



**United Nations
Environment
Programme**

Distr.
GENERAL

UNEP/OzL.Pro/ExCom/63/22
11 March 2011



ORIGINAL: ENGLISH

EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Sixty-third Meeting
Montreal, 4-8 April 2011

PROJECT PROPOSAL: AFGHANISTAN

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

Phase-out

HCFC phase-out management plan (stage I, first tranche)

UNEP and
Germany

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Afghanistan

(I) PROJECT TITLE	AGENCY
HCFC phase-out management plan (stage I, first tranche)	Germany, UNEP (lead)

(II) LATEST ARTICLE 7 DATA	Year: 2009	22.2 (ODP tonnes)
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)								Year: 2009			
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab Use	Total sector consumption		
				Manufacturing	Servicing						
HCFC-123											
HCFC-124											
HCFC-141b											
HCFC-142b											
HCFC-22					22.22						22.22

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline (estimate):	23.33	Starting point for sustained aggregate reductions:	23.33
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	0.0	Remaining:	15.16

(V) BUSINESS PLAN		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
Germany	ODS phase-out (ODP tonnes)	2.1	1.2	0.0	1.7					0.2		5.1
	Funding (US \$)	192,000	110,000	0	157,000					17,000		476,000
UNEP	ODS phase-out (ODP tonnes)	1.2			1.2			1.2			1.2	4.9
	Funding (US \$)	181,700			112,400			117,000			46,100	457,200

(VI) PROJECT DATA			2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
Montreal Protocol consumption limits (estimate)			n/a	n/a	23.3	23.3	21.0	21.0	21.0	21.0	21.0	15.2	
Maximum allowable consumption (ODP tonnes)			n/a	n/a	23.3	23.3	21.0	21.0	21.0	21.0	21.0	15.2	
Project Costs requested in principle(US\$)	Germany	Project costs	174,740			49,152			30,000			26,384	280,276
		Support costs	22,716			6,390			3,900			3,430	36,436
	UNEP	Project costs	120,000			63,569			175,169			40,087	398,825
		Support costs	15,600			8,264			22,772			5,211	51,847
Total project costs requested in principle (US \$)			294,740			112,721			205,169			66,471	679,101
Total support costs requested in principle (US \$)			38,316			14,654			26,672			8,641	88,283
Total funds requested in principle (US \$)			333,056			127,375			231,841			75,112	767,384

(VII) Request for funding for the first tranche (2011)		
Agency	Funds requested (US \$)	Support costs (US \$)
Germany	174,740	22,716
UNEP	120,000	15,600

Funding request:	Approval of funding for the first tranche (2011) as indicated above
Secretariat's recommendation:	For individual consideration

PROJECT DESCRIPTION

1. On behalf of the Government of Afghanistan UNEP, as the lead implementing agency, has submitted to the 63rd Meeting of the Executive Committee a HCFC phase-out management plan (HPMP) at a total cost as originally submitted, of US \$836,638 plus agencies support costs of US \$52,604 for UNEP and US \$56,159 for the Government of Germany. The HPMP proposes strategies and activities to achieve a 35 per cent reduction in consumption by 2020.
2. Included in the HPMP, UNEP also submitted a technical assistance project for the conversion of the refrigeration assembly sector, at a total cost of US \$162,110 as originally submitted.
3. The first tranche for the HPMP being requested at this meeting amounts to US \$160,800 plus agency support costs of US \$20,904 for UNEP and US \$245,234 plus agency support costs of US \$31,880 for the Government of Germany, as originally submitted.

Background

ODS regulations

4. The National Environmental Protection Agency (NEPA) is responsible for the implementation of the Montreal Protocol in Afghanistan. The National Ozone Unit (NOU) was established under the NEPA to coordinate the activities related to the Montreal Protocol. The Government of Afghanistan introduced the ozone depleting substances (ODS) regulations in 2006. The regulations, licensing and quota have been established to control the import and export of all ODS including HCFCs. Afghanistan plans to apply the licensing and quota system to control the import of HCFCs and HCFC-based equipment. It is expected that the licensing and quota system will be functioning effectively by 2012.

