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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Forty-fifth Meeting
Montreal, 4-8 April 2005

PROJECT PROPOSAL: DOMINICAN REPUBLIC

This document consists of the comments and recommendation of the Fund Secretariat on the following project proposal:

Phase-out

- Terminal phase-out plan for Annex A (Group I) substances: 2005 annual implementation programme UNDP

**PROJECT EVALUATION SHEET (MULTI-YEAR PROJECTS)
DOMINICAN REPUBLIC**

PROJECT TITLE**BILATERAL/IMPLEMENTING AGENCY**

Terminal phase-out plan for Annex A (Group I) substances: 2005 annual implementation programme	UNDP
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SUB-PROJECT TITLES

(a) Licensing programme	UNDP
(b) Mobile air conditioning programme	UNDP
(c) Domestic refrigeration programme	UNDP
(d) Commercial refrigeration programme	UNDP
(e) Monitoring programme	UNDP

NATIONAL CO-ORDINATING AGENCY:	Comision Gubernamental del Ozono – Secretaria del Ambiente
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LATEST REPORTED CONSUMPTION DATA FOR ODS ADDRESSED IN PROJECT**A: ARTICLE 7 DATA (ODP tonnes, 2003, as of October 2004)**

CFC-11	5.77	R502 (CFC-115 and HCFC-22)	2.51
CFC-12	258.21		

B: COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes, 2004, 3 March 2005)

ODS	Refrigeration servicing	ODS	Refrigeration servicing
CFC-11	6.71	CFC-114	4.18
CFC-12	301.14	CFC-115	312.03

CFC consumption remaining eligible for funding (ODP tonnes)	381
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CURRENT YEAR DRAFT BUSINESS PLAN: Total funding US \$ 1,711,610: total phase-out 311.20 ODP tonnes

PROJECT DATA		2004	2005	2006	2007	2008	2009	2010	Total
CFC (ODP tonnes)	Montreal Protocol limits	539.80	269.90	269.90	81.00	81.00	81.00	0.00	n.a.
	Annual consumption limit	311.20	269.90	252.00	81.00	81.00	53.00	0.00	n.a.
	Annual phase-out from ongoing projects	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Annual phase-out newly addressed	41.30	17.90	171.00	0.00	28.00	53.00	0.00	311.20
	Annual unfunded phase-out	0	0	0	0	0	0	0	0
TOTAL ODS CONSUMPTION TO BE PHASED OUT		41.30	17.90	171.00	0.00	28.00	53.00	0.00	311.20
Total ODS consumption to be phased in (HCFCs)		0	0	0	0	0	0	0	0
Project cost as originally submitted (US \$)									1,711,610
Final Project costs (US \$):									
Funding for lead agency UNDP		0	500,000	400,000	400,000	211,610	200,000	0	1,711,610
Total project funding		0	500,000	400,000	400,000	211,610	200,000	0	1,711,610
Final Support costs (US \$)									
Support cost for lead agency UNDP		0	37,500	30,000	30,000	15,870	15,000	0	128,370
Total support costs		0	37,500	30,000	30,000	15,870	15,000	0	128,370
TOTAL COST TO MULTILATERAL FUND (US \$)		0	537,500	430,000	430,000	227,470	215,000	0	1,839,970
Final project cost-effectiveness (US \$/kg)									5.5

FUNDING REQUEST: Approval in principle of total ODS phase-out, total project funding and total support costs, and approval of funding for first tranche (2005) as indicated above.

SECRETARIAT'S RECOMMENDATION	Blanket approval at the costs indicated above
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PROJECT DESCRIPTION

1. The Government of the Dominican Republic, through UNDP, has submitted for consideration by the Executive Committee at its 45th Meeting a Terminal Phase-out Plan (TPP). Implementation of the plan will lead to the phase-out of the remaining consumption of Annex A, Group I (CFCs) substances (311.2 ODP tonnes), which represents the expected CFC consumption in 2004 as per the CFC import quota established by the National Ozone Unit. The requested cost of the plan is US \$1,711,600 (excluding agency support costs).

ODS consumption

2. The CFC consumption targets for compliance with the Montreal Protocol requirements for 2005-2010 in the Dominican Republic are as follows:

Consumption limits (in ODP tonnes)	CFC
Baseline consumption	539.8
2005	269.9
2007	81.0
Selected unfunded consumption as per Decision 35/57 (Option 2)	381.0

3. For the year 2003, the Government of the Dominican Republic reported to the Ozone and Fund secretariats a total CFC consumption of 266.5 ODP tonnes, used exclusively in the refrigeration servicing sector. No CTC, TCA and halon consumption was reported for 2003.

4. The historical background of CFC, TCA and CTC consumption in the Dominican Republic is presented in the following table:

ODS	Baseline ODP tonnes	1998 ODP tonnes	1999 ODP tonnes	2000 ODP tonnes	2001 ODP tonnes	2002 ODP tonnes	2003 ODP tonnes	2004 ODP tonnes
CFC	539.8	311.4	752.1	398.8	485.8	329.76	268.16	311.2
CTC	29.0	37.4	30.8	18.7	0.0	0.0	0.0	0
TCA	3.6	4.7	3.7	2.4	2.4	0.0	0.0	0

5. 2004 consumption of 311.2 ODP tonnes is based on import data collected by customs in the Dominican Republic, verified by UNDP. The same data will be reported as officially to the Ozone Secretariat at a later stage. The 2004 consumption data has been presented to the Fund Secretariat as part of reporting on the implementation of the country programme in the Dominican Republic.

