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EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL Sixtieth Meeting Montreal, 12-15 April 2010

## PROJECT PROPOSAL: THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA

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

# Phase-out

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

UNIDO

# PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

COUNTRY: The former Yugoslav Republic of Macedonia

| PROJECT TITLE:                 | HCFC Phase-out Management Plan                     |  |  |  |  |
|--------------------------------|--|--|--|--|--|
| BILATERAL/IMPLEMENTING AGENCY: | UNIDO  |  |  |  |  |
| NATIONAL CO-ORDINATING AGENCY: | NOU, Ministry of Environment and Physical Planning |  |  |  |  |

## LATEST REPORTED CONSUMPTION DATA FOR ODS ADDRESSED IN PROJECT

| A. ARTICLE-7 DATA | 2008 | AS OF MARCH 2010 |
|-------------------|------|------------------|
| Annex C, Group I: |      | 3.46 ODP tonnes  |

| B: COU    | NTRY PROGR | RAMME SECTO                        | ORAL DATA  | 2008    | AS OF M | IARCH 2010 |  |  |  |  |
|-----------|------------|------------------------------------|------------|---------|---------|------------|--|--|--|--|
| Substance |            | Consumption by sector (ODP tonnes) |            |         |         |            |  |  |  |  |
|           | Foam       | Ref. manu.                         | Ref. serv. | Solvent | Other   | Total      |  |  |  |  |
| HCFC-22   | 0          | 0                                  | 2.03       | 0       | 0       | 2.03       |  |  |  |  |
| HCFC-141b | 1.43       | 0                                  | 0          | 0       | 0       | 1.43       |  |  |  |  |
| HCFC-142b | 0          | 0                                  | 0          | 0       | 0       | 0          |  |  |  |  |
| Other     | 0          | 0                                  | 0          | 0       | 0       | 0          |  |  |  |  |

| CONSUMPTION DATA (ODP tonnes) |   |  |                               |      |          |       |  |  |
|-------------------------------|---|--|-------------------------------|------|----------|-------|--|--|
| 2009-2010 baseline:           | To be determined                              | Starting point for sustained aggregate reductions: |                               |      | Baseline | minus |  |  |
|                               |   | Baseline 5%  |                               |      |          |       |  |  |
| CONSUMPTION EI                | CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes) |  |                               |      |          |       |  |  |
| Already approved:             | 0   |  | Remaining:                    | Base | line     |       |  |  |
| CURRENT YEAR BUSINESS PLAN:   |   |  |                               |      |          |       |  |  |
| Total funding (US \$):        | 64,500  |  | Total phase-out (ODP tonnes): | n/a  |          |       |  |  |

# THE TARGETS, AND FUNDING

|       |   | 2010       | 2011       | 2012          | 2013         | 2014     | 2015           | Total                 |
|-------|---|------------|------------|---------------|--------------|----------|----------------|-----------------------|
| 1.1   | Montreal Protocol reduction<br>schedule of Annex C, Group I<br>substances (ODP tonnes)      | None       |            |               | Baseline     |          | Baseline - 10% | n/a                   |
| 1.2   | Maximum allowable total consumption of Annex C Group I substances (ODP tonnes)              | 0          | 0          | 0             | 0            | Baseline | Baseline - 10% | n/a                   |
| 2.1   | Lead IA (UNIDO) agreed funding( US \$)  | 60,000     | 485,000    | 145,000       | 145,000      | 695,000  | 0              | 1,530,000             |
| 2.2   | Support costs for Lead IA(US \$)  | 4,500      | 36,375     | 10,875        | 10,875       | 52,125   | 0              | 114,750               |
| 3.1   | Total agreed funding (US \$)  | 60,000     | 485,000    | 145,000       | 145,000      | 695,000  | 0              | 1,530,000             |
| 3.2   | Total support cost  | 4.500      | 36,375     | 10,875        | 10,875       | 52,125   | 0              | 114,750               |
| 3.3   | Total agreed costs (US \$)  | 64,500     | 521,375    | 155,875       | 155,875      | 747,125  | 0              | 1,644,750             |
| 4.1.1 | Total phase-out of HCFC-22 agreed   | to be ach  | ieved unde | r this agreer | nent (ODP to | onnes)   |                | To 90% of<br>Baseline |
| 4.1.2 | Phase-out of HCFC-22 to be achieve  | ed in prev | iously app | roved projec  | ts (ODP ton  | nes)     |                | 0                     |
| 4.1.3 | Remaining eligible consumption for  | HCFC-2     | 2 (ODP tor | nnes)         |              |          |                | 90% of                |
|       |   |            |            |               |              |          |                |                       |
| 4.2.1 | 4.2.1 Total phase-out of HCFC-141b agreed to be achieved under this agreement (ODP tonnes)1 |            |            |               |              |          |                |                       |
|       |   |            |            |               |              |          |                |                       |
| 4.2.2 | Phase-out of HCFC-141b to be achie  |            |            |               | ects (ODP to | onnes)1  |                | 0                     |
| 4.2.3 | Remaining eligible consumption for  | HCFC-1     | 41b (ODP   | tonnes)       |              |          |                | 0                     |

**FUNDING REQUEST:** Approval of funding for the first tranche (2010) as indicated above.

| SECRETARIAT'S RECOMMENDATION: | For individual consideration |
|-------------------------------|------------------------------|
|-------------------------------|------------------------------|

#### PROJECT DESCRIPTION

- 1. On behalf of the Government of the former Yugoslav Republic of Macedonia, UNIDO, as the designated implementing agency, has submitted to the 60<sup>th</sup> Meeting of the Executive Committee an HCFC phase-out management plan (HPMP) at a total cost of US \$1,530,000 for the first stage of the plan until the year 2015. It foreshadows a second stage with a duration until 2030 for an additional cost of US \$2,400,000. The HPMP follows closely the specifications of the guidelines adopted by the Executive Committee as per decision 54/39. The former Yugoslav Republic of Macedonia consumes HCFC-22 and produces HCFC-141b blown polyurethane foam.
- 2. The HPMP for the former Yugoslav Republic of Macedonia is intended to enable the Government to meet its obligations for HCFC phase-out in line with the Montreal Protocol's control measures. The HPMP is based on a survey assessing the use of HCFCs in the country, the situation of the HCFC-using manufacturing industries and the number of HCFC refrigeration and air-conditioning systems in the country. The resulting plan is developed as a two-stage approach with several activities in the years 2010 to 2015 and second stage with a limited number of activities until 2030. It indicates that in the years 2030 to 2040, no more activities would be necessary to support the phase-out of the former Yugoslav Republic of Macedonia.