HCFC consumption

5. All HCFCs used in Afghanistan are imported, as the country does not have any HCFC production capacity. The survey undertaken during the HPMP preparation showed that HCFC-22 is the only Annex C Group I substance being consumed and is predominantly used for servicing refrigeration and air conditioning (RAC) equipment. In 2009 the total refrigerant consumption (including non-ODS refrigerants) in Afghanistan was 417 metric tonnes (mt), of which HCFC-22 accounted for 404 metric tonnes, or 97 per cent. The rest of 3 percent of the consumption includes HFC-134a, R-410A and R-407C. Table 1 shows the level of HCFC consumption in Afghanistan.

Table 1: HCFC level of consumption

Year	Article 7 data	
	Metric tonnes	ODP tonnes
2005	75	4.13
2006	87	4.79
2007	111	6.11
2008	143	7.87
2009	404	22.22

6. The HCFC consumption in 2009 showed a sharp increase of 260 mt (183 per cent) over that of 2008. According to the HPMP, the HCFC consumption data before 2009 was based on the figures reported to the NOU. These figures however were not accurate as the country was focusing on CFC phase-out and HCFC data collection was neglected. During the HPMP survey, a more rigorous data collection process was involved and data accuracy was improved. The country believes that the 2009

HCFC consumption levels obtained from the survey reflect more accurately the actual HCFC consumption in Afghanistan.

Sectoral distribution of HCFCs

7. The survey undertaken covered all stakeholders and representative service workshops. The survey data gave the number and type of equipment installed and the amount of HCFC-22 required to service the equipment. The total number of RAC units installed in the country using HCFC-22 was estimated at 464,000 in 2009. The average charge for different types of equipment was estimated and used to calculate the total installed capacity. The average leakage rate was estimated at 50 per cent due to poor maintenance. A summary of HCFC consumption by sector is shown in Table 2.

Table 2: HCFC consumption by sector based on the 2009 survey

Type	Total number of units	Total charge of refrigerant (tonnes)		Service demand (tonnes)	
		Metric	ODP	Metric	ODP
Split and commercial ACs	350,000	525.00	28.88	262.50	14.44
Other Refrigeration equipment	114,000	285.00	15.68	142.00	7.81
Total	464,000	810.00	44.55	404.50	22.25

Estimated baseline for HCFC consumption

8. The estimated baseline for HCFC consumption is calculated at 424.2 mt (23.33 ODP tonnes) using the average of reported 2009 consumption of 404 mt (22.22 ODP tonnes) and the estimated 2010 consumption of 444.4 mt (24.44 ODP tonnes). The 2010 consumption forecast was based on a growth rate of 10 per cent from 2009. This consumption also included the HCFC-22 consumption by the refrigeration assembly sector. In line with decision 60/44(e), the estimated baseline will be adjusted accordingly when the actual Article 7 data for 2010 is reported.

HCFC consumption Forecast

9. Based on the consumption growth in recent years and the import of the RAC equipment, HCFC consumption in Afghanistan is anticipated to grow 10 per cent annually until the freeze in 2013. Table 3 provides a summary of the HCFC consumption forecast up to the year 2020.

Table 3. Forecast consumption of HCFC in Afghanistan

Year		2009*	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Constrained HCFC consumption	MT	404.0	444.0	488.4	537.2	424.2	415.0	381.8	355.0	335.0	300.0	275.0	275.73
	ODP	22.22	24.42	26.86	29.55	23.33	22.83	21.00	19.53	18.43	16.50	15.13	15.17
Unconstrained HCFC consumption	MT	404.0	444.0	488.4	537.2	591.0	650.1	715.1	786.6	865.2	951.8	1046.9	1152
	ODP	22.22	24.42	26.86	29.55	32.50	35.75	39.33	43.26	47.59	52.35	57.58	63.34

*actual reported Article 7 data

Conversion of refrigeration assembly sector

10. During the HPMP survey, an enterprise was identified, which assembles refrigeration equipment using self-made or imported components. The company, Qasr Yakh, was established in 2003 and assembles all types of stand-alone refrigeration systems. The products are sold on the domestic market. The average production from 2007 to 2009 was approximately 90 units per year. Until stock was depleted in 2010, CFC-12 was being used alongside HCFC-22 as refrigerants. Subsequently, the CFC use was absorbed by an increased use of HCFC-22. The consumption of HCFC-22 in 2010 was 757 kg. The company has not received assistance from the Multilateral Fund.

11. The HPMP indicated that Afghanistan is still in the process of reconstruction as most of the industrial facilities had been destroyed during the war. The conversion of Qasr Yakh will serve as an example for the potential equipment manufacturers in the production of non-HCFC based refrigeration equipment.