ODS phase-out projects approved by the Executive Committee

6. So far, the Executive Committee has approved 35 projects and activities for the Dominican Republic at a total cost of US \$4,195,294, to phase out 350 ODP tonnes of ODS. Out of the 35 projects approved, 23 projects, accounting for a direct reduction of 206 ODP tonnes,

have already been completed. This reduction in ODS consumption from implemented projects in the aerosol, foam and refrigeration and manufacturing sectors has enabled the country to achieve compliance with the 1999 freeze, and has helped meet the 2005 CFC reduction obligation.

7. In the refrigeration servicing sector, seven demonstration and investment projects including a RMP consisting of refrigerant recovery/recycling, training and monitoring components were approved and implemented successfully, resulting in reduction of CFC consumption in the sector. Projects to monitor the implementation of the RMP and train customs officers are still ongoing.

ODS regulations

8. The Government of the Dominican Republic has adopted policies regulating the use and final phase-out of CFCs in the country. The regulatory and legislative measures adopted by the Government are included in the following list:

- (a) The ozone office has instituted an effective procedure to review and endorse project proposals for submission to the Multilateral Fund for funding. Each enterprise seeking assistance is required to contact the Ozone Programme and show its commitment to phasing out the use of ODS. It must also provide legally binding documentation and certifications for establishing its eligibility, CFC consumption, and financial viability;
- (b) The import and export of all Annex A and Annex B substances are regulated through the issuance of import permits;
- (c) Establishment of the National Certification on Refrigeration Programme for setup and enforcement of the licensing system;
- (d) Ban on imports of ODS-consuming equipment, such as air conditioners, refrigerators, automobiles, etc;
- (e) Identification and registration of ODS importers;
- (f) Ban is extended to existing units using ODS;
- (g) Establishment of a "Licensing System", with an ODS import/ export registration form and a quota system issued by the Ministry of Natural Resources and Environment. Under the licensing system, importers must apply for a license using the official registration forms. The importer can be granted a license if the ensuing background investigation is clear and the importer agrees to abide by the regulations that reduce the import quantities allowed. Coinciding with the registration programme, the government has already begun a scaling down of allowable imports into the Dominican Republic, with new reductions taking effect each year;
- (h) Mandatory registration with designated authorities;
- (i) Mandatory registration for importers with designated authorities;

- (j) Every person who uses, imports, sells, stocks, reclaims or destroys ODS must maintain records and file reports as specified; and
- (k) Every entity that has received financial assistance from any international agency or from the Government of the Dominican Republic is required to maintain records and file reports as specified.

9. The licensing system that regulates imports of CFC-11 and CFC-12 refrigerants is being successfully implemented. For the last three years, imports of those refrigerants have been reduced to a level below the CFC baseline established by the Montreal Protocol.

The refrigeration servicing sector

10. A survey conducted in 2003 demonstrated that most CFC consumption in the country belongs to the refrigeration servicing sector, including domestic refrigeration, the retail food industry, other commercial refrigeration, mobile air conditioning (MAC), and commercial building chillers.

11. The breakdown of consumption by sub-sector is shown in the following table.

SUB-SECTOR	% OF TOTAL CONSUMPTION	TOTAL IN ODP TONNES 2003
Servicing – overall	100%	268.16
domestic	8	21.79
MACs	31	83.46
commercial	33	88.83
industrial	5	15.07
CFC-11 used in servicing	5	13.41
Hotels	7	18.77
ice makers	6	16.09
government offices	4	10.73
Total	100%	268.16*

*2004 consumption was identified at the level of 311.2 ODP tonnes for refrigeration servicing. The new breakdown by sub-sector is not yet available.

12. Domestic refrigeration. There are an estimated 1.2 million domestic refrigerators in the country, of which about 635,000 are based on CFC-12 refrigerant and the balance are based on HFC-134a. The typical size is 10 to 15 cubic feet of volume. The life of domestic refrigerators is less than 20 years, with major servicing of the refrigeration system required about every 7 to 10 years. However, in some cases, repairs are performed by technicians who recharge the unit but pay little attention to leak repair. The servicing work on domestic refrigerators is carried out by about 1000 large and medium-sized servicing shops and by small and informal sector shops (about 2000 small servicing shops and other individual technicians).

13. The retail food industry within the commercial refrigeration sector has made some progress in switching to non-CFC technology, but the primary effort to date has been in complying with the import ban on CFC-based technology and equipment. There have been several supermarkets built since the late 1990s, and these recent projects have relied on non-CFC replacements for refrigerant systems, primarily R-404. However, many continue to use CFC

cooling systems. The retail food industry comprises a wide variety of sizes, ranging from relatively large modern supermarkets, to medium-sized markets, and several small family-owned grocery shops.

