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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Fiftieth Meeting
New Delhi, 6-10 November 2006

PROJECT PROPOSAL: BAHRAIN

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

Phase-out

- Terminal phase-out management plan (first tranche) UNDP and UNEP

Pre-session documents of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol are without prejudice to any decision that the Executive Committee might take following issue of the document.

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**PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS
BAHRAIN**

PROJECT TITLE **BILATERAL/IMPLEMENTING AGENCY**

Terminal phase out management plan (first tranche)	UNDP and UNEP
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SUB-PROJECT TITLES

(a) Policy update and enforcement	UNEP
(b) Refrigeration training and certification	UNEP
(c) Recovery and recycling	UNDP
(d) MAC R&R and retrofit campaign	UNDP, UNEP
(e) Project implementation and monitoring	UNDP, UNEP

NATIONAL CO-ORDINATING AGENCY:	General Directorate of Environment and Wildlife Protection – National Ozone Unit
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LATEST REPORTED CONSUMPTION DATA FOR ODS ADDRESSED IN PROJECT**A: ARTICLE-7 DATA (ODP TONNES, 2005, AS OF SEPTEMBER 2006)**

CFC	58.702		
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B: COUNTRY PROGRAMME SECTORAL DATA (ODP TONNES, 2005, AS OF SEPTEMBER 2006)

ODS	Aerosol	Foam	Ref. Servicing	ODS	Solvents	Process agent	Fumigant
CFC-12			58.23				
CFC-115			0.37				

CFC consumption remaining eligible for funding (ODP tonnes)	
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CURRENT YEAR BUSINESS PLAN: Total funding US \$152,000: phase-out 16.0 ODP tonnes.

PROJECT DATA		2006	2007	2008	2009	2010	Total
CFC (ODP tonnes)	Montreal Protocol limits	67.721	20.316	20.316	20.316	0	
	Annual consumption limit	58.71	20.316	20.316	20.316	0	
	Annual phase-out from ongoing projects						
	Annual phase-out newly addressed						
	Annual unfunded phase-out						
TOTAL ODS CONSUMPTION TO BE PHASED OUT							
Total ODS consumption to be phased-in (HCFCs)							
Project cost as originally submitted (US \$)							
Final project costs (US \$):							
	Funding for UNEP	210,000		120,000			330,000
	Funding for UNDP	272,500		40,000			312,500
	Total project funding	482,500		160,000			642,500
Final support costs (US \$):							
	Support cost for UNEP	27,300		15,600			42,900
	Support cost for UNDP	20,437		3,000			23,437
	Total support costs	47,737		18,600			66,337
TOTAL COST TO MULTILATERAL FUND (US \$)		530,237		178,600			708,837
Final project cost effectiveness (US \$/kg)							

FUNDING REQUEST: Approval of funding for the first tranche (2006) as indicated above.

SECRETARIAT'S RECOMMENDATIONS	Blanket approval
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PROJECT DESCRIPTION

1. On behalf of the Government of Bahrain UNEP, as the lead implementing agency, has submitted a terminal phase-out management plan for CFCs (TPMP) for consideration by the Executive Committee at its 50th Meeting. The project will also be implemented with assistance from UNDP.

2. The total cost of the TPMP for Bahrain is US \$642,500 plus agency support costs of US \$28,437 for UNDP and US \$42,900 for UNEP. The project proposes the complete phase-out of CFCs by the end of 2009. The CFC baseline for compliance is 135.4 ODP tonnes.

Background

3. The Executive Committee approved, at its 22nd Meeting, the RMP project for Bahrain and allocated US \$317,000 (excluding agency support costs) for its implementation. The RMP included training programmes for customs officers and refrigeration technicians (UNEP) and a recovery and recycling programme (UNDP).

Refrigeration servicing sector

4. In order to understand the current situation in relation to CFC use in Bahrain, a survey of 250 randomly selected refrigeration servicing companies was conducted. This number represents about half of the servicing companies in Bahrain. Current ODS consumption in the refrigeration sector in Bahrain is 58.71 ODP tonnes, mainly of CFC-12 used for servicing (35,000 domestic refrigerators, 20,800 commercial and industrial refrigeration systems, 100,000 MAC units and 50 CFC-based chillers). There are about 1,800 refrigeration servicing technicians in the country, about 70 per cent of which have received formal training. The current prices of refrigerants per kg are: US \$9.7 for CFC-12, and US \$11.3 for HFC-134a. CFC-12 is not always readily available.