12. The production process mainly consists of assembling standalone units and charging them with refrigerant. The technology selected for the conversion of Qasr Yakh, is low global warming potential (GWP) hydrocarbon refrigerant (propane or butane) technology. The required changes in the assembly process are mainly due to the change of refrigerants and their flammability; therefore safety related equipment is needed for more stringent leakage control and detection, workspace ventilation, and meeting occupational health and safety requirements. Table 4 provides a list of equipment and the costs of conversion.

Table 4. List of equipment requested for conversion at Qasr Yakh

Item	Cost
Equipment	
Refrigerant storage tank	440
HC refrigerant evacuation and charging unit	62,000
Ventilation and gas detection system	9,300
Circuit and performance (TESTO) monitoring system with logger function and interface	1,050
Electronic leak detector HC	300
Strength test equipment N ₂	420
Circuit tightness control H ₂ /N ₂	2,850
Accessories	3,050
Delivery, insurance	4,500
Installation	3,200
Equipment sub-total	87,110
Test/trial production	10,000
Establish network of manufacture in the country	15,000
Training on site and abroad for local expert (s)	25,000
Technical assistance	15,000
Contingency	10,000
Total	162,110

HCFC phase-out strategy

13. The Government of Afghanistan is proposing to follow the Montreal Protocol schedule and adopt a staged approach to achieve the complete phase-out of HCFCs by 2030. The current submission only consists of stage I of the HPMP to achieve a 35 per cent reduction by 2020, and focuses on activities in the servicing sector and the conversion of an assembly enterprise currently using HCFC-22.

14. Afghanistan will reduce the demand for HCFC-22 for servicing existing equipment through refrigerant recovery and reuse, and by strengthening the training of technicians and building their capacity in better service practices. Afghanistan will also ensure that imports of bulk HCFCs and HCFC-based equipment is controlled according to the Montreal Protocol reduction schedule. In addition, the Government will strengthen the enforcement of the licensing and quota system in order to closely monitor the imports. The summary of activities and proposed implementation period is shown in Table 5.

Table 5: Specific activities of the HPMP and proposed period of implementation

Description of activities	Implementation period
Policy amendments, developing quota system	2011-2012
Training for enforcement officers	2011-2020
Certifications of service technicians, provision of tools	2011-2020
Enhanced awareness and outreach programmes	2011-2020
Training of technicians, provision of tools and equipment, and technical assistance for refrigerant recovery and recycling	2011-2020
Establishing refrigerant reclaim centres	2011
Technical support for the conversion of an assembly enterprise	2011-2012
Project Coordination and management	2011-2023

Cost of the HPMP

15. The total cost of the HPMP for Afghanistan has been estimated at US \$836,638 to achieve a 35 per cent reduction in HCFC consumption by 2020. The detailed cost breakdown is listed in Table 6.

Table 6: Total cost of stage I of the HPMP

Project Title	UNEP (US \$)	Govt. Of Germany (US \$)	Total (US \$)
Policy amendments, developing quota system, training for enforcement officers	81,000	0	81,000
Capability certifications and licensing of servicing technicians	106,000	0	106,000
Enhanced awareness and outreach programmes	61,000	0	61,000
Training of technicians, provision of tools and equipment, and technical assistance for refrigerant recovery and recycling	90,000	269,879	359,879
Establishing refrigerant reclaim centres	0	162,110	162,110
Technical support for the conversion of an assembly enterprise	66,649	0	66,649
Total	404,649	431,989	836,638

SECRETARIAT COMMENTS AND RECOMMENDATION

COMMENTS

16. The Secretariat reviewed the HPMP for Afghanistan in the context of the guidelines for the preparation of HPMPs (decision 54/39), the criteria for funding HCFC phase-out in the consumption sector agreed at the 60th Meeting (decision 60/44), subsequent decisions on HPMPs made at the 62nd Meeting and the 2011-2014 business plan of the Multilateral Fund.

Issues related to HCFC consumption and phase-out strategy

17. The Secretariat queried the sharp increase (183 per cent) in HCFC consumption in 2009 over 2008. UNEP provided an additional explanation. The survey undertaken during the HPMP preparation identified consumption which was not included in the previous reporting, such as that by the International Security Assistance Forces (ISAF), which was not accessible during the preparation of the national phase-out plan. The Secretariat further questioned whether the survey had resulted in higher levels of consumption for years before 2009. UNEP informed the Secretariat that, the 2009 consumption data is the first authentic data that has been cross verified by other sources. For the period before 2009, the consumption levels would also be higher than the reported data under Article 7. However the consumption data was not collected or recorded and verified with reasonable degree of accuracy. HPMP preparation funding provided for the first time an opportunity to conduct an extensive survey and cross check with various sources. Therefore country believes it reflects more accurately the actual HCFC consumption in Afghanistan.

