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EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL Sixty-fifth Meeting Bali, Indonesia, 13-17 November 2011

# PROJECT PROPOSAL: IRAQ

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 UNIDO

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 issuance of the document.

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

Iraq

(I) PROJECT TITLE	AGENCY
HCFC phase out plan (Stage I)	UNEP (lead), UNIDO

(II) LATEST ARTICLE 7 DATAYear: 2009111.0 (ODP tonnes)

(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)									Year: 2010		
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab Use	Total sector consumption		
				Manufacturing	Servicing						
HCFC-123											
HCFC-124					0.1				0.1		
HCFC- 141b											
HCFC- 142b					0.2				0.2		
HCFC-22				3.99	112.86				116.85		

(IV) CONSUMPTION DATA (ODP tonr	nes)		
2009 - 2010 baseline (estimate):	108.38	Starting point for sustained aggregate reductions:	108.38
CONSU	JMPTION E	LIGIBLE FOR FUNDING (ODP tonnes)	
Already approved:	0.0	Remaining:	93.40

(V) BUS	INESS PLAN	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
UNEP	ODS phase-out (ODP tonnes)	2.5		2.5								5.0
	Funding (US \$)	221,000		221,000								442,000
UNIDO	ODS phase-out (ODP tonnes)	7.8	1.0		1.0							9.8
	Funding (US \$)	1,935,197	72,252		60,210							2,067,659

(VI) PROJECT DATA			2011	2012	2013	2014	2015	Total
Montreal Protocol consumption limits (estir	n/a	n/a	108.38	108.38	97.55	n/a		
Maximum allowable consumption (ODP to	n/a	n/a	102.20	97.70	93.40	n/a		
Project Costs requested in principle(US\$)	UNEP	Project costs	115,000		505,000		150,000	770,000
	Support costs				62,108	0	18,448	94,700
	UNIDO	Project costs	80,000		70,000		260,000	410,000
		Support costs	6,000	0	5,250	0	19,500	30,750
Total project costs requested in principle (US \$)					575,000	0	410,000	1,180,000
Total support costs requested in principle (US \$)			20,144		67,358	0	37,948	125,450
Total funds requested in principle (US \$)			215,144		642,358	0	447,948	1,305,450

# PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS - continuation Iraq

(VII) Request for fun	ding for the first tranche (2011)	
Agency	Funds requested (US \$)	Support costs (US \$)
UNEP	115,000	14,144
UNIDO	80,000	6,000

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 Iraq, UNEP, as the lead implementing agency, has submitted to the 65<sup>th</sup> meeting of the Executive Committee stage I of an HCFC phase-out management plan (HPMP) at a total cost, as originally submitted, of US \$1,345,000 plus support costs of US \$112,850 for UNEP and US \$30,750 for UNIDO. The HPMP covers strategies and activities to achieve a 13.82 per cent reduction in HCFC consumption by 2015.

2. The first tranche for stage I being requested at this Meeting amounts to US \$210,000 plus agency support costs of US \$25,346 for UNEP and US \$80,000 plus agency support costs of US \$6,000 for UNIDO, as originally submitted.

# Background

3. Iraq is located in the Middle East and it has borders with the Islamic Republic of Iran, Jordan, Kuwait, Saudi Arabia, the Syrian Arab Republic and Turkey. The country covers a land area of 438,317 square kilometres. Iraq's population was estimated at 32.4 million inhabitants in 2010 (Source: HPMP). The climate is mostly that of desert and the average temperatures range from higher than 48°C in July and August to below freezing in January.

# ODS policy and regulatory framework

4. Iraq issued a Ministerial Order in 2009, considered by the country as a temporary licensing system, to control the import of all ODS including HCFCs and to allow the Ministry of Environment to implement the necessary procedures for licensing and registering importers and exporters. Iraq is currently in its final stage of issuing comprehensive ODS legislation describing the roles of relevant authorities in controlling import and export of ODS, their use and a prohibition on venting. Currently, no quota system is in place. However, the Ministry of Environment is studying the possibility of implementing an HCFC quota system in 2012 or 2013. The Government of Iraq has ratified all the amendments of the Montreal Protocol.