5. Legal regulations were introduced by Ministerial order in 1999, including an ODS licensing system that has been operational in Bahrain since then. All ODS importers must register with the National Ozone Unit (NOU), which determines a total quota for all controlled substances (except HCFC) and divides the total quantity into individual quotas allocated to registered importers. New importers not registered yet may apply for a quota for the following year. Quotas are not transferable. Customs may not release an ODS shipment unless they have received written approval issued by the NOU. At present, nine importers benefit from quotas according to their respective share in imports.

Results achieved so far

6. Through implementation of the RMP, 42 technicians received training in good refrigeration servicing practices in May 2000, and became the trainers for training other technicians in the country. An additional 400 technicians have received training. The training modules have been incorporated into the regular curriculum of the Bahrain Technical Institute.

7. Twenty-three customs officers received training in monitoring of imports and exports of CFCs and CFC-based equipment, who in turn trained an additional 165 customs officers. Three refrigerant identifying kits have been provided to the customs office.

8. The recovery and recycling programme was initiated in March 1998. Initially, limited use of recovery and recycling equipment was reported due to a relatively low price for CFC-12. The 2005 survey demonstrated that 3.4 tonnes of CFC-12 and 10.7 tonnes of HCFC-22 were recovered and reused in the period of twelve months. There is an increased demand in high capacity recovering units capable of recovering large amounts of CFC refrigerant to be used in servicing large industrial installations and chillers.

Activities proposed in the terminal phase-out management plan

9. The Bahrain TPMP includes the following sub-projects:
- (a) Review and update of the current ODS legislation, to account for the requirements for ODS control as per the latest ODS Regulations for the Gulf Co-operative Council;
 - (b) Upgrading, testing and identification of capacities and training programme for 200 customs officers, including inspectors and senior officers, including the procurement of portable refrigerant identifier sets;
 - (c) Training and certification programme for refrigeration service technicians;
 - (d) Provision of recovery/recycling and servicing equipment and tools, including procurement of 75 servicing tool kits to meet the needs of small servicing workshops;
 - (e) MAC recovery and recycling and retrofit promotion campaign, to equip the large MAC workshops with CFC-12 recovery and recycling equipment along with the necessary training;
 - (f) A technical assistance project for chiller retrofit/replacement, to address the needs of chiller owners for information on chiller retrofit and replacement options; and
 - (g) Project implementation and monitoring of the effectiveness of the TPMP implementation.
10. The Government of Bahrain plans to completely phase out CFCs by 1 January 2010, in accordance with the provisions of the Montreal Protocol, and according to the reduction schedule reflected in the draft agreement contained in Annex I.

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

COMMENTS

11. The proposed budget envisages acquiring 75 portable refrigerant recovery machines for domestic, commercial and industrial servicing workshops, 15 recovery and recycling machines for MAC servicing shops and 15 recovery, recycling and charging units for the chiller servicing sector. Under the UNDP recovery and recycling component of the RMP approved for Bahrain, two recovery and recycling machines and 76 recovery units have been delivered to the country.

Inconsistent information in the project completion report and the TPMP raise concern regarding the equipment's effectiveness and commercial viability. In this respect, the Secretariat referred to decisions 41/100 and 49/6 of the Executive Committee which provide guidance to Article 5 countries and implementing agencies in developing appropriate programmes in the refrigeration servicing sector. Clarifications were sought on measures to be taken to implement the Executive Committee's guidance to make recovery and recycling operations sustainable in Bahrain. UNEP provided the required clarifications and proposed measures to make recovery/recycling operations sustainable and effective.

12. The Secretariat raised the issue of the incremental nature of costs associated with the use of equipment capable of recovering/recycling multiple refrigerants (CFCs and non-CFCs). The requested budget has been adjusted accordingly.

13. The TPMP for Bahrain as originally submitted incorporated a technical assistance project for chiller retrofit/replacement. The Secretariat advised UNEP that the request for technical assistance associated with the replacement of chillers in Bahrain is not eligible. In its decision 47/26, the Executive Committee allocated US \$12 million for chiller demonstration projects in all the regions, including US \$200,000 to UNEP to disseminate experience gained in the chiller demonstration projects at the global level. In the same decision it was indicated that no further funding associated with the replacement of chillers would be approved. UNEP agreed to remove this component from the TPMP budget.