18. The Secretariat reviewed the historical consumption data. Afghanistan had a CFC baseline of 380 ODP tonnes and was classified as a non-LVC country during CFC phase-out. In 2004, the CFC consumption as refrigerant in the country was 157.5 ODP tonnes. Most of this CFC consumption was converted to HCFC-22 during CFC phase-out. Meanwhile the import of HCFC-based equipment has been increasing rapidly which would result in an increase in HCFC consumption. The Secretariat also reviewed the HCFC consumption in the context of the population, the number of households connected to electricity, urbanization trends and economic development in the country, and considers the reported HCFC consumption in 2009 to be at a reasonable level for Afghanistan.

19. Afghanistan proposed a staged approach to achieve the 35 per cent reduction by 2020 in stage I of the HPMP. The Secretariat drew UNEP's attention to the fact that the current consumption level and estimated baseline of 424.2 mt (23.33 ODP tonnes) has put Afghanistan in the non-LVC category. The Secretariat advised the country that, based on decision 60/44, stage I of Afghanistan's HPMP as a non-LVC country should only enable it to meet the 10 per cent reduction by 2015.

20. UNEP responded that Afghanistan wishes to cover a 35 per cent reduction by 2020 in the current HPMP since the country would like to plan for a longer period and to avoid another HPMP survey and preparation exercise due to the prevailing security situation in the country. The Secretariat referred to the HPMPs approved for non-LVC countries with refrigeration service sector only (Ghana at the 61st Meeting and Burkina Faso at the 62nd Meeting) to achieve 35 per cent reduction by 2020, where costs were calculated at US \$4.5 per kilogram. Based on this precedent, the Secretariat recommended a 35 per cent reduction target in stage I of the HPMP for Afghanistan. The total cost for stage I of the HPMP was calculated at US \$679,101 based on the phase-out tonnage of 147.713 mt at US \$4.5 per kilogram plus the cost of US \$14,392 for the conversion of an assembly enterprise.

21. The Secretariat also explained to UNEP that the estimated baseline will be subject to adjustment when the reported Article 7 data for 2010 is known. Should the calculation of the actual baseline for

Afghanistan be different to that currently used in the HPMP, the corresponding funds will be adjusted accordingly.

Issues related to the conversion of assembly capacity

22. The Secretariat sought clarification from UNEP regarding the conversion of the assembly enterprise. It requested UNEP to provide detailed information on the enterprise to justify that it meets the funding criteria as set out in decisions 31/45 and 62/14 and that it needs additional funding support other than that provided in the servicing sector.

23. UNEP provided the information requested including photos of the production process. It further explained that the company produces standalone commercial refrigeration equipment with both individual units as well as mini-series of up to 15 similar units. The production process involves assembling, performing leakage tests, and charging refrigerants into the products with subsequent quality control on the premises of the manufacturer. The products are sold on the domestic market.

24. The Secretariat queried the practicality of using hydrocarbon technology for the conversion, given the high cost of safety related equipment required and limited eligible funding of US \$14,392. UNEP responded that the country wishes to choose low GWP hydrocarbon refrigerants for the conversion of Qasr Yakh to mitigate climate impact. It will use part of the HPMP funding to support the conversion of the enterprise.

Technical and cost issues

25. The Secretariat raised the issue related to the proposed refrigerant recovery and reclamation centre. It queried the practicality, cost effectiveness and financial sustainability of such a centre given the difficulties of transportation and the cost of collecting recovered refrigerant. The Secretariat suggested on-site recovery and reuse units would be more appropriate.

26. UNEP responded that recovery and reuse of refrigerant is the goal for Afghanistan to meet its obligations under the Montreal Protocol. Some equipment had been provided to service workshops for refrigerant recovery and reuse during the implementation of the National Phase-out Plan (NPP), where source and quality of the refrigerant is known. The proposed reclamation centre is for receiving refrigerants, which are heavily contaminated or their quality is unknown, and purifying them for reuse. This is needed in Afghanistan as most RAC systems in the country are suffering from power cuts and voltage fluctuation. This leads to damage to equipment and the forming of heavily contaminated refrigerants, which require to be purified for reuse.