5. The National Ozone Unit (NOU) under the authority of the Ministry of Environment is responsible for supervising and overseeing the implementation of phase-out projects including the National Phase-out Plan (NPP) and the HPMP.

# HCFC consumption

6. The survey results showed that Iraq's consumption in 2010 is limited to HCFC-22 and HCFC-409A representing 99 per cent and one per cent of the total HCFC consumption respectively. It also revealed that HCFC consumption increased from 1,735.8 metric tonnes (mt) (95.47 ODP tonnes) in 2006 to 1,923.63 mt (105.80 ODP tonnes) in 2010. The Secretariat was given to understand that Article 7 data for 2010 have recently been forwarded to the Ozone Secretariat, but as of writing of this document not yet been recorded. Since 2007, the yearly HCFC-22 consumption increase rate has ranged from -4 per cent to 14.6 per cent. It should be noted that the customs data could not be assessed since the licensing system was not in place, and customs data was not available at sufficient detail. However, the data collected during the survey was validated by the NOU. Table 1 presents data on HCFC-22 consumption from 2006 to 2010 reported under Article 7 and from the HCFC survey.

	Arti	cle 7	Survey results			
Vear	Year HCFC-22		HCFC-22	HCFC-22		
Ital	(in metric	(in ODP	(in metric	(in ODP		
	tonnes)	tonnes)	tonnes)	tonnes)		
2006	1,735.80	95.47	1,735.80	95.47		
2007	1,989.50	109.42	1,989.50	109.42		
2008	1,938.20	106.60	1,938.20	106.60		
2009	2,017.45	110.96	2,017.45	110.96		
2010	-	-	1,923.63	105.80		

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7. On the basis of the trends in economic growth in Iraq, HCFC consumption is expected to grow on a yearly basis by 6 per cent using an unconstrained growth scenario from 2011 to 2020. Table 2 presents the forecast on HCFC consumption up to 2020.

Table 2: Forecast consumption of HCFC

YEAR		2009*	2010**	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
With cons-	МТ	2,017.45	1,923.63	2,040.00	1,947.27	1,858.18	1,776.36	1,698.18	1,698.18	1,698.18	1,698.18	1,698.18	1,207.27
traint	ODP	110.96	105.80	112.20	107.10	102.20	97.70	93.40	93.40	93.40	93.40	93.40	66.40
Without cons-	МТ	2,017.45	1,923.63	2,040.00	2,161.82	2,290.91	2,429.09	2,574.55	2,729.09	2,892.73	3,065.45	3,250.91	3,445.45
traint	ODP	110.96	105.80	112.20	118.90	126.00	133.60	141.60	150.10	159.10	168.60	178.80	189.50

\*Article 7 data

\*\*2010 estimated consumption

# Sectoral distribution of HCFCs

8. HCFCs in Iraq are used by the servicing sector as well as by the refrigeration and air-conditioning manufacturing sector, the latter comprising of four companies manufacturing air-conditioners, water coolers and showcases. The largest is the State Company for Electrical Industries with a use of 70 mt of HCFC-22 in 2010. The other three have very small use between 0.5 mt and 1.5 mt in 2010.

9. Table 3 below presents the consumption of HCFCs in the country for servicing of refrigeration and air conditioning equipment.

Table 3: Consumption of HCFC-22 for servicing refrigeration and air conditioning systems in 2010

Equipment type	Total units	Charge	(tonnes)	Leakage rates (%)	Consumpt	Servicing Consumption /year) (tonnes)	
		Metric	ODP		Metric	ODP	
Domestic (window and splits units)	2,590,000	4,810.00	264.55	35	1,683.50	92.59	82.2
Commercial (free standing, package, ducted units, railway, refrigeration trucks, cold stores, hotels and super markets)	169,300	1,011.50	55.63	35	354.03	19.47	17.3
Industrial (dairy factories and other)	238	32.20	1.77	35	11.27	0.62	0.5
Total	2,759,538	5,853.70	321.95		2,048.80	112.68	100

10. The current prices of HCFCs and alternative refrigerants per kilogramme in the country are: US \$5.50 for HCFC-22, US \$11.50 for HFC-404A, US \$11.50 for HFC-407C, US \$5.80 for HFC-409A, US \$11.50 for HFC-410A and US \$5 for R-600a. Due to the fact that the price of HCFC-22 is low and already used in installed systems, it is used for almost all servicing requirements. Hydrocarbons are expected to be available in quantity once HC-based equipment is imported and installed. Consequently, the price of HC is not currently available.

