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

Desk Study on Non-Compliance with the Freeze in Consumption of CFCs, Halons, Methyl Bromide and Methyl Chloroform

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List of Acronyms and Abbreviations Used in the Study

A5 A7 (Data)	Article 5 of the Montreal Protocol Article 7 of the Montreal Protocol (Data reported to the Ozone Secretariat in accordance with Article 7 of the Montreal Protocol)
CEIT	Countries with Economies in Transition
CFC	Chlorofluorocarbon
CP	Country programme
ExCom	Executive Committee of the Multilateral Fund
GEF	Global Environment Fund
ImpCom	Implementation Committee
IS	Institutional Strengthening
LVC	Low volume (ODS) consuming (country) which are
	Article 5 countries with a baseline CFC consumption not exceeding 360 ODP tonnes
MAC	Mobile Air Conditioning
MB	Methyl bromide
MLF	Multilateral Fund
MOP	Meeting of the Parties (to the Montreal Protocol)
MP	Montreal Protocol
NOU	National Ozone Unit
ODP	Ozone depleting potential
ODS	Ozone depleting substance
QPS	Quarantine and pre-shipment
RMP	Refrigerant Management Plan
TCA	Tetrachloroethane (Methyl chloroform)
TPMP	Terminal Phase-out Management Plan

EXECUTIVE SUMMARY

- 1. Following a ten-year grace period, the period for compliance with the control schedules of the Montreal Protocol for Article 5 countries began. The first control measure was the freeze in CFCs (Annex A group I substances) production and consumption at the baseline level from 1 July 1999 onwards. Subsequently, the freeze in production and consumption of halon (Annex A group II) and methyl bromide (Annex E) came into force as of 1 January 2002, and the freeze in production and consumption of methyl chloroform or TCA (Annex B group III) as of 1 January 2003. The experiences regarding the compliance with the freeze for these ODSs are the focus of this desk study. It should be noted that there is very little production or consumption of other fully halogenated CFCs (Annex B group I substances) by Article 5 countries while consumption of carbon tetrachloride (Annex B group II) was not subject to the freeze. Therefore these two groups of substances are not covered by the desk study.
- 2. During the study the available relevant reports and documents from the Ozone Secretariat and the Multilateral Fund Secretariat were reviewed and analyzed. A large body of information, including country profiles of all the countries in non-compliance, was compiled for the purpose of the desk study. It was not feasible to include all this information in the final document, but, it is available on request as supplementary information (hard copies or on the intranet of the Fund Secretariat). The report that follows describes the methods used to assemble the information, the reviews and analysis conducted and observations made.
- 3. The conclusions made on the basis of the desk study may be summarized as follows:
 - (a) The study confirms the overall success of the ODS phase-out achieved by Article 5 countries. Most countries are in compliance with the freeze or have already further reduced ODS consumption, some considerably;
 - (b) There were many countries with high levels of ODS consumption above their baseline in the year leading to the freeze in consumption or in the first year of the freeze, suggesting stockpiling taking place;
 - (c) Many countries returned quickly to compliance. On the basis of the analysis of the documentation, this could tentatively be attributed to a combination of the following factors which are interlinked and not listed in order of importance:
 - (i) Actions of the Implementation Committee and Meetings of the Parties resulting in action plans that commit countries to specific consumption levels; in some cases, requests for changes of baseline consumption levels were accepted;
 - (ii) Actions of the Executive Committee, such as constant monitoring of the status of Article 5 countries that identifies countries at risk of non-compliance and adoption of business plans, provision of technical and financial assistance through approval of individual projects, RMPs, TPMPs and agreement-based sector and national phase-out plans which

- include sanctions and penalties for non-performance, to address the needs of countries in non-compliance or at the risk of non-compliance;
- (iii) Actions of bilateral and implementing agencies, particularly where project preparation and/or implementation were accelerated for countries in need of additional phase-out as well as enabling actions undertaken through UNEP's CAP;
- (iv) Actions by countries themselves through enactment and enforcement of legislation and other institutional measures as well as coordination of stakeholder efforts.
- (d) In some cases, where the amount of ODS phase-out reported as a result of action plans is larger than the phase-out reported from completed projects during the same period the actual reasons for the return to compliance remain unclear.
- (e) In spite of the above support, a few countries remain in non-compliance and might need further assistance.
- (f) Although the overall performance record suggests that the system works to prevent non-compliance and to take corrective actions, if needed, the next reduction steps could result in a number of new cases of non-compliance.
- (g) In light of the above information, the Executive Committee might wish to consider the following:
 - (i) To take note of the information contained in document UNEP/OzL.Pro/ExCom/46/8;
 - (ii) To request the Senior Monitoring and Evaluation Officer to include countries in non-compliance in the sample of field visits for planned evaluations of RMPs in non-LVC countries and of national and sector phase-out plans in order to assess the impact of the respective activities.