14. Fishery Industry Refrigeration. There are an estimated 12 to 15 private companies in this sub-sector. The majority of them use HCFC-22 as a refrigerant and a few use ammonia, R-404 and R-507. These companies are involved in exporting frozen goods, and must use non-CFC-based systems in order to meet international or regional standards. Total ODS consumption on the part of companies that use CFC-based systems is less than 0.1 ODP tonnes.

15. Hotels. There are approximately 400 hotels in the Dominican Republic utilizing CFC refrigeration systems. These systems include walk-in freezers and chill rooms. The estimated total CFC consumption in this sector is 18.77 ODP tonnes.

16. Ice & Ice-Cream Manufacturers. There are about 60 ice manufacturers and three ice-cream manufacturers in the Dominican Republic, using a range of systems. They use CFC-12, R-502, HCFC-22, and several have converted to ammonia, R-507, HFC-134a and R-404.

17. Transport Refrigeration. Ten companies install insulation/refrigeration systems for truck and container transport. The majority of them use HFC-134a as a refrigerant. These companies no longer install CFC systems and promote conversion of old systems to HFC-134a.

18. It is important to mention that, since 1999, there has been a considerable reduction in the use of R-502 and an increase in the use of R-404, R-404a and R-507 in industrial applications (big supermarkets, hypermarkets, commercial centres, and refrigerated storage, among others). Currently, the consumption of CFC-115 as part of R-502 is about 3.3 tonnes.

19. There are an estimated 400 air-conditioning servicing shops in the Dominican Republic dealing with building chillers and domestic air-conditioning systems. The technology used in domestic and small building air-conditioning is based on HCFC-22 refrigerant, including split and window units and some central systems.

20. In 2000, Dominican Republic stopped importing equipment/systems containing CFC, including used or new vehicles equipped with CFC-12-based MAC systems. Therefore, the existing stock of CFC-12-based MAC systems is expected to decline over the next few years at a rate based on normal repair practices in the country. Typically, cars are kept for 10-12 years, but due to recent economic conditions owners of older cars are deferring replacement, so a large number of CFC vehicles still remain in the country. The MAC Demonstration Project carried out in Santo Domingo has shown that MAC recycling is a workable proposition in the Dominican Republic, and the experience can be extended to the larger market. There are about 130 MAC servicing shops in the Dominican Republic, in both the private and public sector. These shops would be able to make a contribution to the MAC recycling component.

21. There are still a number of large buildings that continue to use HCFC- or CFC-based cooling systems, but the majority use HCFC. Essentially, all use central air-conditioning units made up of high pressure HCFC-22, and only one has been found to use a low-pressure CFC-11 centrifugal system, which is not included in the phase-out programme.

22. The estimated number of technicians servicing all types of refrigeration systems is more than 4,000, with different levels of technical skill and knowledge. Assistance, including training, servicing equipment and technical support, will focus first on servicing shops that use significant amounts of CFC refrigerants.

23. Current refrigerant prices per kg are shown in the table below:

Product	Current Price In US \$/kg	Trend
CFC-12	2.90	increase
CFC-11	2.70	increase
HFC-134-a	2.90	increase
R-502	10.00	decrease
HCFC-22	1.70	increase
R-409A	8.00	decrease
HCFC-141-b	4.50	increase

24. In the solvent sector, although there was some consumption of solvent ODS in the past, the 2003 survey found no uses, indicating that ODS solvents had been phased out in the Dominican Republic. While there appears to be no current ODS use, the typical turnover in small scale industries could result in the gradual re-introduction of ODS solvents if there are no periodic efforts to revive the sector's interest in making sure that this does not happen.

Phase-out strategy

25. The Government of the Dominican Republic has set the goal of achieving complete phase-out of ODS in the Refrigeration and Other Sectors by 1 January 2010. This will be achieved through investment projects, non-investment projects, technical assistance, legal instruments and capacity-building activities. The country's CFC phase-out strategy relies on:

- (a) The use of substitute technology and chemicals, primarily HFC-134a and some replacement refrigerants/blends to allow extended domestic equipment life and replace CFC-12;
- (b) Increased focus on reducing imports of ODS;
- (c) Promoting CFC recycling and recovery in certain refrigeration and air conditioning sectors;
- (d) Improving repair/leak detection to reduce CFC use and extend existing equipment life;
- (e) Providing additional training of technicians, including a certification programme; and

- (f) Providing technical assistance to promote awareness, policy and regulatory actions.

Project scope

26. The Terminal Phase-out Plan (TPP) will consist of the following components:
- (a) Supplemental qualification training for technicians, including the certification programme;
 - (b) Supplemental recycling and retrofit programme for the MAC sector, for mini-food market refrigeration, and for MAC R&R programme continuity;
 - (c) Use of substitute blends and training for domestic refrigeration servicing, intended to extend the life of older domestic refrigerators in a cost-effective manner, while rapidly eliminating CFC use in this sector;
 - (d) Conversion programme for all commercial refrigeration and continuity of the existing recovery and recycling programme;
 - (e) Training programme for existing and new recycling and recovery programmes;
 - (f) Improving technicians' capacity for repair/leak detection, to reduce CFC use and extend existing equipment life;
 - (g) Other technical assistance (policy and legislation actions);
 - (h) Local project management for implementation/supervision; and
 - (i) Providing technical assistance to promote awareness in government sectors that are directly involved, among ODS importers, and to promote policy and regulatory actions to deal with the informal sector.
27. A detailed description of the activities proposed for each sub-sector, with their respective budgets, is presented in the proposal.

