer components made of materials such as ceramics, cardboard and wood are incinerated. The rest of the transformer is autoclaved and after decontamination, the various metals, such as copper, steel and aluminium, are sent to the metals recycling industry. Autoclaving is a solvent decontamination process that extracts PCBs from contaminated materials.

5.2. LTR^2 technology

The LTR^2 technology (low-temperature rinsing and reuse/recovery) was developed by the ABB company and, after a management buy-out in 2004, it is now promoted by Envio. After draining of the PCB liquid, PCB residues remaining in the transformer (mainly in the transformer core and windings) are removed by means of a cleaning fluid under appropriate and safe process conditions. When the process is complete, the reusable secondary materials have a residual PCB contamination level of less than 5 ppm.

The LTR^2 technology allows the reclassification of many PCB transformers so that they can be put back into use. The materials in transformers that are not being put back into use are almost entirely recovered for reuse (scrap metals). The remaining PCB fluid and oil are incinerated, or destroyed in a chemical process with sodium.

The technology is modular and flexible and can be deployed economically in big or small facilities in any country wishing to establish its own PCB treatment infrastructure.

More details about the technology and Envio may be found at: www.envio-group.com

5.3. Decontamination—dechlorination

Dechlorination processes for the treatment of liquid PCBs and oil contaminated by PCBs are well developed. The chlorine content is converted into inorganic salts, which can be removed from the organic fraction by filtration.

5.4. Decontamination—desorption

Thermal desorbers are used to vaporize hazardous organic contaminants so that they can be separated from the solid materials to which they adhere or on which they are adsorbed. Other systems are then required to treat the desorbed organics.

6. Emerging technologies for decontamination and destruction

- Bioremediation: This refers to the use of microorganisms to break down organic chemical compounds that contaminate soil.
- Solidification and stabilization: These technologies rely on limiting the solubility or mobility of the toxic component in hazardous waste, generally by physical containment.
- Chemical oxidation: Hydrogen peroxide, potassium permanganate and peroxydisulfate are some of the viable oxidants.
- Electrochemical oxidation: At low temperature and atmospheric pressure, electrochemically-generated oxidants react with organochlorines to form carbon dioxide, water and inorganic ions.
- Steam reforming: The steam detoxification process involves steam reforming at a very high temperature (i.e., 1,100 to 15,0000 C) to destroy hazardous wastes.
- Wet air oxidation: The WAO process oxidizes and hydrolyses organic contaminants in water.

7. Instructions for transportation under the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal

7.1. Import, transit and export licences

Application

When PCB-contaminated waste is going to be transported for final disposal in an incineration facility, the waste must be transported under the process for transboundary movement of hazardous wastes stipulated by the Basel Convention. It must be ensured that all responsible environmental authorities are involved from the very outset of the project.

Before shipping the hazardous waste for disposal, the holder of the waste must notify the competent authorities in the importing country, as well as the competent authorities in the exporting country and in all transit countries. The notification will be made using the notification form. An import application form may be necessary, depending on the

importing country. In order to be able to export hazardous waste into most countries, the following conditions have to be met: The consignee is licensed to receive the particular waste; there is confirmation from local authorities that there are no objections to importation of the waste; the imported waste is accompanied by the relevant documents.

The competent authorities of the transit countries have 60 days to either object or consent to the intended shipment.

Responsibility to notify

The exporting country must notify, or require the exporter to notify, in writing, using appropriate documentation of the competent authority of the exporting country, the competent authorities of the countries concerned of any transboundary movement of hazardous wastes or other wastes.

Documentation and general notification

Specific documents are to be used to notify the competent authorities in the countries concerned of all transboundary movements of hazardous wastes and other wastes and, subsequently, to accompany the movement of waste. Competent authorities will issue these documents, which consist of two forms: the movement and the notification documents. The notification and its annexes are designed to provide detailed, accurate and complete information to the parties involved with the movements on the waste itself, on the type of disposal operation for which the waste is destined, and on other details relating to the proposed movement. This information will allow the competent authorities concerned to be sufficiently informed to make a judgment as to whether to object or consent to the movement, in accordance with the Basel Convention and relevant national legislation. A notification may usually cover only one type of waste. The notification may cover several shipments of waste over a maximum period of one year, provided the waste in question has the same physical and chemical characteristics and will be regularly shipped to the same disposer via the same customs offices for entry and exit. The term "general notification" is used when referring to such a notification.