27. In line with decision 60/44, the total funding for the implementation of Afghanistan’s HPMP has been agreed at US \$679,101 (excluding agencies’ support costs). This covers activities for stage I of the HPMP in servicing sector and the conversion of an assembly enterprise as shown in Table 7.

Table 7: Revised activities and estimated budget

Project Title	UNEP	Govt. Of Germany	Total
Policy amendments, developing quota system, training for enforcement officers	81,000	0	81,000
Capability certifications and licensing of servicing technicians	101,956	0	101,956
Enhanced awareness and outreach programmes	59,000	0	59,000

Project Title	UNEP	Govt. Of Germany	Total
Training of technicians, provision of tools and equipment, and technical assistance for refrigerant recovery and recycling	90,000	0	90,000
Plan for gradual reduction	0	265,884	265,884
Technical support for the conversion of an assembly enterprise	0	14,392	14,392
Project Coordination and management	66,869	0	66,869
Total	398,825	280,276	679,101

Impact on climate

28. The proposed technical assistance activities in the HPMP, which include the introduction of better servicing practices and enforcement of HCFC import controls, will reduce the amount of HCFC-22 used for refrigeration servicing. Each kg of HCFC-22 not emitted due to better refrigeration practices results in the savings of approximately 1.8 CO₂-equivalent tonnes. Although a calculation of the impact on the climate was not included in the HPMP, the activities planned by Afghanistan, in particular, training for technicians for improved servicing practice and conversion of assembly capacity to low GWP hydrocarbon refrigerants, indicate that it is likely that the country will achieve the reduction of 32,994 CO₂-equivalent tonnes in emission to the atmosphere as estimated in the 2011-2014 business plan. However, at this time, the Secretariat is not in a position to quantitatively estimate the impact on the climate. The impact might be established through an assessment of implementation reports by, inter alia, comparing the levels of refrigerants used annually from the commencement of the implementation of the HPMP, the reported amounts of refrigerants being recovered and recycled, the number of technicians trained and the HCFC-22 based equipment being retrofitted.

Co-financing

29. In response to decision 54/39(h) on potential financial incentives and opportunities for additional resources to maximize the environmental benefits from HPMPs pursuant to paragraph 11(b) of decision XIX/6 of the Nineteenth Meeting of the Parties, UNEP explained that no co-financing is considered at this moment for Afghanistan.

2010-2014 business plans of the Multilateral Fund

30. UNEP and the Government of Germany are requesting US \$679,101 plus support costs for implementation of stage I of the HPMP. The total value requested for the period 2011-2014 of US \$460,431 including support cost is within the total amount in the business plan.

31. Based on the estimated HCFC baseline consumption of 424.2 mt, Afghanistan's allocation up to the 2020 phase-out should be US \$664,709 in line with decision 60/44 plus US \$14,392 for the conversion of an assembly enterprise.

Draft Agreement

32. A draft Agreement between the Government of Afghanistan and the Executive Committee for HCFCs phase-out is contained in Annex I to the present document.

RECOMMENDATION

33. The Executive Committee may wish to consider:

- (a) Approving, in principle, stage I of the HCFC phase-out management plan (HPMP) for Afghanistan for the period 2011 to 2020, at the amount of US \$767,384, comprising of US \$398,825 and agency support costs of US \$51,847 for UNEP, and US \$280,276 and agency support costs of US \$36,436 for the Government of Germany;
- (b) Noting that the Government of Afghanistan had agreed at the 63rd Meeting to establish as its starting point for sustained aggregate reduction in HCFC consumption the estimated baseline of 23.33 ODP tonnes, calculated using actual consumption for 2009 of 22.22 ODP tonnes and the estimated consumption for 2010 of 24.44 ODP tonnes;
- (c) Approving the draft Agreement between the Government of Afghanistan and the Executive Committee for the reduction in consumption of HCFCs, as contained in Annex I to the present document;
- (d) Requesting the Fund Secretariat, once the baseline data were known, to update Appendix 2-A to the draft Agreement to include the figures for maximum allowable consumption, and to notify the Executive Committee of the resulting levels of maximum allowable consumption, and of any potential related impact on the eligible funding level, with any adjustments needed being made when the next tranche was submitted; and
- (e) Approving the first tranche of stage I of the HPMP for Afghanistan, and the corresponding implementation plan, at the amount of US \$333,056, comprising of US \$120,000 and agency support costs of US \$15,600 for UNEP, and US \$174,740 and agency support costs of US \$22,716 for the Government of Germany.