I. Background

- 1. The desk study on the causes of non-compliance is part of the 2005 monitoring and evaluation work programme and is presented to the 46th meeting of the Executive Committee. It relates to discussions of the Executive Committee at its 43rd meeting with regard to causes of implementation delays and the concern that such delays may contribute to non-compliance in various countries. The next and substantial consumption reduction steps began as of 1 January 2005 with a 50% reduction for CFCs and halons, 85% for carbon tetrachloride, 30% for methyl chloroform and 20% for methyl bromide. The analysis of lessons learnt with respect to the freeze will be useful in the preparation of the next reduction steps for several Ozone Depleting Substances (ODSs) in 2005 and resulting compliance problems.
- 2. Following a ten-year grace period ending in mid-1999, during which US \$861 million was allocated to 117 Article 5 countries to enable the phase-out of 130,800 ODP tonnes of controlled substances including CFCs, halon, methyl chloroform, carbon tetrachloride and methyl bromide the compliance period for Article 5 countries began. The first control measure was the freeze in CFC (Annex A group I substances) production and consumption at the baseline level from 1 July 1999 onwards. Subsequently, the freeze in production and consumption of halon (Annex A group II) and methyl bromide (Annex E) came into force as of 1 January 2002 and the freeze in production and consumption of methyl chloroform or TCA (Annex B group III) as of 1 January 2003. The experiences regarding the compliance with the freeze for these ODSs are the focus of this desk study.
- 3. There are no consumption freeze requirements for carbon tetrachloride (Annex B group II). Thus unlike the other ODS carbon tetrachloride has hitherto not been controlled. Therefore the issue of non-compliance has not yet arisen with regard to this substance. Consequently carbon tetrachloride is not included in this desk study. Also there is very little production or consumption of "other fully halogenated CFCs" (Annex B group I substances) and they are, therefore, also not covered by the study. With regard to control of production, the Executive Committee has concluded with ODS producing countries specific financially supported agreements which embody agreed annual reduction targets. Issues relating to compliance with production phase-out schedules are not considered in the study as they were subject to earlier evaluations.
- 4. The Implementation Committee began examining data related to the first year of compliance for Article 5 Parties in 2001, having urged the Parties at their 12th Meeting in 2000 to send their production and consumption data to the Ozone Secretariat as early as possible, and no later than 30 September 2001 in order to facilitate the exercise. At the 13th Meeting five Article 5 countries (Argentina, Belize, Cameroon, Ethiopia and Peru) were found to be in non-compliance with the initial freeze in CFC production (Argentina) and consumption (the other four countries) for the period 1 July 1999 to 30 June 2000. 15 other Article 5 Parties were listed as being in potential non-compliance with the freeze in consumption of CFCs as they had failed to provide data for that period whereas their calendar year data showed consumption above their baseline.
- 5. As at the end of 2004, there were 17 countries declared to be in non-compliance or presumed to be in potential non-compliance with the freeze in consumption of one or more ODS,

based on data for 2003 or latest available data where 2003 data had not yet been submitted. Of these, Bosnia and Herzegovina for three ODS (CFC, methyl bromide and methyl chloroform); Chile for two ODS (methyl bromide and methyl chloroform) and the other 15 countries for one ODS: Guinea Bissau and Saint Vincent and the Grenadines for CFC; Lesotho, Libya, Pakistan and Somalia for halon; Botswana, Fiji, Guatemala, Honduras and Uganda for methyl bromide; Bangladesh, Ecuador, Iran and Oman for methyl chloroform. Thirteen of these countries (approximately 75%) were LVC countries: Bosnia Herzegovina, Botswana, Ecuador, Fiji, Guatemala, Guinea Bissau, Honduras, Oman, Saint Vincent and the Grenadines, Somalia and Uganda; the six others (Bangladesh, Chile, Iran, Libya and Pakistan) were non-LVC countries. Beside the above-listed countries, Côte d'Ivoire and Tunisia reported for 2003 methyl bromide consumption that exceeded their baselines. However, Côte d'Ivoire became a party to the Copenhagen amendment only in October 2003, while assessment of Tunisia's non-compliance was postponed subject to decision XV/12. Albania also had methyl chloroform consumption that exceeded its baseline, but had not ratified the London Amendment and so the methyl chloroform freeze did not apply to it.