## General information

- 3. The former Yugoslav Republic of Macedonia is a land-locked country located in the centre of the Balkan Peninsula in Eastern Europe with, in the south, a Mediterranean climate, in the centre and north a mild continental one. Of the two million people in 560,000 households, 58 per cent live in cities, of that more than a third live in the capital Skopje. In the ten years from 1997 to 2007, the growth domestic product (GDP) of the former Yugoslav Republic of Macedonia grew in total by about ninety per cent, with the GDP increasing in the years 2006, 2007 and 2008 by 4.0, 5.9 and 5.3 per cent respectively. The GDP per capita increased two folds in the decade to 2007 to a value of US \$3,710. The National Ozone Unit (NOU), located in the Ministry of Environment and Physical Planning, prepared the first country programme for the reduction and phase-out of ODS in July 1995. Since then, 12 projects in the refrigeration, foam, halon, aerosol and methyl bromide sectors as well as phase-out plans have been approved for the former Yugoslav Republic of Macedonia, in addition to funds for institutional strengthening (IS) with four renewals. A refrigeration management plan (RMP) was approved in 1999, and a terminal phase-out plan (TPMP) in 2005. The country participated in the regional chiller demonstration project in 2005. In total, the direct phase-out activities funded by the Multilateral Fund lead to an ODS phase-out of 602 ODP tonnes (620 metric tonnes). The country paid special attention to the refrigerant recovery and recycling (R & R) set up, which includes also the R & R of HCFCs. The recycling programme is very successful; from 2001 to 2006, an average of 7.5 per cent of the national CFC-12 consumption was recycled; in the peak year, 2006, this value increased to 26 per cent of the national CFC consumption being recycled. Recycling continued at about the same level in 2007 and 2008 while the consumption of CFCs was reduced to zero in those years. It should be noted that these figures relate only to the recycling of CFC-12; the recycling of HCFC-22, which is also ongoing, has in the last four years recycled on average 2.8 metric tonnes per year, equal to more than 8 per cent of the annual consumption.
- 4. The country has ratified the Vienna Convention, the Montreal Protocol and all its amendments including the Beijing Amendment. In 1997 a general permit scheme for ODS import had been established, and in 1998 a permit scheme for import of used equipment, followed in 2008 by a permit system for import of new equipment. Any application for a permit for the import of ODS or equipment containing ODS must be submitted to the NOU for the final decision whether to grant the import or not. Environmental taxes for import of ODS and ODS-containing equipment exist since 2005 and depend on the type and quantity of the imported ODS, or the type, quantity and volume of the equipment imported. Refrigerators for example are covered by taxes between US \$4 and US \$8 per unit; CFCs are taxed at

about US \$1.50/kg and HCFCs presently about US \$0.12/kg. The import of used refrigerators, freezers and other cooling and freezing equipment has been banned since 2007, and the import of CFCs from 1 January 2009. The former Yugoslay Republic of Macedonia is aiming to harmonise the regulatory framework with that of the European Union, and both the Government as well as industry strive to achieve the European-standard phase-out strategy for HCFCs. The existing legislation regarding ODS appears to be suitable for an accelerated HCFC phase-out as foreseen by decision XIX/6 of the Meeting of the Parties with only minor amendments.

5. The HPMP provides an overview of the consumption of HCFCs in the country. The country does not have any HCFC production, therefore the consumption is completely covered by imports. Two HCFCs are imported, HCFC-22 and HCFC-141b. The HCFC-141b is imported into the country as part of a polyol foam blowing mixture (pre-blended polyol) and is not under the control of the licensing system. The country reported HCFC-22 and HCFC-141b consumption data to the Ozone Secretariat as shown in the following table:

| Substance                  | HCFC consumption [metric tonnes per year/ (ODP tonnes per year)] |          |         |         |         |         |         |
|----------------------------|--|----------|---------|---------|---------|---------|---------|
|                            | 2002   | 2003     | 2004    | 2005    | 2006    | 2007    | 2008    |
| HCFC-22                    | 69.27 /  | 108.36 / | 86.55 / | 33.82 / | 42.91 / | 22.72 / | 36.86 / |
| (ODP=0,055)                | (3.81)   | (5.96)   | (4.76)  | (1.86)  | (2.36)  | (1.25)  | (2.03)  |
| HCFC-141b                  | 13.00 /  | 16.00 /  | 14.00 / | 18.00 / | 11.00 / | 14.50 / | 13.00 / |
| (ODP=0,11)                 | (1.43)   | (1.76)   | (1.54)  | (1.98)  | (1.21)  | (1.60)  | (1.43)  |
| Calculated use             |  |          |         |         |         |         |         |
| of HCFC total <sup>1</sup> | (5.24)   | (7.72)   | (6.30)  | (3.84)  | (3.57)  | (2.85)  | (3.46)  |