# Calculation of consumption baseline

11. The estimated HCFC baseline for compliance was calculated by Iraq as the average of the 2009 actual consumption of 2,017.45 mt (110.96 ODP tonnes) reported under Article 7 and 2010 estimated consumption of 1,923.63 mt (105.80 ODP tonnes), which results in an estimated baseline of 1,970.54 mt (108.38 ODP tonnes).

# HCFC phase-out strategy

12. The Government of Iraq plans to freeze its consumption of HCFCs by 1 January 2013 at the level of 1,858.18 mt (102.2 ODP tonnes) and gradually reduce it from the baseline data to meet a 13.82 per cent reduction in 2015. The overarching strategy of Iraq is based on consumption reductions in the servicing sector through the enforcement of regulatory measures, recovery/recycling, and better practices to reach the 2015 compliance target, and for future reductions, the assumption that new commercially viable refrigeration and, in particular, air-conditioning technologies that use zero ODP and low global warming potential (GWP) refrigerants in energy efficient equipment will become available in the coming decade.

13. The Government decided not to submit to the 65<sup>th</sup> meeting of the Executive Committee any manufacturing conversion activity, since for the main manufacturer there are doubts regarding the suitability of HFC-410A for high ambient temperatures; at the same time, the company's 2010 consumption is small as compared to the total amount of HCFC consumed in 2010. The Government intends to submit the related activity as part of the second stage of the HPMP. The remaining three smaller factories will simply be provided technical assistance as their consumption is very small.

14. The total cost for the implementation of stage I of the HPMP as submitted is US \$1,345,000 plus agency support costs of US \$143,600 including US \$112,850 for UNEP and US \$30,750 for UNIDO. The requested funding distribution per component (excluding support costs) is as follows: US \$410,000 for technical assistance to the servicing sector; US \$190,000 for policy and regulatory enforcement; US \$350,000 for training, certification and standardization; and US \$395,000 for project management, monitoring and evaluation. The activities to be implemented in stage I of the HPMP, at a total cost of US \$1,345,000 and associated phase-out of 272.33 mt (14.98 ODP tonnes) of HCFC-22, include:

- (a) Enforcement of policies and regulations;
- (b) Development and production of booklets, training manuals and electronic references for different technical educational levels;
- (c) Implementation of a national certification programme including development of the certification scheme, preparation of the certification admission and testing modules;
- (d) Distribution of additional training equipment to upgrade training centres to conduct certification programme;
- (e) Implementation of a pilot certification programme for 500 technicians in different servicing sub-sectors particularly HCFC consuming sectors;

- (f) Development of terms of reference and work plan to prepare national standards and codes related to HCFC consuming sectors which could include equipment, refrigerants, refrigerants' containers and hazardous refrigerants;
- (g) Implementation of specialized technical awareness programme for addressing large end-users, buildings owners, consultants and technical decision-makers at governmental level about alternatives to HCFC in different applications particularly zero/low GWP options;
- (h) Monitoring of the three reclaim centres established under the NPP and provision of testing equipment for each centre;
- (i) Supply of filter kits and two cylinders for each recovery and recycling machine provided under the NPP for onsite recovery/reuse;
- (j) Supply of an additional 100 sets of recovery units including filter kits plus two cylinders for each machine; and
- (k) Management, co-ordination and evaluation of the HPMP activities.