- 6. During deliberations at the meetings of the Implementation Committee and of the Parties, some delegates gave several reasons for such non-compliance situations with the freeze, such as:
 - (a) difficulty in gathering data on CFC consumption which spanned two halves of two calendar years;
 - (b) delays in the preparation and implementation of phase-out projects;
 - (c) importation of large quantities of used refrigerators, MAC and other equipment based on CFC;
 - (d) problems caused for the phase-out by the low prices for CFCs prevailing in world markets at the time.
- 7. The Executive Committee has through its strategic planning and 3-year rolling phase-out plan regularly identified countries that could face the risk of being in non-compliance with impending reduction steps or having difficulty in sustaining current control measures. The relevant data are contained in the documents presented regularly to the Executive Committee on the Status of Compliance, the Three-Year Phase-out Model and the Consolidated Business Plan.
- 8. The desk study identifies the countries which have been in non-compliance and moved back into compliance or which still are in non-compliance or appear to be in non-compliance with the freeze based on their latest consumption figures. It also analyzes whether certain types of countries (LVC countries or non-LVC countries, larger or smaller, late-comers to the Montreal Protocol, etc.) are more likely to be in non-compliance than others.

II. Methodological Approach

9. The Senior Monitoring and Evaluation Officer with the assistance of two consultants reviewed all relevant documents and reports of the Meetings of the Parties to the Montreal

Protocol and of the Executive Committee as well as data reports of the Ozone Secretariat and the Multilateral Fund Secretariat and related documentation from the two Secretariats and other relevant sources. The available data were analysed to determine possible trends in compliance by Article 5 countries with the control measures under the Montreal Protocol. Comments from the Ozone Secretariat and UNEP were taken into account in finalizing the study.

- 10. The desk study analyzed the following possible reasons for countries moving into non-compliance:
 - (a) Baseline or consumption data reported incorrect;
 - (b) Delayed preparation of projects;
 - (c) Delayed implementation of projects;
 - (d) Delayed approval of legislation, particularly licensing systems;
 - (e) Legislation not enforced.
- 11. As a second step, it was analyzed how countries moved back into compliance:
 - (a) Baseline or consumption data corrected;
 - (b) As a result of their own institutional and regulatory measures;
 - (c) As a result of intervention by the Implementation Committee and the Meeting of the Parties requesting an action plan;
 - (d) Additional projects being approved or the implementation of ongoing projects being accelerated;
 - (e) Other measures like supplementary missions or advice from implementing agencies, network meetings/CAP team or ozone officers in the region.

III. Overview of Current Situation with Regard to Compliance with the Freeze

III.1 Relevant Decisions of the Meetings of the Parties to the Montreal Protocol

- 12. In the period 2000 to 2004 (12th to 16th Meeting) the Meetings of the Parties took a number of decisions concerning Article 5 countries in non-compliance or potential non-compliance with the freeze in consumption of CFC, halon, methyl chloroform and methyl bromide. Most of these decisions related to individual countries which, consistent with the decisions, submitted action plans for returning to compliance for endorsement by the Meeting of the Parties.
- 13. In addition, there were decisions of the Parties endorsing requests from eight Article 5 Parties for upward revisions to their baseline consumption data for one or several controlled

substances (see Table 1 below). These decisions invariably had the effect of moving the countries concerned back into compliance. Where this was the case, the country concerned was treated in the desk study as if it had never been in non-compliance.