The movement document is intended to accompany the consignment at all times from the time of departure from the generator of the waste to the arrival of the consignment at the disposer in another country. The movement document provides relevant information on a particular consignment, for example, on the carriers of the consignment, passage through customs offices, and the receipt and disposal of waste by the disposer. The movement document should also provide accurate information on the authorizations issued by the competent authorities for the proposed movement of waste. It is therefore recommended by the Conference of the Parties to the Basel Convention that the duly completed notification should always accompany the movement document.

Contracts

The existence of a contract between the exporter (holder of the waste) and the disposer, specifying environmentally sound management of the waste in question, is an important precondition for the authorization of the transboundary movement of waste. The parties to a contract must ensure that the contract complies with the requirements fixed in the Basel Convention and in relevant national legislation. It is suggested that a copy of the contract should be attached to the notification. In general, contracts should confirm that the carriers, traders and disposal facilities operate under the legal jurisdiction of the Contracting Parties to the Basel Convention and have appropriate legal status. They must be licensed or otherwise authorized, approved or "recognized" by the competent

authorities of the country of export, country/countries of transit or country of the assignment of legal responsibility and liability in contracts for any adverse consequences resulting from mishandling, accidents or other unforeseeable events, as that will assist the competent authorities in identifying the responsible parties at any given moment, in accordance with national and international rules and regulations. The contract should also specify which party should assume responsibility for alternative arrangements in cases where the original terms of the contract cannot be fulfilled. It should be noted that a contract should normally be concluded before the notification is provided and the competent authorities have issued their authorizations. Therefore, the contract should include the caveat "subject to authorization", in order to avoid possible practical trade problems in case the competent authorities do not permit the proposed movement of waste.

Financial guarantees

The Basel Convention requires that: "Any transboundary movement of hazardous wastes or other wastes shall be covered by insurance, bond or other guarantee as may be required by the State of import or any State of transit which is a Party" (Article 6, para. 11). These guarantees are intended to provide for immediate funds for alternative management of the waste in cases where shipment and disposal cannot be carried out as originally intended. These guarantees may take the form of an insurance policy, bank letters, bonds or other promise of compensation for damage, depending on the countries concerned.

International transport rules and regulations

The Basel Convention requires that hazardous wastes and other wastes subject to transboundary movement be packaged, labelled and transported in conformity with generally accepted and recognized international rules and standards in the field of packaging, labelling and transport, and that due account be taken of relevant internationally recognized practices. The shipment will be subject to the provision of a bank guarantee by the notifier in favour of the authorities of the importing country.

8. Unwanted and obsolete pesticides

Obsolete pesticides are stored, and unused pesticides that can no longer be used for their original intended use require disposal. There are many reasons for the existence of stocks of unwanted pesticides. These can range from the pesticide having been banned, with stocks remaining in storage, through deterioration of a pesticide due to the length of time it has remained in storage or improper storage conditions, rendering it no longer usable for the original intended purpose, to other reasons such as chemical changes that make the product unusable. It is difficult to ascertain whether or not a pesticide product has become unusable. Generally, it is not so difficult to ascertain if the product is unwanted. It may occur, however, that the product, while unwanted in one situation, is capable of being used in another one.

Unwanted pesticides are a major problem in many countries. For decades, stockpiles of obsolete and unwanted pesticides have been accumulating in developing countries, so that it is now estimated that there are more than 200,000 tonnes of such materials located at thousands of sites all around the planet. Many of these chemicals (POPs) have long been banned or are unusable for other reasons. Today, they are often found in dangerous storage conditions, leaking from rusted containers, contaminating groundwater and soils and poisoning the health and environment of people everywhere.

Inventory data for unwanted and obsolete pesticides should include:

- Location
- Classes and types of materials
- Weight and volume of each material
- Owner information
- Storage situation
- Leakage and contamination information
- Product information—active ingredient, formulation, concentration
- Age and condition of the product.

9. Best available techniques and best environmental practices

General considerations

Article 5 of the Stockholm Convention requires Parties, within two years of its entry into force for them, to develop an action plan to identify, characterize and address the release of the chemicals listed in its annex C. Chemicals currently listed are polychlorinated dibenzo-p-dioxins (PCDDs) and polychlorinated dibenzofurans (PCDFs), as well as hexachlorobenzene (HCB) and polychlorinated biphenyls (PCBs), when produced unintentionally.