Annex I

DRAFT AGREEMENT BETWEEN THE ISLAMIC REPUBLIC OF AFGHANISTAN AND THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE REDUCTION IN CONSUMPTION OF HYDROCHLOROFLUOROCARBONS

1. This Agreement represents the understanding of the Government of Islamic Republic of Afghanistan (the “Country”) and the Executive Committee with respect to the reduction of controlled use of the ozone-depleting substances (ODS) set out in Appendix 1-A (“The Substances”) to a sustained level of 15.16 ODP tonnes prior to 1 January 2020 in compliance with Montreal Protocol schedules, with the understanding that this figure is to be revised one single time in 2011, when the baseline consumption for compliance would be established based on Article 7 data, with the funding to be adjusted accordingly, as per decision 60/44.
2. The Country agrees to meet the annual consumption limits of the Substances as set out in row 1.2 of Appendix 2-A (“The Targets and Funding”) in this Agreement as well as in the Montreal Protocol reduction schedule for all Substances mentioned in Appendix 1-A. 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 any consumption of the Substances which exceeds the level defined in row 1.2 of Appendix 2-A (maximum allowable total consumption of Annex C, Group I substances) as the final reduction step under this agreement for all of the Substances specified in Appendix 1-A, and in respect to any consumption of each of the Substances which exceeds the level defined in row 4.1.3 (remaining eligible consumption).
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 3.1 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 (the “Funding Approval Schedule”).
4. The Country will accept independent verification, to be commissioned by the relevant bilateral or implementing agency, of achievement of the annual consumption limits of the Substances as set out in row 1.2 of Appendix 2-A (“The Targets, and Funding”) of this Agreement as described in sub-paragraph 5(b) 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 Targets for all relevant years. Relevant years are all years since the year in which the hydrochlorofluorocarbons phase-out management plan (HPMP) was approved. Exempt are years for which no obligation for reporting of country programme data exists at the date of the Executive Committee Meeting at which the funding request is being presented;
 - (b) That the meeting of these Targets has been independently verified, except if the Executive Committee decided that such verification would not be required;
 - (c) That the Country had submitted tranche implementation reports in the form of Appendix 4-A (the “Format of Tranche Implementation Report and Plan”) covering each previous calendar year, that it had achieved a significant level of implementation of activities initiated with previously approved tranches, and that the rate of disbursement of funding available from the previously approved tranche was more than 20 per cent; and

- (d) That the Country has submitted and received approval from the Executive Committee for a tranche implementation plan in the form of Appendix 4-A (the “Format of Tranche Implementation Reports and Plans”) covering each calendar year until and including the year for which the funding schedule foresees the submission of the next tranche or, in case of the final tranche, until completion of all activities foreseen.

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 Institutions and Roles”) will monitor and report on implementation of the activities in the previous tranche implementation plan in accordance with their roles and responsibilities set out in Appendix 5-A. This monitoring will also be subject to independent verification as described in sub-paragraph 5(b).

7. 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 smoothest phase-down and phase-out of the Substances specified in Appendix 1-A. Reallocations categorized as major changes must be documented in advance in a Tranche Implementation Plan and approved by the Executive Committee as described in sub-paragraph 5(d). Major changes would relate to reallocations affecting in total 30 per cent or more of the funding of the last approved tranche, issues potentially concerning the rules and policies of the Multilateral Fund, or changes which would modify any clause of this Agreement. Reallocations not categorized as major changes may be incorporated in the approved Tranche Implementation Plan, under implementation at the time, and reported to the Executive Committee in the Tranche Implementation Report. Any remaining funds will be returned to the Multilateral Fund upon closure of the last tranche of the plan.

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

- (a) The Country would use the flexibility available under this Agreement to address specific needs that might arise during project implementation; and
- (b) The Country and the bilateral and implementing agencies involved will take full account of the requirements of decisions 41/100 and 49/6 during the implementation of the 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 fulfil the obligations under this Agreement. UNEP has agreed to be the lead implementing agency (the “Lead IA”) and the Government of Germany has agreed to be cooperating implementing agency (the “Cooperating IA”) under the lead of the Lead IA in respect of the Country’s activities under this Agreement. The Country agrees to evaluations, which might be carried out under the monitoring and evaluation work programmes of the Multilateral Fund or under the evaluation programme of any of the IA taking part in this Agreement.