Country ODS Original Revised **MOP Decision** Baseline Baseline (ODP (ODP Tonnes) Tonnes) **CFC** Belize 400.4 445.6 Decision XIV/27 Lebanon Methyl 152.4 236.4 Decision XVI/31 bromide CFC Paraguay 157.4 210.6 Decision XIV/27 10.3 **Philippines** Methyl Decision XVI/31 8.0 bromide CFC 400.4 445.6 Sri Lanka Decision XIV/27 Thailand Methyl 164.9 183.0 Decision XVI/31 bromide Methyl Decision XV/43 Uganda 1.9 6.3

349.1

2.8

1.1

1796.1

140.0

54.5

Decision XVI/31

Decision XVI/31

Decision XVI/31

Table 1: Article 5 Countries with Revised ODS Baseline Consumption

14. During the consumption freeze period there were also decisions of the Parties which endorsed requests by some non-Article 5 countries, including Armenia, Kyrgyzstan and Turkmenistan, for a change in status to Article 5 countries. Such countries, though in non-compliance with the provisions of Article 2 as non-Article 5 Parties came into compliance as Article 5 Parties, provided their consumption at the time of the change in status met the freeze requirements of the ODS in question. The circumstances described in this paragraph have been taken into consideration in the review and analysis of the information.

III.2 Aggregate Consumption and Non-Compliance Data

bromide CFC

Halon

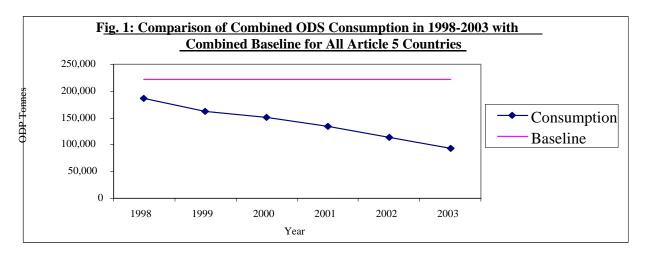
Methyl

bromide

Yemen

15. The review and analysis of the consumption data over the period from immediately before the freeze (1998) through the freeze period for which data is available, as shown in figure 1 below, indicate that the total ODS consumption of Article 5 countries excluding those Article 5 countries not receiving assistance from the Multilateral Fund, has seen a strong and steady decline, in particular with respect to CFC consumption. Only a small number of Article 5 countries were in non-compliance at the end of 2003. Three countries were in non-compliance with the freeze in the consumption of CFC, while four, six and seven countries respectively were in confirmed or potential non-compliance with the consumption freeze of halon, methyl chloroform and methyl bromide. The total remaining consumption reported for the four

controlled substances under review (CFC, halon, methyl chloroform and methyl bromide) was 83,499.3 ODP tonnes, of which 2,643.6 ODP tonnes or 3.2% related to countries in non-compliance with the freeze in consumption of those ODS.



16. Methyl chloroform had the highest percentage of reported consumption (47%) attributable to countries in non-compliance or potentially in non-compliance with the freeze, while CFCs had the lowest percentage of 0.4%. %. It is important to note that for methyl chloroform the assessment of non-compliance is only for the first year and a change in situation is possible when some data reporting issues involving countries potentially in non-compliance such as Iran are resolved. The number of Article 5 countries reporting consumption differs largely for each ODS. While 11% of the countries reported no consumption of CFC for the period 2000-2003, 64% did not report any consumption of methyl chloroform. Thus when all Article 5 countries are considered it may be said that the proportion of Article 5 countries in non-compliance with the freeze in ODS consumption ranged from 2.1% for CFC to 6.3% for methyl bromide (see Table 2 below).

Table 2: Summary of Article 5 Countries in Non-Compliance with the Freeze in ODS Consumption at the End of 2003*.

ODS	Total Number of Article 5 Countries*	Total Number of Countries Reporting Consumption	Total Reported Consumption (ODP Tonnes)	Number of Countries in Non- compliance	Per Cent of ODS- Consuming Countries in Non- compliance	Per Cent of All Article 5 Countries in Non- compliance	Total Reported Consumption of Countries in Non- compliance (ODP Tonnes)	Per Cent of Reported Consumption of Countries in Non- compliance
CFC	137	135	69,184.70	3	2.4	2.1	262.5	0.4
Halon	137	66	6,966.40	4	6.3	2.8	756.2	10.9
Methyl chloroform	137	54	861	6	13.7	4.9	401.9	46.7
Methyl bromide	137	84	6,487.20	7	10.7	6.3	1,222.9	18.9
Total			83,499.30				2,643.50	3.2

^{*} Excluding six countries not accessing the Multilateral Fund, (Cyprus, Republic of Korea, Saudi Arabia, Singapore, South Africa and United Arab Emirates) none of which was in non-compliance in 2003.