Table 1: HCFC consumption 2002 to 2008

- The survey showed that the consumption of HCFC-22 is exclusively related to the service and equipment assembly sectors, and that no manufacturing capacity producing equipment with HCFC-22 exists in the country.
- The survey identified three companies in the foam sector using HCFC-141b. The company "Sileks AD Co." received support from the Multilateral Fund for the phase-out of CFC-11 and its replacement by HCFC-141b at the 22<sup>nd</sup> Meeting in 1997. There are several companies, in addition to Sileks, namely Koper and Zlatna Raka which are using HCFC-141b for foam blowing. Koper and Zlatna Raka have not previously received support from the Multilateral Fund. Koper was established in 1990 and is a factory for the production of domestic appliances and commercial refrigerators, while Zlatna Raka, established in 1970, is a producer of insulated segment doors. All three manufacturers import polyol mixtures containing HCFC-141b. It should be noted that the calculated annual use of HCFC-141b, measured in ODP tonnes, is larger than the HCFC-22 consumption in more than a quarter of the years covered by Table 1. The use of HCFC-141b in pre-blended polyols was 9.9 metric tonnes (1.09 ODP tonnes) at the largest manufacturer Sileks, 3.3 metric tonnes (0.36 ODP tonnes) at the company Koper and another metric tonne (0.11 ODP tonnes) at the company Zlatna Raka. The HPMP pointed out that the installed capacities were significantly higher, at an aggregated figure of 106 metric tonnes of HCFC-141b in pre-blended polyol per year.
- 8. The forecast for the use of HCFCs in the future assumes that the air conditioning and refrigeration sector will grow by 15-20 per cent during the coming years. However, it is also acknowledged that since about three to four years ago, alternatives have been introduced in many traditional HCFC-22 applications, mainly due to the fact that most of the importers have had easiest access to the units sold in the European market. The HPMP document points to a risk of turning back to HCFC-22 equipment if importers bring in low priced HCFC-22 units from Asia, since "the concern for the environmental

<sup>&</sup>lt;sup>1</sup> The total HCFC use in the country is the result of import of bulk HCFC-22 as reported under Article 7 plus the imports of HCFC-141b in pre-blended polyol

difference among many end users appears to be lower than the desire to pay the lowest price". The plan points to the risks posed by an increase in installed HCFC-22 stock for achieving the freeze level in 2013. As a result of these considerations policy measures are under development to curb the supply of new equipment (see below); on the basis of this curbed demand, the plan includes an estimate for the increase in consumption of HCFC-22 until 2012. An estimate for the increase in HCFC-141b use indicates a substantial increase of 10 per cent per year, based on the presently low utilization of the installed capacity at the companies and the general expected growth of the economy of the country. The forecasts for the years until 2015 are presented in Table 2.

Table 2: Forecast of HCFC consumption for the years 2009 to 2015

| Substance    |  |       | Year  |       |       |       |          |       |       |  |  |
|--------------|--|-------|-------|-------|-------|-------|----------|-------|-------|--|--|
| Sut          | ostance  | Base  | 2009  | 2010  | 2011  | 2012  | 2013     | 2014  | 2015  |  |  |
| HCFC-22      | HCFC-22  |       |       |       |       |       |          |       |       |  |  |
|              | Increase   |       | 5%    | 5%    | 5%    | 5%    | Baseline | -5%   | -10%  |  |  |
| Camanantia n | (metric tonnes)  | 58.65 | 61.58 | 64.66 | 67.89 | 71.28 | 63.12    | 59.96 | 56.81 |  |  |
| Consumption  | (ODP tonnes)   | 3.23  | 3.39  | 3.56  | 3.73  | 3.92  | 3.47     | 3.3   | 3.12  |  |  |
| HCFC-141b    |  |       |       |       |       |       |          |       |       |  |  |
|              | Increase   |       | 10%   | 10%   | 10%   | 10%   | Baseline | -5%   | -10%  |  |  |
| C            | (metric tonnes)  | 14.2  | 15.7  | 17.3  | 19    | 21    | 16.5     | 15.68 | 14.85 |  |  |
| Consumption  | (ODP tonnes)   | 1.56  | 1.73  | 1.9   | 2.09  | 2.31  | 1.82     | 1.72  | 1.63  |  |  |
| Total HCFC   |  |       |       |       |       |       |          |       |       |  |  |
|              | Reported (ODP tonnes)                                  | 3.23  | 3.39  | 3.56  | 3.73  | 3.92  | 3.47     | 3.3   | 3.12  |  |  |
| Consumption  | Reported plus<br>pre-blended<br>polyol (ODP<br>tonnes) | 4.79  | 5.12  | 5.46  | 5.82  | 6.23  | 5.29     | 5.02  | 4.75  |  |  |

9. The HPMP recognizes the growing trend towards alternatives in new installations on the European market towards with low impact on the climate. The document points out that alternatives are available for all applications and that a replacement of HCFCs is possible in new systems at relatively low cost, but that there are significant challenges to phase out HCFCs in particular in existing refrigeration and air conditioning equipment. The alternatives presently available for the refrigeration and air conditioning sector in the former Yugoslav Republic of Macedonia include the most prominent HFCs (HFC-134a, HFC-404A, HFC-407A, and HFC-410A); Table 3 shows the costs of these alternatives. The use of isobutane in domestic refrigeration servicing and ammonia in industrial refrigeration assembly and servicing is also common in the country. The imports of the different refrigerants and the associated wholesale prices are shown in Table 3. All refrigerant uses are either related to servicing or to assembly and charging of refrigeration equipment.