# SECRETARIAT'S COMMENTS AND RECOMMENDATION

# COMMENTS

15. The Secretariat reviewed the HPMP for Iraq 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 60<sup>th</sup> meeting (decision 60/44), subsequent decisions on HPMPs, and the 2011-2014 business plan of the Multilateral Fund. The Secretariat discussed technical and cost-related issues with UNEP, which were satisfactorily addressed as summarized below.

# Issues related to HCFC consumption

16. The Secretariat examined the HCFC survey results and noted that they were consistent with data reported under Article 7. The Secretariat noted a peak in HCFC imports in 2009 and sought clarification on this issue. UNEP advised that the increase in imports of HCFCs results from the major increase in HCFC-22 prices and the improvement of the security situation in Iraq that allowed importers to stockpile. The amount of HCFCs stockpiled in 2009 covered part of the needs for 2010. It should be highlighted that the 2010 HCFC imports level is lower than HCFCs imported in 2007 and 2008.

# Starting point for aggregate reduction in HCFC consumption

17. The Government of Iraq agreed to establish as its starting point for sustained aggregate reduction in HCFC consumption the average level of the 2009 actual consumption of 2,017.45 mt (110.96 ODP tonnes) reported under Article 7 and 2010 estimated consumption of 1,923.63 mt (105.80 ODP tonnes). The baseline has thus been estimated at 1,970.54 mt (108.38 ODP tonnes). The business plan indicated a baseline of 115.39 ODP tonnes.

# Technical and cost issues

18. The Secretariat sought clarification on the activities planned in the HPMP and how these would build upon similar activities implemented under the NPP. UNEP indicated that the activities implemented under the NPP and those proposed in the HPMP are complementary and that UNEP,

UNIDO and the country will avoid the double-funding of any of the proposed activities. It should be recalled that the first and the second tranches of the NPP were approved at the  $58^{th}$  and  $63^{rd}$  meetings respectively.

19. The Secretariat noted that the Government of Iraq decided not to submit a project proposal for the HCFC-based manufacturing sector during stage I of the HPMP on the assumption that a more suitable refrigerant will be available on the market in the near future. In this regard, the Secretariat requested further clarification on the reason why the manufacturing sector could not be considered during the first stage of the HPMP since it appears unlikely that new alternatives to HCFC-22 will be available within the 2015 time-frame. The Secretariat also pointed out that HFC-410A is currently successfully used in high ambient and high humidity conditions. UNEP explained that during the preparation of the HPMPs for Bahrain, Kuwait, Oman, Qatar and Saudi Arabia, the related Governments and industry representatives concluded that HFC-410A is not suitable for high-ambient temperature countries. Furthermore, the special forum and symposium organized by UNEP on this issue with the participation of several international manufacturers of equipment and refrigerants as well as key regional manufacturers also concluded that alternative technologies for high-ambient temperature environments require further assessment.

20. The Secretariat raised concerns on the support provided to the National Legislation Enforcement Committee and explained that this should have been funded through Institutional Strengthening (IS). UNEP advised that Iraq had become a Party to the Montreal Protocol only in 2008 and as such it has to establish and stabilize the institutional setup required to implement the Protocol. Moreover the new comprehensive ODS Legislation to be issued by early 2012 covers not only imports, but also regulations requiring in-country enforcement such as access restrictions to refrigerants, minimum education levels for technicians, venting bans and recovery requirements. In the particular case of Iraq with its newly established administration, special attention to and exchanges between the central government and the regions is required to allow implementation of enforcement throughout the country. This exchange will be enabled through the establishment of a specialized enforcement committee consisting of representatives of all authorities involved in legislation and enforcement. UNEP indicated that the committee will meet on a regular basis to monitor the implementation, propose procedural arrangements, smooth co-ordination and solve any conflict of jurisdictions amongst local authorities. The support required was accepted by the Secretariat solely on the background of the specific situation of the country, and it was agreed that funding of such a committee would be limited to the first stage only, with the intention of supporting the initiation of the necessary enforcement structures under the specific circumstances prevailing in Iraq, but without intention of funding the operation of enforcement structures as such.