10. The Lead IA will be responsible for carrying out the activities of the plan as detailed in the first submission of the HPMP with the changes approved as part of the subsequent tranche submissions, including but not limited to independent verification as per sub-paragraph 5(b). This responsibility includes the necessity to co-ordinate with the Cooperating IA to ensure appropriate timing and sequence of activities in the implementation. The Cooperating IA will support the Lead IA by implementing the activities listed in Appendix 6-B under the overall co-ordination of the Lead IA. The Lead IA and Cooperating IA have entered into a formal agreement regarding planning, reporting and responsibilities under this Agreement to facilitate a co-ordinated implementation of the Plan, including regular co-ordination meetings. The Executive Committee agrees, in principle, to provide the Lead IA and the Cooperating IA with the fees set out in rows 2.2 and 2.4 of Appendix 2-A.

11. Should the Country, for any reason, not meet the Targets for the elimination of the Substances set out in row 1.2 of Appendix 2-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 tranche 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. The Executive Committee will discuss each specific case in which the country did not comply with this Agreement, and take related decisions. Once these decisions are taken, this specific case will not be an impediment for future tranches as per paragraph 5.

12. The Funding 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.

13. The Country will comply with any reasonable request of the Executive Committee, 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.

14. The completion of the HPMP and the associated Agreement will take place at the end of the year following the last year for which a maximum allowable total consumption has been specified in Appendix 2-A. Should at that time activities be still outstanding which were foreseen in the Plan and its subsequent revisions as per sub-paragraph 5(d) and paragraph 7, the completion will be delayed until the end of the year following the implementation of the remaining activities. The reporting requirements as per Appendix 4-A (a), (b), (d) and (e) continue until the time of the completion if not specified by the Executive Committee otherwise.

15. 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 Montreal Protocol unless otherwise defined herein.

APPENDICES

APPENDIX 1-A: THE SUBSTANCES

Substance	Annex	Group	Starting point for aggregate reductions in consumption (ODP tonnes)
HCFC-22	C	I	23.33

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Parameter/Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)	n/a	n/a	23.33	23.33	21.00	21.00	21.00	21.00	21.00	15.16	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)			23.33	23.33	21.00	21.00	21.00	21.00	21.00	15.16	n/a
2.1	Lead IA (UNEP) agreed funding (US\$)	120,000			63,569			175,169			40,087	398,825
2.2	Support costs for Lead IA (US\$)	15,600			8,264			22,772			5,211	51,847
2.3	Cooperating IA (the Government of Germany) agreed funding (US\$)	174,740			49,152			30,000			26,384	280,276
2.4	Support costs for cooperating IA (US\$)	22,716			6,390			3,900			3,430	36,436
3.1	Total agreed funding (US\$)	294,740			112,721			205,169			66,471	679,101
3.2	Total support costs (US\$)	38,316			14,654			26,672			8,641	88,283
3.3	Total agreed costs (US\$)	333,056			127,375			231,841			75,112	767,384
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this Agreement (ODP tonnes)											8.17
4.1.2	Phase-out of HCFC-22 to be achieved through previously approved projects (ODP tonnes)											n/a
4.1.3	Remaining eligible consumption of HCFC-22 (ODP tonnes)											15.16

APPENDIX 3-A: FUNDING APPROVAL SCHEDULE

1. Funding for the future tranches will be considered for approval not earlier than the second meeting of the year specified in Appendix 2-A.