Table 3: Import of alternative refrigerants in 2008 (issue permits) and whole sale prices

| Refrigerant   | HCFC -22    | R-507      | R-404A    | R-407C    | R-410A    | HFC-134a   |
|---------------|-------------|------------|-----------|-----------|-----------|------------|
| Price (US \$) | 2.27 - 2.87 | 5.32 - 6.0 | 5.3 - 6.7 | 5.5 - 6.0 | 5.6 - 6.0 | 4.27 - 5.6 |
| Import        | 36.860      | 15.297     | 71.699    | 10.193    | 11.704    | 51.610     |
| (metric       |             |            |           |           |           |            |
| tonnes)       |             |            |           |           |           |            |

## Strategy and plan for the implementation HCFC phase-out

- 10. The submission of the HPMP consists of a differentiated plan for the years until 2015 and also information about the activities and implementation from 2016 to 2040. The plan contains policy instruments such as import quotas and taxes, activities such as the conversion of three foam manufacturers and the further improvement of a R & R scheme as well as activities related to waste disposal. Finally, the HPMP submitted foresees also IS funds for all years until and including 2015.
- The introduction of an annual import quota for new air-conditioning equipment (split and unitary) 11. containing HCFCs is planned by the Ministry of Environment and Physical Planning. The baseline will be the number of imported units during the year 2008, standing at 36,000. It is expected that this number will remain constant for the years 2009 and 2010, reduced to 20,000 in the year 2011, and from the year 2012 onwards a ban is planned on imports of new air-conditioning equipment containing HCFC into the country. It is also planned to establish an import quota for the import of bulk HCFC-22 for the years 2011 and 2012 at the presently forecasted level of HCFC-22 consumption, as presented in Table 2. Imports in the year 2013 will be limited to the baseline value, in 2014 at 5 per cent and in 2015 the reduction of 10 per cent required to achieve compliance will be applied to the import licenses of HCFC-22. The introduction of mandatory reporting for importers and exporters related to the total quantities of imported or exported goods under the issued permits, for cross-checking the data with information received from customs is also foreseen. The Government plans a tax on HCFC-using air-conditioning equipment being imported, at a level of approximately US \$5/kW of cooling capacity. The tax on HCFCs will be raised from the current US \$0.12/kg to about US \$1.40/kg, and those taxes will be imposed from 2011 onwards. The import of HCFC-containing equipment will be banned from January 2012, and of non-refillable HCFC containers from January 2015. Finally, it is planned to introduce a mandatory log book for users of equipment containing more than three kilogrammes of HCFCs starting in 2012 onwards.
- 12. Activities foreseen under the HPMP consist of training of users and service technicians in non-HCFC refrigeration technologies and in Recovery and recycling (R&R) of HCFCs as well as in the keeping of log books of HCFCs equipment. Further training activities are planned for the customs officers to ensure the enforcement of the new HCFC-related regulations. The HPMP proposes to add another 40 sets of R & R equipment to the already existing fleet. The country further proposes to undertake waste disposal activities.
- 13. A waste disposal facility is intended to recover HCFCs from equipment at the end of its useful life. The dismantling of equipment, discharging and storage and refrigerants would be part of this undertaking; the HPMP for the years until 2015 foresees the start-up funding for this activity and the operational costs for the set-up period.
- 14. The conversion of the manufacturing industry using pre-blended polyol is also proposed to take place under the first step of the HPMP. The alternatives selected are CO2-water technology for the conversions at Sileks and Zlatna Raka, and the use of pentane technology at Koper. The operating costs have been calculated in the proposal, but no increase was made; consequently, no incremental operating costs are being requested. The cost for the institutional strengthening is also covered in the HPMP.
- 15. Phase II of the HPMP from 2016 to 2030 foresees a number of activities in addition to management, import quota setting and monitoring at a total cost, on average, US \$50,000 per year.
- 16. These activities include awareness-raising work, including issuing of brochures, organization of technical seminars and workshops and awareness of the broad public such as press releases, television spots, radio broadcasts, and the distribution of leaflets, posters and movies. Finally, the plan foresees significant expenses for the IS within the HPMP and suggests to discontinue IS outside the HPMP. The operation of the waste disposal centre is planned until 2040 with costs of, on average, US \$60,000 per

year; these costs include all other operational costs of the programme, i.e. operation of the recovery and recycling system and other activities. Finally, monitoring and verification costs are foreseen for the second phase with a total of US \$150,000. The total costs for phase II are estimated at US \$2,400,000, or US \$96,000 per year.

- 17. The coordination of the national activities will be undertaken by the NOU, and also the management of the implementation of the planned project activities will be allocated to the NOU in corporation with UNIDO as an implementing agency. The monitoring of the development of the HPMP and the verification of the achievements of the performance targets will be assigned to an independent local company or independent local consultants. The establishment of a separate National Ozone Unit is not foreseen.
- 18. The budget overview of the first and second phase of the HPMP is provided in Table 4 below, the costs per year for the first phase in Table 5.

Table 4: Budget overview of the HPMP

| Activities /project  | Funds<br>requested<br>(US \$) |
|--|-------------------------------|
| Phase I  |                               |
| 1. Cost estimate for the refrigeration service sector as well as legislative and monitoring activities | e, enforcement                |
| Legislation  | 10,000                        |
| Customs training   | 40,000                        |
| Technicians training   | 60,000                        |
| Improvement of recovery and recycling scheme   | 100,000                       |
| Monitoring   | 40,000                        |
| Sub-Total  | 250,000                       |
| 2. Institutional strengthening support until 2015  | 300,000                       |
| 3. Conversions in manufacturing industries   |                               |
| Company Sileks, Kratovo  | 248,000                       |
| Company Koper, Negotino  | 252,000                       |
| Company Zlatna Raka, Sk  | 50,000                        |
| Sub-Total Sub-Total  | 550,000                       |
| 4. Establishment of waste disposal centre and collection of ODSs:                                      |                               |
| Equipment  | 250,000                       |
| Operating cost for three years   | 180,000                       |
| Sub-Total  | 430,000                       |
| Total for Phase I  | 1,530,000                     |

| Activities /project  | Funds<br>requested<br>(US \$) |
|--|-------------------------------|
| Phase II   |                               |
| Institutional support, policy instruments, awareness raising until 2040 (25 years) | 750,000                       |
| Waste disposal centre - collection and destruction<br>until 2040 (25 years)        | 1,500,000                     |
| 3. Monitoring and verification until 2040 (25 years)                               | 150,000                       |
| Total for Phase II (forecast)  | 2,400,000                     |
| Total cost for the HCFC phase-out (forecast)                                       | 3,930,000                     |