21. The Secretariat assessed the need for the proposed e-licensing system and required additional information to assess whether the costs of such a system constitutes incremental cost. UNEP advised that this is part of a regional activity in the West Asia region and is a regional effort to enhance the monitoring of ODS trade by accelerating data reporting and compilation, facilitate the identification of gaps between licensed and imported shipments soon after they might occur, support the local and regional efforts to monitor and curb illegal trade, and facilitate the process of ODS licensing in a large country like Iraq through proper share of information amongst NOUs, importers, exporters and boarders' authorities. Moreover, the e-licensing system is already included or will be part of the HPMPs for Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, the Syrian Arab Republic and Yemen. Part of the funds for the e-licensing system are pooled between all participating countries to enable cost effective programming of a generic system catered to the needs in the region, and remaining funds are used for each country to customize the generic version to its particular needs and establish the conditions for its use. The funds for the e-licensing system are part of the overall HPMP funding for the servicing sector and subject to the cost effectiveness value established in decision 60/44(f)(xv).

22. The Secretariat highlighted the fact that the project management, coordination and evaluation cost, as originally submitted, represented 29 per cent of the total funding. UNEP advised that security related costs are estimated to contribute US \$40,000 to the total cost of the component of US \$375,000, as originally submitted. Based on the Agreement reached under the approved NPP for which a similar component was calculated at around 10 per cent of the total funding, UNEP revised the cost of the project management, co-ordination and evaluation to 11.84 per cent of the total funding (excluding security cost). UNEP indicated that security related costs will be minimized as much as possible but will depend on the security situation. In the field security training is mandatory for all UN staff members and consultants travelling to Iraq. The estimated cost is US \$5,000 per individual and the refresher course is around US \$3,500 per individual.

23. The total agreed cost for the implementation of stage I of the HPMP is estimated at US \$1,180,000 as shown in Table 4. It would result in a reduction of 14.98 ODP tonnes of HCFC by 2015, representing 13.82 per cent of the HCFC baseline for compliance. Given the level of HCFC consumption to be phased out by 2015, the Secretariat noted that implementation of stage I of the HPMP could assist Iraq to make progress in meeting the control measures beyond 2015. Moreover, UNEP indicated that the strategy of the Government is a combination of regulatory measures and specific activities that will allow the country to comply with 2013 and 2015 control measures. UNEP also advised that the Government of Iraq is aware of the implication of such commitment.

Project component/activities	Agency	2011 (US \$)	2013 (US \$)	2015 (US \$)	Total (US \$)
Technical assistance to the servicing	UNIDO	80,000	70,000	260,000	410,000
sector					
Policy & regulatory enforcement	UNEP	45,000	105,000	15,000	165,000
Training, certification and	UNEP	70,000	285,000	75,000	430,000
standardization					
Project management, monitoring and	UNEP	0	89,000	46,000	135,000
evaluation					
Security	UNEP	0	26,000	14,000	40,000
Total		195,000	575,000	410,000	1,180,000

# Table 4: Revised level of funding of Stage I of the HPMP

# Co-financing

24. 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 indicated that efforts have been made by the Government to identify ways and means of capturing future climate change-related revenue streams based on current UNFCCC requirements to assist in the funding of this HPMP. However, no specific contribution was reported in the HPMP.

# Impact on the climate

25. 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 kilogramme (kg) of HCFC-22 not emitted due to better refrigeration practices results in the savings of approximately 1.8  $CO_2$ -equivalent tonnes saved. Although a calculation of the impact on the climate was not included in the HPMP, the activities planned by Iraq, in particular its above-average efforts to improve servicing practices, introduce reclamation and reduce associated refrigerant emissions indicate that it is likely that the country will surpass the 16,854.7  $CO_2$ -equivalent tonnes that would not be emitted into 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.

#### 2011-2014 business plan of the Multilateral Fund

26. UNEP and UNIDO are requesting US \$1,180,000 plus support costs for implementation of stage I of the HPMP. The total value requested for the period 2011-2014 of US \$85,702 including support costs is within that in the business plan. Based on the estimated HCFC baseline consumption in the servicing sector of 108.38 ODP tonnes and assuming a reduction of 13.82 per cent, Iraq's allocation up to the 2015 phase-out should be US \$1,225,481, excluding support costs, in line with decision 60/44.