14. The total level of funding of the TPMP for Bahrain is US \$642,500, of which US \$565,000 is based on decision 45/54 on TPMPs for LVC countries (i.e., US \$565,000 for countries with CFC baselines above 120 ODP tonnes) and US \$77,500 is based on decision 31/48 on RMP updates (i.e., an additional 50 per cent of the RMP originally approved).

RECOMMENDATIONS

15. The Executive Committee may wish to:

- (a) Approve, in principle, the terminal CFC phase-out management plan for Bahrain at the amount of US \$642,500 plus agency support costs of US \$23,437 for UNDP and US \$42,900 for UNEP;
- (b) Approve the draft agreement between the Government of Bahrain and the Executive Committee for the implementation of the terminal CFC phase-out management plan as contained in Annex I to the present document;
- (c) Urge UNDP and UNEP to take full account of the requirements of decisions 41/100 and 49/6 during the implementation of the terminal phase-out management plan; and

- (d) Approve the first tranche of the plan for the 2006-2007 annual implementation programme at the funding levels shown in the table below on the understanding that the report covering its implementation, to be submitted with the request for a second tranche, will include a detailed account of the institutional set-up, in particular the monitoring and reporting responsibilities.

	Project Title	Project Funding (US\$)	Support Cost (US\$)	Implementing Agency
(a)	Terminal phase out management plan (first tranche)	272,500	20,437	UNDP
(b)	Terminal phase out management plan (first tranche)	210,000	27,300	UNEP

Annex I

DRAFT AGREEMENT BETWEEN BAHRAIN AND THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE TERMINAL PHASE-OUT MANAGEMENT PLAN

1. This Agreement represents the understanding Bahrain (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 1 January 2010 in compliance with Protocol schedules.
2. The Country agrees to meet the annual consumption limits of the Substances in Annex A (Group I) of the Montreal Protocol as set out in row 2 of Appendix 2-A (the “Targets, and Funding”) in this Agreement. 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 as described in the TPMP document.
3. Subject to compliance 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 5 of Appendix 2-A (the “Funding”) to the Country. The Executive Committee will, in principle, provide this funding at the Executive Committee meetings specified in Appendix 3-A (the “Funding Approval Schedule”).
4. The Country will meet the consumption limits for each of the Substances 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 30 days prior to the applicable Executive Committee meeting set out in the Funding Approval Schedule:
 - (a) That the Country has met the Targets for the applicable year;
 - (b) That the meeting of these Targets will be independently verified if requested by the Executive Committee consistent with paragraph (d) of decision 45/54;
 - (c) That the Country has substantially completed all actions set out in the last annual implementation programme; and
 - (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 (the “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 (the “Monitoring”) 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 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 5(d). 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.

8. Specific attention will be paid to the execution of the activities in the servicing sector, in particular:

- (a) The Country would use the flexibility available under this Agreement to address specific needs that might arise during project implementation;
- (b) The technical assistance programme will be implemented in stages so that remaining resources can be diverted to other 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; and
- (c) The Country and the implementing agencies will take full account of the requirements of decisions 41/100 and 49/6 during the implementation of the terminal phase-out management plan.

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 fulfill the obligations under this Agreement. UNEP has agreed to be the lead implementing agency (the "Lead IA") and UNDP has agreed to be the cooperating implementing agency (the "Cooperating 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 verification. The Country also agrees to periodic evaluations, which will be carried out under the monitoring and evaluation work programs of the Multilateral Fund. The Cooperating IA will be responsible for carrying out the activities listed in Appendix 6-B. The Executive Committee agrees, in principle, to provide the Lead IA and the Cooperating IA with the fees set out in rows 6 and 7 of Appendix 2-A.

10. Should the Country, for any reason, not meet the Targets for the elimination of the Substances 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 installment 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.

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 and the Cooperating IA to facilitate implementation of this Agreement. In particular, it will provide the Lead IA and the Cooperating 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.