Implementation and management

28. Overall management of the TPP will be carried out by UNDP with the assistance of the Government of the Dominican Republic. The Ozone Office will be responsible for monitoring the implementation of the phase-out plan. The National Ozone Commission (COGO) will be responsible for tracking the promulgation and enforcement of policy and legislation, and will work with UNDP to prepare annual implementation plans and progress reports to the Executive Committee. A local consultant will be recruited for project implementation, technical assistance (TA), and training and follow-up to ensure that all aspects of the project are being implemented with the quality needed to achieve the anticipated results.

Cost of the TPP

29. The total cost of the TPP is US \$1,711,600. The total cost breakdown and disbursement schedule is presented below. The cost-effectiveness of the proposal is calculated at US \$5.5/ODP kg based on the expected impact of phasing out 311.2 ODP tonnes, which is slightly below the import quota for the year 2004.

Activity	Budget (US \$)
Licensing programme for 2,000 technicians	300,000
Mobile air conditioning programme	369,500
Domestic refrigeration programme	486,000
Commercial refrigeration programme	312,500
TA-Awareness programme for solvents – 4 years	88,000
Monitoring unit	155,600
TOTAL	1,711,600

30. The proposal contains a draft agreement and the 2005 first-year implementation plan. The 2005 phase-out strategy will rely primarily on appropriate, commercially available, substitute technology for the various refrigeration and air conditioning sub-sectors that have continued to use CFCs. While all of the activities programmed for the plan are expected to start in 2005, only some particular actions will have an immediate impact, ensuring that the level of imports in 2005 will not be beyond 269.9 ODP tonnes, and preparing the ground for achieving a level of imports of 252 ODP tonnes by 1 January 2006. These immediate phase-out actions are aimed at establishing a good partnership with the Custom Department to comply with the import quota and with importers and distributors to make substitutes available in the market that will provide substitute blends and drop-in refrigerant alternatives to refrigeration servicing technicians. The proposed actions will start as soon as the project is approved and will have a phase-out impact of the 59.20 ODP tonnes. Funding of US \$500,000 is requested as a first tranche for the 2005 annual implementation programme.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

31. UNDP submitted the proposal for the Dominican Republic for consideration by the Executive Committee for the first time at the 43rd Meeting. After the review by the Secretariat, it was agreed that more work was required and the proposal was withdrawn and resubmitted to the 44th Meeting. The Fund Secretariat discussed the starting point and impact of the proposal with UNDP at that time. The proposal used the 2004 import quota to establish the starting point for the CFC reduction schedule rather than actual 2003 consumption data available at that time. The Secretariat drew UNDP's attention to the fact that latest actual ODS consumption had been applied to determine ODS reduction schedules and to calculate the cost-effectiveness in sector plans and national ODS phase-out plans recently approved by the Executive Committee. The Secretariat recommended using the latest 2003 CFC consumption as a basis for the first year of programme implementation, for the Draft Agreement and to calculate cost-effectiveness. On the

request of the Government of the Dominican Republic, the proposal was withdrawn and resubmitted for consideration at the 45th Meeting. The proposal refers to 2004 consumption, which was identified at the level of 311.2 ODP tonnes based on import data collected by customs in the Dominican Republic and verified by UNDP. The Government of the Dominican Republic presented its report on the implementation of the country programme to the Fund Secretariat on 3 March 2005, including 2004 ODS consumption data. Data will be reported as official to the Ozone Secretariat at a later stage.

32. The Fund Secretariat pointed out to UNDP that the proposed retrofitting of 1800 MAC systems at the cost of US \$180,000 would cover only about 1.8% of the total number of passenger and commercial vehicles equipped with MAC systems. The potential impact of these activities might be the phase-out of only about 1.08 ODP tonnes, with a cost-effectiveness of about US \$166/kg. The Fund Secretariat recommended that UNDP put more emphasis on other, more cost-effective activities proposed in the TPP, such as the provision of servicing equipment to technicians and training in better servicing practices.

33. The Secretariat noted that the proposed incentive programme for retrofitting refrigeration equipment using drop-in refrigerants might not be sustainable, given the prevailing prices of CFC refrigerants and alternatives. It advised UNDP to follow the changing market situation very closely.

34. While discussing the recovery/recycling programme, the Secretariat drew UNDP's attention to the provisions of decision 41/100, which requires: establishing, during project preparation, a more sound estimate of the likely demand for recovery and recycling equipment; delivering equipment to the country only against firm orders; and procuring, delivering and distributing equipment in several stages, after reviewing the utilization of equipment delivered, and verifying further demand.