#### Draft Agreement

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

# RECOMMENDATION

28. The Secretariat recognised the difficult situation regarding implementation and enforcement of ODS phase-out in Iraq, the particular efforts undertaken in the HPMP to strengthen enforcement in the country, and the high level of commitment to the HCFC phase-out shown by the Government of Iraq when proposing an acceleration of the phase-out schedule. The Secretariat therefore recommends that the Executive Committee considers:

- (a) Approving, in principle, stage I of the HCFC phase-out management plan (HPMP) for Iraq for the period 2011 to 2015 to meet a 13.82 per cent reduction in HCFC consumption, at the amount of US \$1,305,450, consisting of US \$770,000 plus agency support costs of US \$94,700 for UNEP, and US \$410,000 plus agency support costs of US \$30,750 for UNIDO;
- (b) Noting that the approved funding includes US \$40,000 for security related cost, provided on an exceptional basis, to enable the implementation of the programme, and not taken into account when establishing the reduction of eligibility associated with the activities particularly in the servicing sector;
- (c) Noting that the Government of Iraq had agreed to establish as its starting point for sustained aggregate reduction in HCFC consumption an estimated baseline of 108.38 ODP tonnes, calculated using actual consumption of 110.96 ODP tonnes reported for 2009 under Article 7 of the Montreal Protocol and estimated consumption of 105.80 ODP tonnes for 2010;
- (d) Deducting 14.98 ODP tonnes of HCFCs from the starting point for sustained aggregate reduction in HCFC consumption;
- (e) Approving the draft Agreement between the Government of Iraq and the Executive Committee for the reduction in consumption of HCFCs, as contained in Annex I to the present document;

- (f) Requesting the Fund Secretariat, once the baseline data were known, to update Appendix 2-A to the Agreement to include the figures for maximum allowable consumption, and to notify the Executive Committee of the resulting change in the levels of maximum allowable consumption; and
- (g) Approving the first tranche of stage I of the HPMP for Iraq, and the corresponding implementation plan, at the amount of US \$215,144, consisting of US \$115,000 plus agency support costs of US \$14,144 for UNEP, and US \$80,000 plus agency support costs of US \$6,000 for UNIDO.

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#### Annex I

# DRAFT AGREEMENT BETWEEN THE GOVERNMENT OF THE REPUBLIC OF IRAQ 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 the Republic of Iraq (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 93.40 ODP tonnes by 1 January 2015 in compliance with Montreal Protocol schedules, with the understanding that this figure is to be revised one single time, once the baseline consumption for compliance has been established based on Article 7 data.

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 that exceeds the level defined in row 1.2 of Appendix 2-A 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 that 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 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 agrees to implement this Agreement in accordance with the HCFC phase-out sector plans submitted. In accordance with sub-paragraph 5(b) of this Agreement, the Country will accept independent verification of the achievement of the annual consumption limits of the Substances as set out in row 1.2 of Appendix 2-A of this Agreement. The aforementioned verification will be commissioned by the relevant bilateral or implementing agency.

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 eight weeks in advance of the applicable Executive Committee meeting set out in the Funding Approval Schedule:

- (a) That the Country had met the Targets set out in row 1.2 of Appendix 2-A for all relevant years. Relevant years are all years since the year in which this Agreement was approved. 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 are exempted;
- (b) That the meeting of these Targets has been independently verified, unless the Executive Committee decided that such verification would not be required;
- (c) That the Country had submitted annual implementation reports in the form of Appendix 4-A ("Format of Implementation Reports and Plans") 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;

- (d) That the Country has submitted an annual implementation plan in the form of Appendix 4-A 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; and
- (e) That, for all submissions from the 68<sup>th</sup> meeting onwards, confirmation has been received from the Government that an enforceable national system of licensing and quotas for HCFC imports and, where applicable, production and exports is in place and that the system is capable of ensuring the Country's compliance with the Montreal Protocol HCFC phase-out schedule for the duration of this Agreement.