The action plan, which is to be part of a Party's national implementation plan, to be developed pursuant to Article 7 of the Convention, will include strategies for meeting obligations to reduce or eliminate releases of the chemicals listed in annex C of the Convention, and a schedule for implementation of the action plan. The plan will identify priorities for action, including for those source categories that provide the most cost-effective opportunities for the reduction or elimination of release. It will also include an inventory of releases of the chemicals listed in annex C.

In accordance with the implementation schedule of its action plan and taking into account the guidelines to be adopted by the Conference of the Parties, a Party is to promote, and in some cases require, the use of the best available techniques and to promote the use of the best environmental practices distinguished by the sources of release identified. Parties are also to promote the development of and, where appropriate, require the use of substitute materials or processes to prevent the formation and release of chemicals listed in annex C.

Policy, legal and governance issues

Just how a government promotes or requires the use of the best available techniques and the best environmental practices will vary from country to country, depending on the legal structure and socio-economic conditions. Possible enforcement strategies would include reporting of release estimates, public information and education programmes, voluntary industry programmes, economic instruments and regulation. These issues should be addressed in the Party's national action plan.

The types of measures that may be promoted or required as best available techniques to reduce or eliminate the release of annex C chemicals can be categorized as follows: a shift

to alternative processes; primary measures that prevent the formulation of chemicals listed in annex C; and secondary measures that control and reduce the release of these chemicals.

Scientific and technical issues

The state of science with regard to both the measurement of releases of the chemicals listed in annex C and the levels of them present in the environment and with regard to what are considered to be the best available techniques and best environmental practices will progress as time goes by. This guidance will be regularly updated to keep abreast of these changes.

The Convention identifies the term "best" as most effective in achieving a high general level of protection of the environment as a whole.

Economic and social implications

Depending on the process that is the source of the chemicals listed in annex C, economic and social conditions in a country are a factor in determining what are the "best available techniques" and the "best environmental practices". Where processes are relatively large in scale and capital intensive and involve large and continuous throughputs (for example, cement kilns firing hazardous wastes, sinter plans in the iron and steel industry, fossil fuel-fired utilities), the technologies and practices used and the enterprises that manage them are rather similar worldwide. In such cases, the best available techniques and the best environmental practices can be applied in much the same way in every country. Where processes are relatively smaller in scale (crematoria, home heating and cooking, industrial boilers, motor vehicles) or involve management of wastes (waste incineration, open burning), the technologies and practices available may vary greatly from country to country. In these cases, determination of the best available techniques and the best environmental practices will need to include an analysis of the economic feasibility of the various options available. Thus, "best" may mean the best option that is economically feasible under the socio-economic conditions present.

Formation of the chemicals listed in annex C: An overview

Polychlorinated dibenzo-*p*-dioxins (PCDDs), polychlorinated dibenzofurans (PCDFs), polychlorinated biphenyls (PCBs) and hexachlorobenzene (HCB) are unintentionally formed in industrial-chemical processes such as chemical manufacture, and thermal processes such as waste incineration. The formation of PCDDs/PCDFs has been studied extensively in combustion-related processes and to a lesser extent in non-combustion-related chemical processes; however, the mechanisms and exact conditions of formation have not been fully resolved. There is far less information as to the formation of PCBs and HCB. Since there are similarities in the structure and occurrence of PCDDs/PCDFs, PCBs and HCB, it is usually assumed that those parameters and factors that favour formation of PCDDs/PCDFs also generate PCBs and HCB.

Waste management considerations

The Stockholm Convention identifies waste incinerators as a source category with the potential for a comparatively high level of formation and release of the chemicals listed in annex C. These include "co-incinerators of municipal, hazardous or medical waste or of sewage sludge" and "cement kilns firing hazardous waste" as a source category with the same or similar potential, as well as burning of waste, including burning of landfill sites.

The first priority among waste management options is source reduction.

Municipal solid waste, hazardous waste and sewage sludge

Waste incinerators are identified in the Stockholm Convention as having the potential for a comparatively high level of formation and release to the environment of the chemicals listed in annex C.

The best available techniques and the best environmental practices for incineration include practicing proper waste handling, ensuring good combustion, avoiding formation conditions, capturing the chemicals listed in annex C that are formed and handling residues appropriately.

Medical waste

Incineration of medical waste (infectious health-care waste, biological health-care waste, sharps and body parts) in dedicated waste incineration plants is performed both to fully destroy organic matter and hazards and to reduce the volume of waste as a pretreatment step to environmentally sound landfilling.