35. The Secretariat pointed out to UNDP that the unit cost for recovery/recycling equipment, used to calculate the budget, was high.

36. UNDP clarified that car owners in the MAC sector would pay a portion of conversion costs, thus improving cost-effectiveness. A staged approach would be used in the procurement of the recovery/recycling equipment and the market situation would be monitored constantly during implementation of the retrofitting incentive programme to make it sustainable. UNDP agreed to reduce the unit cost of recovery/recycling machines.

37. The Secretariat and UNDP discussed the incremental cost of the proposal and agreed on the grant amount of US \$1,711,610, including US \$155,600 for the project monitoring unit. The cost-effectiveness of the proposal is US \$5.5/kg.

38. The Draft Agreement between the Government of the Dominican Republic and the Executive Committee for the complete phase-out of Annex A (Group I) substances and the annual implementation plan for 2005 are presented in Annex I to the present document.

RECOMMENDATION

39. The Fund Secretariat recommends blanket approval of the projects at the funding level indicated below. The Executive Committee may wish to consider:

- (a) approving in principle the terminal phase-out plan for CFCs for the Dominican Republic at a total level of funding of US \$1,711,600 plus agency support costs of US \$128,370 for UNDP;
- (b) approving the Draft Agreement between the Government of the Dominican Republic and the Executive Committee contained in Annex I to the present document; and
- (c) approving the funding for the first tranche of the phase-out plan at the amount of US \$500,000, plus support costs of US \$37,500 for UNDP.

Annex I

**DRAFT AGREEMENT BETWEEN DOMINICAN REPUBLIC AND THE EXECUTIVE
COMMITTEE OF THE MULTILATERAL FUND FOR THE PHASE-OUT OF
ANNEX A GROUP I OZONE -DEPLETING SUBSTANCES**

1. This Agreement represents the understanding of Dominican Republic (the “Country”) and the Executive Committee with respect to the complete phase-out of controlled use of the ozone-depleting substances in the sectors set out in Appendix 1-A (“The Substances”) prior to 2010, in compliance with Protocol schedules.
2. The Country agrees to phase out the controlled use of the Substances in accordance with the annual phase-out targets set out 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 accepts that, by its acceptance of this Agreement and performance by the Executive Committee of its funding obligations described in paragraph 3, it is precluded from applying for or receiving further funding from the Multilateral Fund in respect to the Substances.
3. Subject to compliance with the following paragraphs by the Country with its obligations set out in this Agreement, the Executive Committee agrees in principle to provide the funding set out in row 8 of Appendix 2-A (“The Targets, and Funding”) to the Country. 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 9 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 set out in the Funding Approval Schedule:
 - (a) That the Country has met the Target for the applicable year;
 - (b) That the meeting of the Target has been independently verified as described in paragraph 9; and
 - (c) That the Country has substantially completed all actions set out in the last Annual Implementation Programme;

- (d) That 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 Programmes”) 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 set out 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 9.

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 use the Funding for other purposes that can be demonstrated to facilitate the smoothest possible phase-out, consistent with this Agreement, whether or not that use of funds was contemplated in determining the amount of funding under this Agreement. Any changes in the use of the Funding must, however, be documented in advance in the Country’s Annual Implementation Programme, endorsed by the Executive Committee as described in sub paragraph 5(d) and be subject to independent verification as described in paragraph 9.

8. Specific attention will be paid to the execution of the activities in the refrigeration servicing subsector:

- (a) The Country would use the flexibility available under this Agreement to address specific needs that might arise during project implementation;
- (b) The recovery and recycling programme for the refrigeration servicing sector will be implemented in stages so that remaining resources can be diverted to other phase-out activities, such as additional training or procurement of service tools in cases where the proposed results are not achieved, and will be closely monitored in accordance with Appendix 5-A of this Agreement.

9. 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. UNDP has agreed to be the lead implementing agency (“Lead IA”) in respect of the Country’s activities under this Agreement. 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 programmes of the Multilateral Fund. The Executive Committee agrees, in principle, to provide the Lead IA with the fees set out in row 7 of Appendix 2-A.

10. Should the Country, for any reason, not meet the Targets for the elimination of the Substances set out in Appendix 1-A or otherwise does 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 the amount exceeding the Maximum Allowable Total Consumption of CFCs limit (Appendix 2-A) in any one year.

11. 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.

12. 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 with access to information necessary to verify compliance with this Agreement.