Table 5: Planned expenditures by calendar year for the first phase of the HPMP

| Year                  | 2011   | 2012    | 2013    | 2014    | 2015    | Total –   |
|-----------------------|--------|---------|---------|---------|---------|-----------|
|                       |        |         |         |         |         | Phase I   |
| Non-investment costs  | 0      | 120,000 | 10,000  | 10,000  | 10,000  | 150,000   |
| (US \$), excluding IS |        |         |         |         |         |           |
| IS                    | 0      | 75,000  | 75,000  | 75,000  | 75,000  | 300,000   |
| Technical assistance  | 60,000 | 40,000  |         |         |         | 100,000   |
| for improving R&R     |        |         |         |         |         |           |
| scheme (US \$)        |        |         |         |         |         |           |
| Investment cost for   |        |         |         |         | 550,000 | 550,000   |
| foam projects (US\$)  |        |         |         |         |         |           |
| Cost for ODS waste    |        | 250,000 | 60,000  | 60,000  | 60,000  | 430,000   |
| disposal (US \$)      |        |         |         |         |         |           |
| Total                 | 60,000 | 485,000 | 145,000 | 145,000 | 695,000 | 1,530,000 |

## SECRETARIAT'S COMMENTS AND RECOMMENDATION

## **COMMENTS**

- 19. The Secretariat has reviewed the latest submission which included some minor changes in data reporting and distribution of funds for the HPMP. These are represented on the project evaluation sheet on page 2 of the present document and in Appendix 2-A of the updated draft agreement contained in Annex I to the present document.
- 20. In the view of the Secretariat, this HPMP presents in its phase I an example for an exceptionally well formulated, strategic programme, using the experiences of past programmes as well as the legal and organisational basis built by the country during the phase-out of CFC and other ODS in the country. The approach appears targeted and effective and, given the ongoing work on the creation of legal instruments, is likely to succeed in controlling the consumption, curbing the growth in consumption in the years 2011 and 2012 to a maximum of 5 per cent, and phasing the consumption down to 90 per cent of the baseline by 2015. The very successful implementation of the R & R system in the country in the past makes it likely that the reduction can be carried out without premature abandonment of HCFC-22 based infrastructure before the end of its useful life. However, as pointed out below, the eligibility of some of the elements of both phases of the HPMP remains uncertain.

- 21. The HPMP foresees the conversion of three foam companies from their use of HCFC-141b blown foam to alternatives. The total cost of these three conversions is US \$550,000, and consists only of capital costs. The total costs appear high but, in the overall context of the HPMP, acceptable for the phase-out of, on average, 14.2 metric tonnes of HCFC-141b to low GWP alternatives. The conversion of the company Sileks, associated with a consumption of 9.9 metric tonnes (1.09 ODP tonnes) and a cost of US \$248,000, constitutes a second conversion after the phase-out of CFC-11 in a Multilateral Fund project approved in 1997. The Secretariat draws attention to the general question on whether the use of HCFC-141b in imported pre-blended polyols establishes eligibility for funding. In its related decision 59/12, the Executive Committee decided to request the Fund Secretariat, in consultation with the Ozone Secretariat, to prepare for the 61st Meeting a brief discussion paper outlining the implications for Article 5 Parties and the Multilateral Fund associated with the import and export of HCFC-based pre-blended polyols, to request bilateral and implementing agencies to provide the Secretariat with any information related to the production, export, import, and/or use of pre-blended polyols containing HCFCs; and to request bilateral and implementing agencies not to submit additional projects for the phase-out of HCFCs contained in imported pre-blended polyols beyond those submitted to the present Meeting until the eligibility of such projects had been decided by the Executive Committee.
- 22. The HPMP submitted by UNIDO on behalf of the former Yugoslav Republic of Macedonia contains the information requested in decision 59/12. Further, the submission of the project for the former Yugoslav Republic of Macedonia has been deferred by the 59<sup>th</sup> Meeting and therefore does not constitute an additional submission as per decision 59/12; consequently, the issue regarding this particular case can be discussed at this 60<sup>th</sup> Meeting of the Executive Committee. It should further be noted that the former Yugoslav Republic of Macedonia is a low-volume-consuming country, and the enterprises concerned are clearly falling into the category of small and medium size enterprises. Both categories are referred to explicitly as in need of assistance when directing the Executive Committee in decision XIX/6 regarding support to be provided for HCFC-phase-out. The Government has, in addition, reported to the Ozone Secretariat its HCFC-141b consumption in pre-blended polyols in the years 2001 to 2008.
- 23. The legal set-up includes measures related to curbing rising demand through import limits of equipment depending on HCFCs as early as 2009 with a ban in 2012, and curbing demand through import restrictions on HCFCs as early as 2011. The HPMP does not foresee a licensing system for the import or use of HCFC-141b in pre-blended polyols. The measures foreseen for the refrigeration sector focus largely on training and R & R, which in the specific case of the former Yugoslav Republic of Macedonia has proven to be quite effective. The Secretariat fully supports the planned set-up and the measures contained in the HPMP.
- 24. Phase I of the HPMP includes the set-up of a waste disposal centre; for phase II, the waste disposal centre is the only operational activity foreseen. It is a combination of a disposal and storage facility and at the same time provides support for the R&R programme.<sup>2</sup> The predominant part of the cost related to the waste disposal centre concerns the collection of ODS as defined in the interim guidelines for the funding of demonstration projects for the disposal of ODS (decision 58/19). Under that decision these activities in the HPMP proposal for the former Yugoslav Republic of Macedonia could not receive funding. It should further be noted that even the activities eligible for a demonstration project according to decision 58/19, e.g. storage of ODS, have not been submitted as a demonstration project; they are instead incorporated into the HPMP. Only the support for the R&R programme would seem to be a typical HPMP-activity, if TPMPs are used as a model. The Secretariat believes that any efforts for collection of ODS should be, in line with decision 58/19, carried out within a national or sectoral phase-out plan to ensure effective integration with the sectoral efforts in the country. However, there is presently no indication of whether, when and to what degree the Executive Committee will fund such an activity; consequently, it appears ineligible at this point in time.