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 implementation of the activities in the previous annual implementation plans 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 paragraph 4 above.

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 reduction of consumption and phase-out of the Substances specified in Appendix 1-A:

- (a) Reallocations categorized as major changes must be documented in advance either in an annual implementation plan submitted as foreseen in sub-paragraph 5(d) above, or as a revision to an existing annual implementation plan to be submitted eight weeks prior to any meeting of the Executive Committee, for its approval. Major changes would relate to:
  - (i) Issues potentially concerning the rules and policies of the Multilateral Fund;
  - (ii) Changes which would modify any clause of this Agreement;
  - (iii) Changes in the annual levels of funding allocated to individual bilateral or implementing agencies for the different tranches; and
  - (iv) Provision of funding for programmes or activities not included in the current endorsed annual implementation plan, or removal of an activity in the annual implementation plan, with a cost greater than 30 per cent of the total cost of the last approved tranche;
- (b) Reallocations not categorized as major changes may be incorporated in the approved annual implementation plan, under implementation at the time, and reported to the Executive Committee in the subsequent annual implementation report; and
- (c) Any remaining funds will be returned to the Multilateral Fund upon completion of the last tranche foreseen under this Agreement.

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 UNIDO has agreed to be the 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 agencies taking part in this Agreement.

10. The Lead IA will be responsible for ensuring co-ordinated planning, implementation and reporting of all activities under this Agreement, 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 reached consensus on the arrangements regarding inter-agency 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 amount set out in Appendix 7-A ("Reductions in Funding for Failure to Comply") in respect of each ODP kg 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 above.

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 the information necessary to verify compliance with this Agreement.

14. The completion of stage I 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 level has been specified in Appendix 2-A. Should there at that time still be activities that are outstanding, and 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 sub-paragraphs 1(a), 1(b), 1(d), and 1(e) of Appendix 4-A will continue until the time of the completion unless otherwise specified by the Executive Committee.

15. All of the conditions 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	С	Ι	108.38	

#### **APPENDIX 2-A: THE TARGETS, AND FUNDING**

Row	Particulars	2011	2012	2013	2014	2015	Total
1.1	Montreal Protocol reduction			108.38	108.38	97.54	n/a
	schedule of Annex C, Group I						
	substances (ODP tonnes)						
1.2	Maximum allowable total			102.20	97.70	93.40	n/a
	consumption of Annex C, Group I						
	substances (ODP tonnes)						
2.1	Lead IA (UNEP) agreed funding						
	(US \$)	115,000	0	505,000	0	150,000	770,000
2.2	Support costs for Lead IA (US \$)	14,144	0	62,108	0	18,448	94,700
2.3	Cooperating IA (UNIDO) agreed						
	funding (US \$)	80,000	0	70,000	0	260,000	410,000
2.4	Support costs for Cooperating IA						
	(US \$)	6,000	0	5,250	0	19,500	30,750
3.1	Total agreed funding (US \$)	195,000	0	575,000	0	410,000	1,180,000
3.2	Total support costs (US \$)	20,144	0	67,358	0	37,948	125,450
3.3	Total agreed costs (US \$)	215,144	0	642,358	0	447,948	1,305,450
4.1.1	Total phase-out of HCFC-22 and under this Agreement (ODP tonnes)						
4.1.2	Phase-out of HCFC-22 in previously approved projects (ODP tonnes)						
4.1.3	Remaining eligible consumption for HCFC-22 (ODP tonnes)						

# **APPENDIX 3-A: FUNDING APPROVAL SCHEDULE**

1. Funding for the future tranches will be considered for approval at the last meeting of the year specified in Appendix 2-A.