APPENDICES

APPENDIX 1-A: THE SUBSTANCES

Annex A:	Group I	CFC-11, CFC-12, CFC-115
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APPENDIX 2-A: THE TARGETS, AND FUNDING

	2006	2007	2008	2009	2010	Total
1. Montreal Protocol consumption limits of Annex A, Group I substances (ODP tonnes)	67.721	20.316	20.316	20.316	0	
2. Max allowable total consumption of Annex A Group I substances (ODP tonnes)	58.71	20.316	20.316	20.316	0	
3 Lead IA (UNEP) agreed funding (US \$)	210,000		120,000			330,000
4. Cooperating IA (UNDP) agreed funding (US \$)	272,500		40,000			312,500
5. Total agreed funding (US \$)	482,500		160,000			642,500
6. Lead IA (UNEP) support costs (US \$)	27,300		15,600			42,900
7. Cooperating IA (UNDP) support costs (US \$)	20,437.5		3,000			23,437
8. Total support costs (US \$)	47,737.5		18,600			66,337
9. Total agreed costs (US \$)	530,237.5		178,600			708,837

APPENDIX 3-A: FUNDING APPROVAL SCHEDULE

1. Funding will be considered for approval at the second meeting of 2008.

APPENDIX 4-A: FORMAT OF ANNUAL IMPLEMENTATION PROGRAMME

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	_____
Co-operating agency(ies)	_____

2. Targets

Indicators		Preceding year	Year of plan	
Supply of ODS	Import			
	Total (1)			
Demand of ODS	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						
Total						
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 until approval of next tranche (US \$)
Total	

7. Administrative Fees

APPENDIX 5-A: MONITORING INSTITUTIONS AND ROLES

1. All the monitoring activities will be coordinated and managed by the National Ozone Unit (NOU) and the Lead IA and the Cooperating IA through the project funding, which is included within this TPMP.

2. The Lead IA will have a particularly prominent role in the monitoring arrangements because of its mandate to monitor ODS imports, whose records will be used as a crosschecking reference in all the monitoring programmes for the different projects within the TPMP. This organization, along with the cooperating implementing agency will also undertake the challenging task of monitoring illegal ODS imports and exports with advisements made to the appropriate national agencies through the National Ozone Office.

Verification and reporting

3. In accordance to decision 45/54 (d), the Executive Committee reserves the right for independent verification in case the Executive Committee selects Bahrain for related auditing. Based on discussion with the Lead IA, Bahrain should select the independent organization (auditing) to carry out the verification of the TPMP results and this independent monitoring programme.

4. The monitoring reports will be produced and verified each year, previous to the third meeting of the Executive Committee. These reports will produce the input for the yearly 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) Assisting the Country in preparation of the Annual Implementation Programme;
- (c) 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 consistent with Appendix 5-A. In case the Executive Committee selects the Bahrain TPMP consistent with paragraph (d) of decision 45/54 separate funding will be provided by the Executive committee to the Lead IA for this undertaking;
- (d) Ensuring that the achievements in previous annual implementation programmes are reflected in the future annual implementation programme;
- (e) Reporting on the implementation of the Annual Implementation Programme of the preceding year and preparing for annual implementation programme for the year of submission for submission to the Executive Committee, commencing with the 2007 annual implementation programme combined with the report on the 2006 annual implementation programme;
- (f) Ensuring that appropriate independent technical experts carry out the technical reviews undertaken by the Lead IA;

- (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) Providing verification that consumption of the Substances has been eliminated in accordance with the Targets, if requested by the Executive Committee;
- (j) Coordinating the activities of the Cooperating IA;
- (k) Ensuring that disbursements made to the Country are based on the use of the indicators; and
- (l) Providing assistance with policy, management and technical support when required.

APPENDIX 6-B: ROLE OF COOPERATING IMPLEMENTING AGENCY

1. The Cooperating IA, will:

- (a) Provide policy development assistance when required;
- (b) Assist the Bahrain NOU in the implementation and verification of the activities funded; and
- (c) Provide reports to the Lead IA on these activities, for inclusion in the consolidated reports.

APPENDIX 7-A: REDUCTIONS IN FUNDING FOR FAILURE TO COMPLY

1. In accordance with paragraph 7 of the Agreement, the amount of funding provided may be reduced by US \$15,000 per ODP tonne of reductions in consumption not achieved in the year.

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