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 $<sup>^2</sup>$  The R & R programme has in 2001 to 2008 collected in total 1.95 metric tonnes of non-recyclable ODS for future destruction.

- 25. The Executive Committee has in a number of cases in the past funded similar programmes for collection under phase-out plans, for example the recovery of CFCs from cars and from ships at the end of their useful life under the service sector plan for China. However, the funding provided in the past had been provided within an agreed cost frame for servicing sector activities, and the countries decided subsequently to reallocate funds to the collection of ODS using the flexibility clause in phase-out agreements. The HPMP for the former Yugoslav Republic of Macedonia seems to add the related cost of disposal on top of the cost the Secretariat would consider eligible. The total cost associated with this activity in this HPMP, while justifiable, appears very significant at a level of US \$430,000. UNIDO, when asked by the Secretariat, stated that the environmental impact of the HCFCs to be collected is considerable and would warrant, in the opinion of the country, the associated costs.
- 26. The total cost of the HPMP for the first phase as requested stands at US \$250,000 for activities similar to those in a TPMP (legislation, customs training, refrigeration service sector support etc.), US \$300,000 for five years of institutional strengthening, US \$550,000 for the projects in the foam sector and US \$430,000 for the waste disposal activities. In document UNEP/OzL.Pro/ExCom/55/47, the level foreseen for activities in the refrigeration sector is exactly as forecasted by the Secretariat, not taking into account the additional activities related to the disposal centre and the IS integrated into the plan, and the foam projects with presently uncertain eligibility. Given the current limited experience with HPMPs, the cost review which the Secretariat was able to carry out was only limited, however the Secretariat believes that the costs requested appear to be justifiable and appropriate.
- The HPMP proposes a significant change in the structure of the funding for the IS in the former Yugoslav Republic of Macedonia. At the 57<sup>th</sup> Meeting, funding for IS was approved for two years at the level of US \$132,347, i.e. US \$66,174 per year; the next request could be submitted for the first meeting in 2011. Instead, the HPMP proposes to include the funding in the HPMP starting from January 2012 until December 2015, on a basis of US \$60,000 per year, and not to request IS separately. Upon request from the Secretariat, the country confirmed that they will not seek IS funding for the time between April and December 2011. In comparison, the extension of the IS from April 2011 to December 2015, on a pro rata basis, would lead to costs of US \$308,812, versus requested cost of US \$300,000. It is noteworthy that the IS requested is also the only funding foreseen for implementation support, i.e. the HPMP does not foresee a separate project management unit. With this set-up, the IS will be subject to the performance characteristics of the proposed agreement, which will probably include suspending and/or reducing funding for the HPMP in case of non-compliance with the agreement.
- 28. The Executive Committee had decided in its decision 59/47, in paragraph (a) to extend financial support for institutional strengthening (IS) funding for Article 5 Parties beyond 2010 up to December 2011, and in paragraph (b) reiterated to allow Article 5 Parties to submit their IS projects as stand-alone projects or within their HCFC phase-out management plans. However, in case of the former Yugoslav Republic of Macedonia, the paragraphs (a) and (b) of that decision are mutually exclusive. To include funding for IS under the HPMP, the country has to request it upon approval of the HPMP, and for the years 2012 to 2015; paragraph (a) of the decision establishes that the country has a right to do so. These years are, according to paragraph (b) of the decision, not eligible for funding; the country could therefore only include IS funding in its HPMP by foregoing any further IS funding until 2015. On the assumption that the Executive Committee will address this contradiction of decision 59/47, the IS funding has been included in the HPMP proposal.
- 29. Phase II of the HPMP, from 2016 to 2040, consists of activities related to the waste disposal centre, as well as institutional costs and monitoring and verification:
  - (a) The cost for the waste disposal centre in phase II covers the operational costs of the centre, after its set-up during phase I. The Secretariat pointed out that operational costs are typically not covered by the Multilateral Fund, and questioned whether waste disposal alone would be sufficient as an activity to reach the complete phase-out of HCFCs in the

country by 2040. The Secretariat further pointed to the taxes to be raised on the import of HCFCs and HCFC-containing equipment, and requested whether such taxes could not be used to fund at least the operational cost of the waste disposal centre. UNIDO responded on behalf of the country that income from the import tax could contribute as additional funding to this activity. UNIDO, on behalf of the Government, expressed the understanding that preventing the emission of surplus ODS has a high priority. The existence of a waste disposal centre and the planned integration into the overall organisational set-up in the country would at the same time also ensure that other activities, in particular the R & R, would be sustainable in the country;