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

1. The submission of the Implementation Report and Plan for each tranche request will consist of five parts:

(a) A narrative report, with data provided by calendar year, regarding the progress since the year prior to the previous report, reflecting 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 include ODS phase-out as a direct result from the

implementation of activities, by substance, and the alternative technology used and the related phase-in of alternatives, to allow the Secretariat to provide to the Executive Committee information about the resulting change in climate relevant emissions. The report should further highlight successes, experiences, and challenges related to the different activities included in the Plan, reflecting any changes in the circumstances in the Country, and providing other relevant information. The report should also include information on and justification for any changes vis-à-vis the previously submitted Annual Implementation Plan(s), 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 on 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 until and including the year of the planned submission of the next tranche request, highlighting the interdependence of the activities, and taking into account experiences made and progress achieved in the implementation of earlier tranches; the data in the plan will be provided by calendar year. The description should also include a reference to the overall plan and progress achieved, as well as any possible changes to the overall plan that are foreseen. The description should cover the years specified in sub-paragraph 5(d) of the Agreement. The description should also specify and explain in detail such changes to the overall plan. This description of future activities can be submitted as a part of the same document as the narrative report under sub-paragraph (b) above;
- (d) A set of quantitative information for all annual implementation reports and annual implementation plans, submitted through an online database. 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), the annual implementation plan and any changes to the overall plan, and will cover the same time periods and activities; and
- (e) An Executive Summary of about five paragraphs, summarizing the information of the above sub-paragraphs 1(a) to 1(d).

# **APPENDIX 5-A: MONITORING INSTITUTIONS AND ROLES**

1. The Project Management Unit (PMU) will be responsible for implementation of the HPMP, tracking the promulgation, and enforcement of policy and legislation. It will assist the Lead IA and the Cooperating IA with the preparation of annual implementation plans and progress reports to the Executive Committee.

2. The Government of Iraq in consultation with the Lead IA will select and contract an independent local institution to support the PMU in the implementation of the HPMP and report annually on the outcomes and deliverables of the HPMP.

3. The selected institution will have full access to all financial and technical data and information concerning the implementation of the Plan to phase out the Substances for reliable data collection and cross checking. It will prepare and submit to the National Ozone Unit (NOU) and the Lead IA reports of activities on a quarterly basis and the reports on the status of implementation of the Plan to phase out the Substances and consumption figures annually for consideration and follow up.

- 4. The responsibility of the selected organization will be:
  - (a) To develop and present to the Lead IA and NOU the approach to independent monitoring of the HPMP implementation;
  - (b) To undertake independent monitoring of all the activities implemented in the HPMP;
  - (c) To present reports on HPMP implementation status and HCFC consumption in the country on half-yearly basis;
  - (d) To prepare periodic (annual) assessment of the consumption of ODS in the refrigeration sector; and
  - (e) To take into consideration comments and recommendations of the Lead IA and NOU on activities and react accordingly.
- 5. The NOU will be responsible for:
  - (a) Providing the selected organization with all relevant information in possession;
  - (b) Providing the selected organization with full information on NOU activities and partners;
  - (c) Providing the selected organization with the necessary support/documentation to ensure its access to relevant official institutions and other organizations; and
  - (d) Providing the reasonable support in independent data collection.

# Verification and reporting

6. Based on discussions with the Country, the Lead IA should mandate an independent organization to carry out the annual verification of the HPMP results and the consumption of the Substances mentioned in Appendix 1-A and this independent monitoring programme.

# APPENDIX 6-A: ROLE OF THE LEAD IMPLEMENTING AGENCY

- 1. The Lead IA will be responsible for a range of activities, including 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 HPMP;
  - (b) Assisting the Country in preparation of the Implementation Plans and subsequent reports as per Appendix 4-A;
  - (c) Providing independent verification to the Executive Committee that the Targets have been met and associated annual activities have been completed as indicated in the 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 annual implementation plans consistent with sub-paragraphs 1(c) and 1(d) of Appendix 4-A;
- (e) Fulfilling the reporting requirements for the annual implementation reports, annual implementation plans and the overall plan as specified in Appendix 4-A 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 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 Cooperating IA, 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
- (1) 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 entity 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 THE COOPERATING IMPLEMENTING AGENCY

1. The Cooperating IA will be responsible for a range of activities. These activities are specified in the overall plan, including at least the following:

- (a) Providing assistance for policy development 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 \$152 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.

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