APPENDIX 4-A: FORMAT OF TRANCHE IMPLEMENTATION REPORTS AND PLANS

1. The submission of the Tranche Implementation Report and Plan will consist of five parts:
 - (a) A narrative report regarding the progress in the previous tranche, reflecting on the situation of the Country in regard to phase out of the Substances, how the different activities contribute to it and how they relate to each other. The report should further highlight successes, experiences and challenges related to the different activities included in the Plan, reflecting on changes in the circumstances in the country, and providing other relevant information. The report should also include information about and justification for any changes vis-à-vis the previously submitted tranche plan, such as delays, uses of the flexibility for reallocation of funds during implementation of a tranche, as provided for in paragraph 7 of this Agreement, or other changes. The narrative report will cover all relevant years specified in sub-paragraph 5(a) of the Agreement and can in addition also include information about activities in the current year;
 - (b) A verification report of the HPMP results and the consumption of the substances mentioned in Appendix 1-A, as per sub-paragraph 5(b) of the Agreement. If not decided otherwise by the Executive Committee, such a verification has to be provided together with each tranche request and will have to provide verification of the consumption for all relevant years as specified in sub-paragraph 5(a) of the Agreement for which a verification report has not yet been acknowledged by the Committee;
 - (c) A written description of the activities to be undertaken in the next tranche, highlighting their interdependence, and taking into account experiences made and progress achieved in the implementation of earlier tranches. The description should also include a reference to the overall Plan and progress achieved, as well as any possible changes to the overall plan foreseen. The description should cover the years specified in sub-paragraph 5(d) of the Agreement. The description should also specify and explain any revisions to the overall plan which were found to be necessary;
 - (d) A set of quantitative information for the report and plan, submitted into a database. As per the relevant decisions of the Executive Committee in respect to the format required, the data should be submitted online. This quantitative information, to be submitted by calendar year with each tranche request, will be amending the narratives and description for the report (see sub-paragraph 1(a) above) and the plan (see sub-paragraph 1(c) above), and will cover the same time periods and activities; it will also capture the quantitative information regarding any necessary revisions of the overall plan as per sub-paragraph 1(c) above. While the quantitative information is required only for previous and future years, the format will include the option to submit in addition information regarding the current year if desired by the country and lead implementing agency; and
 - (e) An Executive Summary of about five paragraphs, summarizing the information of above sub-paragraphs 1(a) to 1(d).

APPENDIX 5-A: MONITORING INSTITUTIONS AND ROLES

1. The NOU will submit annual progress reports on implementation status of the HPMP to UNEP and the Government of Germany.
2. Monitoring of activities of the HPMP and verification of the achievement of the performance targets, specified in the Plan, will be assigned to an independent local company or to independent local consultant(s) by UNEP.

APPENDIX 6-A: ROLE OF THE LEAD IMPLEMENTING AGENCY

1. The Lead IA will be responsible for a range of activities. These can be specified in the project document further, but include at least the following:
 - (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 Tranche Implementation Plans and subsequent reports as per Appendix 4-A;
 - (c) Providing verification to the Executive Committee that the Targets have been met and associated annual activities have been completed as indicated in the Tranche Implementation Plan consistent with Appendix 4-A;
 - (d) Ensuring that the experiences and progress is reflected in updates of the overall Plan and in future Tranche Implementation Plans consistent with sub-paragraphs 1(c) and 1(d) of Appendix 4-A;
 - (e) Fulfilling the reporting requirements for the tranches and the overall Plan as specified in Appendix 4-A as well as project completion reports for submission to the Executive Committee. The reporting requirements include the reporting about activities undertaken by the Cooperating IA;
 - (f) Ensuring that appropriate independent technical experts carry out the technical reviews;
 - (g) Carrying out required supervision missions;
 - (h) Ensuring the presence of an operating mechanism to allow effective, transparent implementation of the Tranche Implementation Plan and accurate data reporting;
 - (i) Co-ordinating the activities of the Cooperating IA, and ensuring appropriate sequence of activities;
 - (j) In case of reductions in funding for failure to comply in accordance with paragraph 11 of the Agreement, to determine, in consultation with the Country and the co-ordinating implementing agencies, the allocation of the reductions to the different budget items and to the funding of each implementing or bilateral agency involved;
 - (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.

2. After consultation with the Country and taking into account any views expressed, the Lead IA will select and mandate an independent organization to carry out the verification of the HPMP results and the consumption of the substances mentioned in Appendix 1-A, as per sub-paragraph 5(b) of the Agreement and sub-paragraph 1(b) of Appendix 4-A.

APPENDIX 6-B: ROLE OF COOPERATING IMPLEMENTING AGENCY

1. The Cooperating IA will be responsible for a range of activities. These activities can be specified in the respective project document further, but include at least the following:

- (a) Providing policy development assistance when required;
- (b) Assisting the Country in the implementation and assessment of the activities funded by the Cooperating IA, and refer to the Lead IA to ensure a co-ordinated sequence in the activities; and
- (c) Providing reports to the Lead IA on these activities, for inclusion in the consolidated reports as per Appendix 4-A.

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

1. In accordance with paragraph 11 of the Agreement, the amount of funding provided may be reduced by US \$166 per ODP kg of consumption beyond the level defined in row 1.2 of Appendix 2-A for each year in which the target specified in row 1.2 of Appendix 2-A has not been met.