- (b) The concept for IS for phase II follows the concept of phase I, i.e. the IS appears to be integrated into the performance-based plan. The level requested for the IS drops to US \$50,000 per year, i.e. about 25 per cent lower than the present level of IS; the IS would presumably continue to be under a performance-based agreement; and
- (c) It should be noted that all information regarding phase II is, at this point in time, preliminary, and that no concept, no funding and no activities for phase II will be before the Executive Committee for discussion at this point in time.
- 30. The Draft Agreement closely adheres to the preliminary template approved in decision 59/16. The proposed funding schedule is foreseeing a significant amount for the last tranche, and is very closely linked to the proposed activities and their schedule in the overall HPMP. The annual implementation plan is a logical part of the already carefully structured and scheduled HPMP proposal and is acceptable to the Secretariat. However, the Secretariat would suggest urging the former Yugoslav Republic of Macedonia to submit the related information regarding, in particular, the implementation plan into the MYA database for HPMP as soon as it becomes available (April 2010).
- 31. The Draft Agreement contains, in its Appendix 1-A. the proposed starting point for sustained aggregate reductions in consumption. The Government of the former Yugoslav Republic of Macedonia has decided to use the baseline as a starting point, which however will only be established based on the Article 7 data for the years 2009 and 2010, due in September 2011. It appears to the Secretariat that this is consistent with the HPMP guidelines approved under decision 54/39;
- 32. The country did not provide a maximum allowable consumption for the years 2010 to 2012, again based on the fact that the baseline is presently unknown. Even were the maximum allowable consumption to have been provided, the country would be likely to propose a conservative level, and the Secretariat would have at this time no basis for assessment. Consequently, the first year for which a maximum allowable consumption has been allocated is 2013, and the Article 7 data for that year will not be available until September 2014. The Secretariat also sees merit in the country's decision to propose the last funding for the year 2013, since an approval in 2013 would certainly enable activities to have an effect on achieving the 2015 reduction step. But, in combination, the Executive Committee is left without the possibility of assessing the performance against a maximum allowable consumption, and can only assess it against the progress reported in implementing the annual implementation plans. The Secretariat proposes a related decision under paragraph 34(e) below, but will raise the matter in reporting on issues identified during project review under "Preliminary template for draft agreements for HPMPs". The Secretariat will continue discussions with UNIDO to try to obtain the country's agreement to be flexile towards similar changes in their Draft Agreement.
- 33. Regarding the waste disposal centre, the Secretariat would like to recall that, during the discussion of this project at the 59<sup>th</sup> Meeting, funding for this activity remained one of the open questions. While some members did not question the ODS disposal elements, others wished to see it split off. In this regard the Secretariat wishes to inform the Executive Committee that the activity could be separated from the HPMP, and any decision in this regard would not constitute an impediment to approving the HPMP.

The same holds true for the funding for activities related to preblended polyol. Consequently, the Secretariat advised UNIDO in particular regarding the open policy issues on the inclusion of IS funding in the proposal, the conversion of enterprises producing foam using pre-blended polyol and the waste disposal centre, to contact the country in order to obtain a specific mandate for the Executive Committee. This mandate should provide that UNIDO, on behalf of the country, can agree to potential changes to the draft agreement, if decisions on policy issues would necessitate so.

## RECOMMENDATION

- 34. The Executive Committee may wish to:
  - (a) Consider, in light of the policy issues raised by the Secretariat and of discussions and any relevant decision taken during the 60th Meeting of the Executive Committee, whether the following items are seen as eligible:
    - (i) The funding for Institutional Strengthening in the HPMP until 2015;
    - (ii) The conversion at Sileks, since it is a second conversion and related to the phase-out of HCFC-141b use in imported pre-blended polyol in a country without HCFC-141b consumption;
    - (iii) The conversion at Koper and Zlatna Raka, as it is related to the phase-out of HCFC-141b use in imported pre-blended polyol in a country with HCFC-141b consumption of HCFC-141b only in pre-blended polyol;
    - (iv) The start-up of a waste disposal centre, and whether the Executive Committee wishes to include in its decision a note that any approval of such a facility does not constitute a precedent for funding of operational costs for a facility in a possible future phase II;
  - (b) Depending on the decision taken related to above (a) (i) request that the former Yugoslav Republic of Macedonia not to submit a funding request for institutional strengthening outside this Agreement until the end of the last year mentioned in the Agreements in Appendix 2-A;
  - (c) Consider whether to approve the starting point proposed by the country, which is the baseline consumption and is therefore a presently non-quantifiable amount. In this case the Executive Committee might also consider requesting the Secretariat to update, once the baseline data is known, Appendix 1-A of the Agreement with the information related to the starting point and Appendix 2-A of the Agreement with the figures for the maximum allowable consumption, and to notify the Executive Committee of the starting point and the resulting levels of maximum allowable consumption accordingly;
  - (d) Note with appreciation the commitment by the Government of the former Yugoslav Republic of Macedonia to reduce the consumption of HCFC by 10 per cent from the future baseline by the year 2015;
  - (e) Approve, in principle, the HPMP (HCFC phase-out management plan) for the former Yugoslav Republic of Macedonia, at the amount determined based on the outcome of the discussions on the issues for consideration in sub-paragraph (a) above;

- (f) Approve the Draft Agreement between the former Yugoslav Republic of Macedonia and the Executive Committee for the reduction in consumption of hydrochloroflurocarbons as contained in Annex I including agreed changes based on the outcome of discussions on issues for consideration in sub-paragraph (a) above; and
- (g) Approve the first annual implementation plan for 2010, and the first tranche of the HPMP for the former Yugoslav Republic of Macedonia, based on the final version of the Agreement incorporating, as appropriate, the changes by the Executive Committee to the HPMP and the Agreement.