If medical waste is incinerated in conditions that are not in line with the best available techniques or best environmental practices, there is a potential for the release of PCDDs and PCDFs in relatively high concentrations.

Cement kilns firing hazardous waste

The main purpose of cement kilns is clinker production. Firing waste in cement kilns aims at energy recovery and substitution of fossil fuels. In some cases hazardous wastes are disposed of in these installations.

Open burning of waste, including burning of landfill sites

Open burning is an environmentally unacceptable process that generates the chemicals listed in annex C to the Stockholm Convention and numerous other pollutant products of incomplete combustion.

The best guidance is to reduce the amount of material disposed of via this method with the goal of eliminating it altogether.

The best available techniques include the use of plastic-free and oil-free feed materials, high furnace temperatures above 850° C, effective gas collection, afterburners and rapid quench, activated carbon adsorption, and dedusting of fabric filters. The achievable performance levels for secondary lead smelters: < 0.1 ng I-TEQ/Nm3.

Residential combustion sources

Combustion of wood, coal and gas for residential room heating and cooking. Combustion takes place in hand-fired stoves or fireplaces or, in the case of larger central heating systems, in automatically fired installations. Significant levels of PCDDs and PCDFs, and lesser amounts of PCBs, are released from residential combustion sources as a result of incomplete combustion and the use of fuels, including household waste, that contain carbon and chlorine.

Given their relatively large numbers, residential combustion appliances contribute noticeably to overall releases of the chemicals listed in annex C. High-quality, efficient combustion in cooking and heating appliances is very important for reducing the formation and release of the chemicals listed in annex C.

Fossil fuel-fired utility and industrial boilers

Utility and industrial boilers are facilities designed to burn fuel to heat water or to produce steam for use in electricity generation or in industrial processes, and due to the total mass, emissions from the boiler sector may be significant because of the scale of fossil fuel combustion, in terms of both tonnage and distribution, for electricity generation and heat or steam production.

Crematoria

The formation of PCDDs, PCDFs, HCB and PCBs and their release from crematoria are possible due to the presence of chlorinated materials, precursors and chlorine in the cadavers.

Motor vehicles, particularly those burning leaded gasoline

PCDDs and PCDFs have been found in the emissions from motor vehicles fuelled with gasoline or diesel. The higher concentrations identified in emissions from vehicles run on leaded gasoline are due to the presence of chlorinated and brominated scavengers in the fuel.

The best available techniques include banning of halogenated scavengers, and fitting of motor vehicles with oxidation catalysts or particulate filters.

Significant releases of the chemicals listed in annex C also come from:

- Thermal processes in the metallurgical industry
- Secondary copper production
- Sinter plants in the iron and steel industry
- Secondary aluminum production
- Secondary zinc production
- Secondary lead production
- Primary aluminium production
- Magnesium production
- Secondary steel production
- Primary smelting of base metals

10. Contaminated sites

Overview

Industrialization has left numerous sites contaminated by all sorts of toxic substances and wastes, including heavy metals, hydrocarbons, tars, chemical pollutants and pesticides.

Land pollution is a frequent source of harmful impacts on health, and of contamination of surface water and groundwater. Contaminated sites may be a major environmental issue. In addition to posing a possible threat to public health and the environment, contaminated sites can have significant economic, legal and planning implications. Therefore contaminated sites must be listed, situations prioritized and those requiring urgent attention identified.

Screening is needed to assess and rank the risk that any contaminated site presents by considering the completion of the risk pathway from a contaminant source, or hazard, to a receptor, using weighted factors for the various parameters making up the pathway. Three overall receptor pathways may be considered, namely, exposure to surface water or to groundwater and direct contact. Each of these pathways is to be treated independently and assigned equal importance, with the overall ranking of a site used to prioritize sites for further investigation. The vertical and lateral extent of contamination is important, in order to ensure that the extent and characteristics of the contamination are understood, so that appropriate data are used for modelling and decision-making purposes.

Screening for POPs may be limited to sites where site history indicates their likely presence.

Examples:

Pesticides—Pollutants are generated during the manufacture of pesticides (leaks from storage tanks, tank wash waters, manufacturing residues, etc.). In addition, pollutants may accumulate in the natural environment once pesticides have been marketed, either because of repeated spreading on the same plots, or because of inappropriate practices in product storage, inadequate disposal of soiled packaging or use of prohibited pesticides.