13. 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. All terms used in this Agreement have the meaning ascribed to them in the Protocol unless otherwise defined herein

APPENDIX 1-A THE SUBSTANCES

1. The ozone-depleting substances to be phased out under the Agreement are as follows:

Annex	Group	Chemical
A	I	CFC 11, CFC 12, CFC 113, CFC 114 and CFC 115

APPENDIX 2-A THE TARGETS, AND FUNDING

	2004	2005	2006	2007	2008	2009	2010	Total
Montreal Protocol Reduction Schedules	539.80	269.90	269.90	81.00	81.00	81.00	0.00	n.a.
1. Max allowable total consumption of Annex A Group I substances (ODP tonnes)	311.20	269.90	252.00	81.00	81.00	53.00	0.00	n.a.
2. Reduction from ongoing projects (ODP tonnes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3. New reduction under plan (ODP tonnes)	41.30	17.90	171.00	0.00	28.00	53.00	0.00	311.20
4. Unfunded reductions (ODP tonnes)	0	0	0	0	0	0	0	0
5. Total annual reduction of Annex A Group I substances (ODP tonnes)	41.30	17.90	171.00	0.00	28.00	53.00	0.00	311.20
6. Lead I.A. agreed funding (US\$)	0	500,000	400,000	400,000	211,600	200,000	0	1,711,600
7. Lead I.A. support costs (US\$)	0	37,500	30,000	30,000	15,870	15,000	0	128,370
8. Total agreed funding (US \$)	0	500,000	400,000	400,000	211,600	200,000	0	1,711,600
9. Total agency support costs (US \$)	0	37,500	30,000	30,000	15,870	15,000	0	128,370
10. Total grant for tranche (US\$)	0	537,500	430,000	430,000	227,470	215,000	0	1,839,970

APPENDIX 3-A FUNDING APPROVAL SCHEDULE

1. Funding other than the payments in year 2005 will be considered for approval at the first meeting of the year of the annual implementation plan.

APPENDIX 4-A- FORMAT FOR ANNUAL IMPLEMENTATION PROGRAMMES

1. **Data**

Country	
Year of plan	
# of years completed	
# of years remaining under the plan	
Target ODS consumption of the preceding year	
Target ODS consumption of the year of plan	
Level of funding requested	
Lead implementing agency	

2. **Targets**

Target:				
Indicators		Preceding Year	Year of Plan	Reduction
Supply of ODS	Import			
	Production*			
	Total (1)			
Demand of ODS	Manufacturing			
	Servicing			
	Stockpiling			
	Total (2)			

* For ODS-producing countries

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
Type of Policy Control on ODS Import: servicing, etc	
Public Awareness	
Others	

6. **Annual Budget**

Activity	Planned Expenditures (US \$)
TOTAL	

7. **Administrative Fees**

APPENDIX 5-A MONITORING INSTITUTIONS AND ROLES

1. All of the monitoring activities will be coordinated and managed through the project "Technical Assistance for Implementation and monitoring", which is included within the Terminal phase-out plan (TPP). The actual monitoring activities will be delegated to COGO of the Ministry of Environment, and these activities will be developed by a personnel hired for this purpose.

2. The monitoring programme will be based on three elements: 1) well designed forms for data collection, evaluation and reporting, 2) programme of regular monitoring visits, and 3) appropriate cross-checking of information from different sources.

Verification and reporting

3. The outcome of the different elements of the TPP and of the monitoring activities will be verified independently by an external organization. The Government and the independent organization will jointly design the verification procedures as part of the design phase of the monitoring programme.

Institution for conducting the verification

4. The Government of Dominican Republic wishes to designate UNDP to organize the independent verification of the TPP targets and results of the monitoring activities.

Frequency of verification and reporting

5. The monitoring reports will be produced and verified each year, previous to the first meeting of the Executive Committee. These reports will produce the input for the annual implementation reports required by the Executive Committee.

APPENDIX 6-A ROLE OF THE LEAD IMPLEMENTING AGENCY

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 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) Verification for the Executive Committee that consumption of the Substances has been eliminated in accordance with the Target;
- (j) Ensuring that disbursements are made to the Country in a timely and effective manner; and
- (k) Providing assistance with policy, management and technical support when required.

APPENDIX 7-A REDUCTIONS IN FUNDING FOR FAILURE TO COMPLY

1. In accordance with paragraph 10 of the Agreement, the amount of funding provided may be reduced by US \$10,000 per ODP tonne of reductions in consumption not achieved in the year.

ANNEX 1 - FIRST ANNUAL IMPLEMENTATION PROGRAMME (2005)

1. Data:

Country:	Dominican Republic
Years of plan:	2005
# Of years completed:	None
# Of years remaining under the plan:	6
Target CFC consumption of the preceding year:	NA (First Tranche)
Target CFC consumption of the year of plan:	41.30 reduction for 2004 17.90 reduction for 2005
Level of funding requested:	US\$ 500,000
Lead implementing agency:	UNDP
Co-operating agency(ies):	NA

2. CFC Targets (Annex A Group I Substances)

Target:		Year 2005		
Indicators		Preceding Year	Consumption expected 1 January 2006	Reduction during tranche period
Supply of ODS	Import	311.20	252.00	59.20
	Production*	0.00	0.00	0.00
	Total (1)	311.20	252.00	59.20
Demand of ODS	Manufacturing (4)	0.00	0.00	0.00
	Servicing (5)	311.20	252.00	59.20
	Stockpiling	0.00	0.00	0.00
	Total (2)	311.20	252.00	59.20