#### Annex I

# DRAFT AGREEMENT BETWEEN THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA AND THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE REDUCTION IN CONSUMPTION OF HYDROCHLOROFLUROCARBONS

- 1. This Agreement represents the understanding of the Government of the former Yugoslav Republic of Macedonia 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 reduction to 90% of the baseline prior to 1 January 2015 in compliance with Montreal Protocol schedules.
- 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. 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 as the final reduction step under this agreement for all ODS specified in Appendix 1-A, and in respect to any consumption of each of the substances which exceeds the level defined in rows 4.1.3 and 4.2.3.
- 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 meet the consumption limits for each of the Substances as indicated in Appendix 2-A. It will also accept independent verification to be commissioned by the relevant implementing agency (IA) of achievement of these consumption limits 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 hydrochloroflurocarbons phase-out management plan (HPMP) was approved when an 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 has substantially completed all actions set out in the previous tranche implementation plan and submitted a tranche implementation report in the form of Appendix 4-A (the "Format of Tranche Implementation Report and Plan") for each previous calendar year; and

- (d) That the Country has submitted and received endorsement from the Executive Committee for a tranche implementation plan in the form of Appendix 4-A (the "Format of Tranche Implementation Report and Plan") for 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 that monitoring in accordance with the roles and responsibilities set out in Appendix 5-A. This monitoring will also be subject to independent verification as described in sub-paragraph 5(b).
- 7. While the Funding was determined on the basis of estimates of the needs of the Country to carry out its obligations under this Agreement, the Executive Committee agrees that the Country may have the flexibility to reallocate the approved funds, or part of the funds, according to the evolving circumstances to achieve the goals prescribed under this Agreement. Reallocations categorized as major changes must be documented in advance in the next tranche implementation plan and endorsed by the Executive Committee as described in sub-paragraph 5(d). Reallocations not categorized as major changes may be incorporated in the approved 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 that the:
  - (a) Country would use the flexibility available under this Agreement to address specific needs that might arise during project implementation; and
  - (b) Country and the implementing agencies 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. UNIDO has agreed to be the lead implementing agency (the "Lead IA") and 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). The Executive Committee agrees, in principle, to provide the Lead IA with the fees set out in row 2.2 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 components of this Agreement will not be modified on the basis of any future Executive Committee decision that may affect the funding of any other consumption sector projects or any other related activities in the Country.
- 13. The Country will comply with any reasonable request of the Executive Committee and the Lead IA to facilitate implementation of this Agreement. In particular, it will provide the Lead IA with access to information necessary to verify compliance with this Agreement.
- 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), 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   | С     | I     | Baseline  |
| HCFC-141b | С     | I     | Baseline  |

APPENDIX 2-A: THE TARGETS, AND FUNDING

|       |  | 2010         | 2011    | 2012    | 2013     | 2014    | 2015             | Total                  |
|-------|--|--------------|---------|---------|----------|---------|------------------|------------------------|
| 1.1   | Montreal Protocol reduction schedule of<br>Annex C, Group I substances<br>(ODP tonnes) | None         |         |         | Baseline |         | Baseline<br>-10% | n/a                    |
| 1.2   | Maximum allowable total consumption of Annex C Group I substances (ODP tonnes)         | Unrestricted |         |         | Baseline |         | Baseline<br>-10% | n/a                    |
| 2.1   | Lead IA (UNIDO) agreed funding( US \$)   | 60,000       | 485,000 | 145,000 | 145,000  | 695,000 | 0                | 1,530,000              |
| 2.2   | Support costs for Lead IA(US \$)   | 4,500        | 36,375  | 10,875  | 10,875   | 52,125  | 0                | 114,750                |
| 3.1   | Total agreed funding (US \$)   | 60,000       | 485,000 | 145,000 | 145,000  | 695,000 | 0                | 1,530,000              |
| 3.2   | Total support cost   |              | 36,375  | 10,875  | 10,875   | 52,125  | 0                | 114,750                |
| 3.3   | Total agreed costs (US \$)   | 64,500       | 521,375 | 155,875 | 155,875  | 747,125 | 0                | 1,644,750              |
| 4.1.1 | Total phase-out of HCFC-22 agreed to be achieved under this agreement (ODP tonnes)     |              |         |         |          |         |                  |                        |
| 4.1.2 | Phase-out of HCFC-22 to be achieved in previously approved projects (ODP tonnes)       |              |         |         |          |         |                  |                        |
| 4.1.3 | Remaining eligible consumption for HCFC-22 (ODP tonnes)                                |              |         |         |          |         |                  | 90% of the<br>Baseline |
| 4.2.1 | Total phase-out of HCFC-141b agreed to be achieved under this agreement (ODP tonnes)   |              |         |         |          |         |                  |                        |
| 4.2.2 | Phase-out of HCFC-141b to be achieved in previously approved projects (ODP tonnes)     |              |         |         |          |         |                  |                        |
| 4.2.3 | Remaining eligible consumption for HCFC-141b (ODP tonnes)                              |              |         |         |          |         |                  |                        |

## 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 REPORT AND PLAN

- 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 year 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 online into a database, as per the relevant decisions of the Executive Committee in respect to the format required. This quantitative information, to be submitted by calendar year, 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 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 of status of implementation of the HPMP to UNIDO.
- 2. Monitoring of development of HPMP and verification of the achievement of the performance targets, specified in the Plan, will be assigned to independent local company or to independent local consultants by UNIDO.

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

- 1. The Lead IA will be responsible for a range of activities to be specified in the project document as follows:
  - (a) Ensuring performance and financial verification in accordance with this Agreement and with its specific internal procedures and requirements as set out in the Country's phase-out plan;
  - (b) Assisting the Country in preparation of the tranche Implementation Plan and subsequent report 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;
- (f) Ensuring that appropriate independent technical experts carry out the technical reviews undertaken by the Lead IA;
- (g) Carrying out required supervision missions;
- (h) Ensuring the presence of an operating mechanism to allow effective, transparent implementation of the Tranche Implementation Plan and accurate data reporting;
- (i) Ensuring that disbursements made to the Country are based on the use of the indicators; and
- (j) 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 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 \$ 127,538 per ODP tonne of reductions in consumption not achieved in the year.

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