PCBs—PCBs are mainly used as dielectric fluids in transformers and capacitors. Contamination may occur at various stages of the life cycle of these products, for example, in production facilities; facilities where electrical equipment (e.g. transformers) is manufactured; facilities where the equipment is used; facilities where this equipment is repaired and serviced; and disposal facilities.

Screening of sites for dioxins and furans may be expensive and unnecessary (unless analysis can be restricted to sites where the site history or the presence of an indicator substance suggests potential dioxin contamination).

Criteria for identification of contaminated sites

The formulation of a suitable and effective management framework for contaminated lands should be underpinned by adequate scientific and socio-economic data and information. The information gathered must cover sources, pathways, fate and transport, human and ecosystem exposure, toxicology and ecotoxicology.

Process to identify contaminated sites:

- Sites are prioritized by applying a risk model. This applies weighting factors according to the risks associated with a site's historic industrial use and how sensitive the current land use would be to "contamination effects". The result is a score or risk rating of sites where there is a "potential pollutant linkage". The sites at which there is the greatest potential for contamination to cause significant harm to human health and/or the environment are identified at this first stage.
- In the second stage, the highest priority sites are investigated and an "actual pollutant linkage" established. This investigation will involve carrying out a detailed desk-based researched assessment of available information and a walkover survey of the site.

- In the final stage, the presence or absence of "a significant pollution linkage" is confirmed with certainty. This may involve carrying out an intrusive site investigation, i.e., taking soil, water and/or gas samples for chemical analysis to determine the extent, location and concentrations of contaminants in the soil and/or water.

Once a site has been designated as "contaminated", the most appropriate methods for cleaning up the site must be established.

Contaminated sites pose a threat both to people's health and to the environment and need to be managed. To assess how much of a threat they pose, we need to identify them.

Identifying contaminated sites

Site categories

Unverified—Sites where activities may have taken place, or be taking place, but this has not yet been independently verified. These sites have to be verified before testing for contamination takes place.

Verified—Sites where activities have taken place, or are taking place. It is likely that contamination may be present and samples may be taken for further testing.

Confirmed contaminated—Sites where contamination is present and has been confirmed by chemical analysis.

Remediated—Sites that have been cleaned up.

Assessing risk

Contaminants can move from the source to the receptor via food, air and water (contaminated surface water or groundwater). Contaminants can enter people's bodies by ingestion (eating or drinking), inhalation (breathing in) and direct contact (for example, absorption through the skin).

Hazardous substances

Common hazardous substances include petrol, solvents, household chemicals, acids and alkali compounds, cyanide compounds, and agrochemicals such as pesticides.
Hazardous substances may be:

- Explosive—for example, some compressed gases
- Oxidizing—for example, swimming pool chlorine or hydrogen peroxide
- Corrosive—for example, battery acids
- Flammable—for example, fireworks, and solvents such as petrol, kerosene and methanol
- Toxic—for example, pesticides (many of the above are also toxic).

They may also be:

- Radioactive—for example, drugs used in radiotherapy, isotopes in smoke alarms
- Asphyxiant (causing suffocation)—for example, liquid nitrogen in a small room
- Pathogenic—for example, disease carried in effluents.

The risks

Many hazardous substances are useful or even essential in modern life, but they need to be managed carefully in order to avoid adverse effects, such as damage to the health of people, animals and plants. Hazardous substances may enter the environment during normal use (for example pesticides), or through accident, leakage or incorrect disposal. Contaminated sites can release hazardous substances into the environment through:

- Floods
- Leaching into groundwater
- Loss to air, for example, by evaporation or transportation on fine particles (wind-blown dust).

We can measure the threat to the environment from hazardous substances by looking at the extent of their use, transportation and disposal. A source could be any facility or activity that stores, uses or disposes of hazardous substances in sufficient quantity that intentional or accidental discharge of the substance could be a risk to human health or the environment.

Thus, certain activities and industries are more likely than other uses or activities to use or store hazardous substances, and therefore there is a greater probability of site contamination occurring. The list below is indicative.