* For ODS-producing countries

3. Industry Action

Sector	CFC Consumption Preceding Year (1) 2005	CFC Consumption Year of Plan (2) 1 st Jan. 2006	Reduction within Two-Year period of the Plan (1)-(2)	Number of Projects Completed	Number of Servicing Related Activities	ODS Phase-Out (in ODP tonnes)
Manufacturing						
Aerosol	0.0	0.0	0.0	0		0.0
Foam	0.0	0.0	0.0	0		0.0
Refrigeration	0.0	0.0	0.0	0		0.0
Solvents	0.0	0.0	0.0	0		0.0
Other	0.0	0.0	0.0	0		0.0
Total	0.0	0.0	0.0	0		0.0
Servicing						
Refrigeration	311.20	252.00	59.20	0	4	59.20
Solvents	0.00	0.00	0.0	0	1	0.0
Total	311.20	252.00	59.20	0	5	59.20
GRAND TOTAL	311.20	252.00	59.20	0	5	59.20

4. Technical Assistance

Immediate phase out actions 2005:

The phase-out strategy for Dominican Republic will rely primarily on appropriate, commercially available, substitute technology for the various refrigeration and air conditioning sub-sectors that have been continuing to use CFCs. While all the activities programmed for the plan are expected to start in 2005, only some particular actions will have an immediate impact ensuring that the level of imports in 2005 will not be beyond 269.9 ODP tonnes, and preparing the ground for achieving a level of imports of 252 ODP tonnes by 1st January 2006. These immediate phase out actions are presented in bullet points as follows.

- Partnering with the Custom Department to comply with the quota: Ensuring compliance with the 2005 quota by improving the control and recording of imports at the entry points. Custom training will continue to ensure custom officers in the pre-selected entry points are prepared to work according to the licensing-quota system established. On the other hand, monthly review of the registered imports is going to be done by the NOU to ensure that classification of substances is correct, that imports are coming exclusively

from the licensed importers and that quotas are being respected. The monthly review will allow taking corrective measures on time when they are required, avoiding falling in non-compliance (this action is a component of the activity 4.2.3 *Domestic Refrigeration Programme*, presented in the strategy – Chapter 4).

- Partnering with importers and distributors to make substitutes available in the market: Meetings with the importers and distributors will be maintained on a regular basis in order to achieve commitments in the substitution of imports of CFC by blends and drop-in alternatives. In addition, importers and distributors will receive periodic training sessions, including sections addressed by manufactures of the blends and new equipments (at least three during the year) on alternatives available in the market for the different applications in refrigeration and air conditioning. These measures will also help comply with the established quota for 2005 (this action is a component of the activity 4.2.3 *Licensing Programme for 2000 Technicians*, presented in the strategy – Chapter 4).
- Ensuring use of substitute blends and drop in alternatives by technicians: Once the alternatives are available in the market, promoting its use will be done through the training programmed to technicians, especially for the domestic refrigeration servicing sub sector. This measure will extend in a cost effective fashion the life of older domestic refrigerators while rapidly eliminating use of CFCs in this sector. In addition to the training, awareness and technical material will be distributed in the stores where the technicians purchase the gas (partnership with importers and distributors mentioned above will help ensure this). But the most important action to ensure the use of the alternatives will be the financial support to technicians in the domestic and commercial subsectors to facilitate the use of blends and alternative refrigerants (this action corresponds to the incentive to purchase cylinders of alternative gases and is a component of the activities 4.2.3 *Domestic Refrigeration Programme*, and 4.2.4 *Commercial Refrigeration Programme*, presented in the strategy – Chapter 4).

Impact: The three actions described above, will start as soon as the project is approved and will have as impact the 59.20 ODP tonnes, in order to achieve a consumption level of 252 ODP tonnes for 1st January 2006.

Long term sustainability actions (first year):

The activities described above will lead to accelerated reduction of CFC imports in the short term, but by themselves will not ensure a sustainable Total Phase-Out. They require of complementary activities that, while they do not have immediate phase out impact, they are the ones that are going to ensure the sustainability of the project as they will reduce future dependence on CFCs. These activities are the tools and licensing of technicians, the recovery-recycling and retrofit in the MAC and commercial refrigeration sectors, and the establishing of a monitoring unit to asses the transition and apply lessons learned or variations when required.

Detailed 2005 workplan for the strategy including short term and long term actions:

The Chapter 4 of the TPOP presents a strategy composed of 6 main activities (Licensing of technicians, MAC project, domestic refrigeration project, commercial refrigeration project, technical assistance on solvents and Monitoring). A description of the expected first year achievements for these 6 main activities is presented now. This description includes short term actions and term sustainability actions:

4.1 Proposed Activity: Licensing of 2000 technicians

Objective: Supplemental qualification training of technicians, which will result in their certification. It will allow not only recognition of their capability, but also control the sub sectors in which they are permitted to operate, and will allow them to secure supplies of controlled substances and their substitutes for any subsector in which they are allowed to operate.

Target Group: 2000 technicians

Activities for 2005:

- Undertake necessary modifications to the importing regulations to start imports of substitutes, (one of the measures contemplated is to reduce to not more than five entry points authorized for CFCs imports in whole Country).
- Periodic meetings with importers and distributors to achieve commitments on the imports of alternatives.
- Training to importers and distributors on alternatives by application completed.
- Establishing a system to enforce licensing-quota system.
- Establishing the certification (or license system) for the technicians.
- Organization of meeting between alternatives manufacturers , new equipment manufacturers, importers/distributors of ODS and NOU

Impact: The impact expected is the compliance with the 2005 quota.

4.2 Mobile Air Conditioning Programme

Objective: To provide equipment, support and training to the MAC and refrigeration servicing sector and ensure sustainable use of Recovery and recycling equipment

Target Group: 60 MAC service workshops and independent technicians working in MAC service.

Activities: During this tranche the following activities will be achieved:

- Designing the revolving system to collect and re-use contributions.
- Selection of the total group of beneficiaries and selection of the first group of 20 to distribute first sent of equipment.

- Procurement, distribution and monitoring of the MAC equipment for these 20 enterprises.
- Training In Santo Domingo on MAC.
- Training in Santiago on MAC

Impact: The impact expected for the actions accomplished in the period are 0 in 2005 and in 2006 it will depend of the results of the first group of equipment distributed.

4.3 Proposed Activity: Domestic Refrigeration Programme and Complementary training to Custom Officers

Objective: To provide support and training to domestic refrigeration service technicians in order to enhance their capability to provide maintenance and to reduce imports of CFC by encouraging the use of alternative refrigerants.

Target Group: Technicians and workshops that provide service in the domestic refrigeration sub sector.

Activities in 2005:

- Establish incentive system for service technicians to use alternative refrigerants in place.
- Awareness material on alternatives produced and distributed to refrigerant stores.
- Continuation of training to custom officers.
- Additional 10 ODS identifiers distributed and custom training provided to additional 50 custom officers.

Impact: The impact expected is the compliance with the 2005 quota.

4.4 Proposed Activity: Commercial Refrigeration Programme

Objective: To provide equipment, support and training to 50 refrigeration service companies providing maintenance in this sub sector and ensure the proper use of recovery and recycling equipment in the sector.

Target Group: Approximately 60 service workshops will be benefited from this programme.

Activities in 2005:

- Establish incentive system for service technicians to use alternative refrigerants in place.
- First group of servicing technicians trained on conversion of equipment.
- Beneficiaries for this activity selected.
- Bidding and order of equipment done for a first group of 20 workshops.

Impact: Impact for 2005 is the compliance with the quota. Impact for 2006 will depend on the results of the equipment distributed.

4.5 Proposed Activity: Technical Assistance in Solvents

Objective: Prevent the importing and use of ODS solvents and improve industry awareness of need to avoid inadvertent re-use of ODS solvents.

Target Group: Potential users of ODS as solvents, and companies that used ODS as solvents in the past.

Activities in 2005:

- Establish first contact with already identified ex-users and potential users of ODS as solvents in order to understand their situation with regards to applications, inventories of ODS, risks of re-start import and future needs of alternatives.
- Continue information gathering in order to find possible non-previously identified users of ODS as solvents or importers.

Impact: Based on the activities started in 2005, it will be possible to acquire a more reliable understanding of the situation of use of ODS as solvents in the country. Depending on this situation, activities to address identified needs will be implemented during the next years of the plan.

4.6 Proposed Activity: Monitoring Unit

Objective: Formation of a trained and competent staff within the NOU that is fully capable of providing the technical support needed for implementation, as well as organizing and following the schedule of activities, auditing for compliance, and changing priorities when needed in order to achieve committed ODS reductions on schedule and within budget.

Target Group: Refrigeration servicing sector.

Activities in 2005:

- International and national experts recruited.
- Detailed programming set up.
- Monitoring methodology defined and on place.
- Revolving system for the MAC project established.
- Incentives system for the domestic and commercial sectors established.
- Preparation of the annual report.

Impact: Compliance with the 2005 CFC import quota.

5. Government Actions

- Presentation of the Plan to stakeholders.
- Establishment of the Monitoring Unit.
- Review and follow up on the implementation of the quota system in view of the commitments acquired through the plan.
- Supervision of the monitoring unit.
- Quarterly report to UNDP and Annual Progress Report to the Executive Committee.

6. Estimated Budget and Administrative Fees divided by activity (first tranche):

Budget: US\$ 500,000
 Admin. Fees: US\$ 37,500

<i>ACTIVITY</i>	<i>BUDGET</i>	<i>FEES</i>
1 Licensing Programme for 2,000 technicians	US\$ 100,000	US\$ 7,500
2 Mobile Air Conditioning Program	US\$ 50,000	US\$ 3,750
3 Domestic Refrigeration Program and Customs	US\$ 150,000	US\$ 11,250
4 Commercial Refrigeration Program	US\$ 150,000	US\$ 11,250
5 TA-Awareness Program for Solvents – 4 years	US\$ 0	US\$ 0
6 Monitoring Unit	US\$ 50,000	US\$ 3,750
TOTAL	US\$ 500,000	US\$ 37,500

Concerning the impact of the above actions, it has not been distributed by activity as it is expected that the combine effect of the strategy (consisting on promotion of alternatives, training to technicians, additional custom training and monitoring of the licensing/quota system) will ensure the compliance with the 2005 target.