- Chemical production
- Commercial analytical laboratories
- Asbestos production, use, and disposal
- Asphalt or bitumen manufacture
- Battery manufacture or recycling
- Cement or lime production
- Cemeteries
- Coal and coke yards
- Dry-cleaning plants
- Electrical transformers/capacitors—manufacturing, repair or disposal
- Fertilizer manufacture
- Foundry operations
- Iron and steel works
- Municipal/industrial landfill
- Use of pesticides—gardens, orchards, glasshouses, etc.
- Metal production
- Metal treatment or coating—including polishing, anodizing, galvanizing, electro-plating, heat treatment using cyanide compounds and finishing
- Mining and extractive industries and mineral processing
- Storing of hazardous wastes, including waste dumps
- Paint manufacture and formulation

- Pulp plants
- Pesticide manufacture (including animal poisons, insecticides, fungicides and herbicides)
- Petroleum or petrochemical industries
- Pharmaceutical manufacture
- Power stations
- Petrol service stations and fuel depots
- Scrapyards
- Tanneries or commercial finishing of leather
- Storage tanks for fuel, chemicals and liquid waste
- Storage, treatment and/or disposal of wastes
- Sewage treatment

Toxicity

The toxicity of a contaminant must be assessed for each case, together with an assessment of the ability of the contaminants to cause adverse human health and environmental effects.

Contaminants that are of high concern include:

- Materials that are persistent, bioaccumulative and toxic
- Heavy metals
- Industrial wastes (e.g. pesticides, herbicides, paint sludge, acid and alkaline solutions, petroleum hydrocarbons)
- Institutional wastes (e.g. from laboratories, hospitals)
- Pathological wastes and animal carcasses
- Radioactive wastes

The quantity of potentially hazardous materials must be treated independently of their toxicity, but the quantity combined with the toxicity gives a measure of the hazard at the source. Thus, the combination of a small quantity of a highly toxic material may present a similar hazard to a large quantity of a substance with a low toxicity.

The inherent mobility or ability of the hazardous substance to be transported along a pathway once released from containment, e.g., volatility, water solubility, likelihood of partitioning to soil or water, must also be taken into account.

Surface water

For a surface water receptor to be at risk, a contaminant must be "flushed" off a site. The flushing may occur as surface runoff resulting from rainfall, irrigation or flooding.

The surface water receptor pathway consists of the site topography, the distance from the site to the nearest surface waterway or the potential for flooding of the site.

Groundwater

For a groundwater pathway receptor, the contaminant must migrate to a usable aquifer, and travel through the aquifer to the point of contact. This can be assessed by the thickness of any low-permeability protective layer overlying aquifers of concern, the effect of rainfall driving the migration of contaminants through the ground and the distance to the nearest user.

Annual rainfall

The annual rainfall is a measure of the driving force for contaminants migrating down to the groundwater table. Rainfall values should be obtained from local authority records or the most appropriate nearby meteorological station maintained on the national meteorological network. Note that the choice of meteorological station should take into account local conditions, such as whether the area is hilly or prevailing winds result in substantial differences over short distances.
Where additional water is applied to the ground, e.g., by means of irrigation, this should be converted to equivalent annual rainfall.

Distance to user

The distance to the user is used to assess the ability of a hazard to migrate through an aquifer to a point of use.

Minimizing risk

Risks associated with contaminated sites can be minimized by breaking the source-pathway-receptor chain. This can be done by removing the source of contamination (remediation), removing the pathways that allow contaminants to reach receptors and removing the receptors.

Laboratory methods and techniques

Inaccurate laboratory data can lead to poor assessment of risk to human health and the environment, the potential for poor remediation or site management outcomes and adverse economic implications for site development.

This issue is considered to be essentially a professional matter that requires input from commercial and government laboratories and related professional associations to determine the most appropriate and up-to-date laboratory methods for soil and water contaminants.

Community consultation

The assessment of site contamination can become a major issue of public anxiety.

11. Information on the Internet

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal
www.basel.int

Stockholm Convention on Persistent Organic Pollutants
www.pops.int

Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade
www.pic.int/home.php?type=s&id=77

www.pic.int/en/ConventionText/ONU-GB.pdf

UNEP Chemicals; Many useful reports can be viewed and downloaded via this website
www.chem.unep.ch

UNEP Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities; a lot of useful information
www.gpa.unep.org

Guidelines for the Identification of PCBs and Materials Containing PCBs, UNEP, 1999
www.chem.unep.ch/pops/pdf/PCBident/pcbiden.pdf

GEF—Global Environment Facility
www.gefweb.org

UNITAR—United Nations Institute for Training and Research
www.unitar.org

UNIDO—United Nations Industrial Development Organization
www.unido.org

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