17. It is also important to point out that for all four controlled substances there were large numbers of countries that always have been in compliance with the freeze. As shown in the table 3 below this was highest for halon and methyl chloroform for which over 80% of the consuming Article 5 countries had always been in compliance, although fewer countries consumed these substances than they did CFC and methyl bromide. (see Table 3 below). There is reason to expect that this pattern will be sustained for the next reduction steps in 2005.

Table 3: Proportion of ODS-Consuming Countries Always in Compliance with the Freeze

ODS	Number of ODS- Consuming Countries*	Number of ODS- Consuming Countries Always in Compliance with the Freeze	Per Cent of ODS- Consuming Countries Always in Compliance with the Freeze
CFC	135	89	66
Halon	66	55	85
Methyl Chloroform	54	48	89
Methyl Bromide	84	61	73

Total number of countries: 137, excluding Cyprus, , Republic of Korea, Saudi Arabia, Singapore, South Africa and United Arab Emirates.

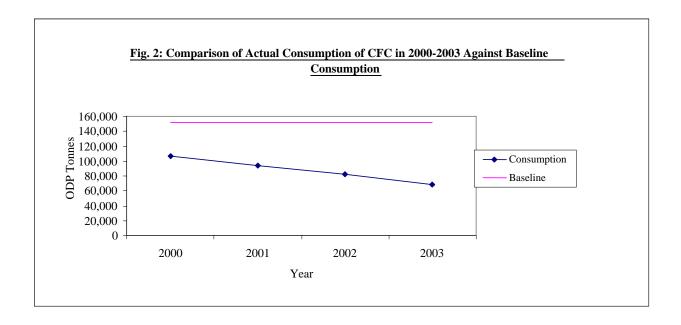
- 18. These issues and possible factors that might have influenced the status of non-compliance are described below in further detail for each of the controlled substances. For this analysis individual country profiles were developed based on information provided in country programme reports, inventory of projects and other relevant sources.
- 19. Annexes IA-ID provide the historical consumption data for the period 1998-2003 for all Article 5 countries in the study, showing those which have always been in compliance or in non-compliance with the consumption freeze of the four controlled substances. Annex II provides comparison between annual cumulative consumption of countries in compliance and those in non-compliance.

IV. Compliance and Non-Compliance with the Freeze by ODS

IV.1 CFCs

- 20. Out of 142 Article 5 countries 130 reported consumption of CFCs for 2000, 128 for 2001, 127 for 2002 and 125 for 2003. The lower number in 2003 is due in part to some countries reporting zero consumption, which if sustained would mean complete phase-out by those countries. 94 reporting countries have always been in compliance with the freeze.
- 21. The total CFC consumption of Article 5 countries of 69,184.7 ODP tonnes in 2003 represents 45% of their total baseline consumption of 152,007 ODP tonnes. Thus in 2003, all Article 5 countries together were 5% or 7,758 ODP tonnes below the CFC reduction level

required of them as of 1st January 2005. As illustrated in Figure 1 below, this is a consequence of the rapid CFC consumption reductions generally occurring in the Article 5 countries. Consumption data from the years immediately before the freeze (1997-1998) showed very high consumption of countries above their baselines reaching a peak in 1998-1999 but declining rapidly as the compliance regime set in.



- 22. In 2000 the total consumption of 130 reporting countries was 106,808.8 ODP tonnes while the total consumption of 24 countries, which were in non-compliance during the same period, was 9,580.4 ODP tonnes. This constituted 9% of the total consumption. This percentage decreased to 7.1 in 2001, 2.2 in 2002 and 0.4 in 2003. The number of countries in non-compliance as a proportion of the number of Article 5 countries reporting data declined from 18.4% in 2000 to 14.1%, 7.9% and 2.4% in 2001, 2002 and 2003 respectively. The 2.4% in 2003 represented three countries accounting for a total consumption of 252 ODP tonnes.
- 23. Although the total amount to be phased out in order to bring these three countries (Bosnia Herzegovina, Guinea Bissau and St. Vincent and the Grenadines) back into compliance appears to be relatively small (0.4% of total consumption), the excess consumption compared with the allowable (baseline) consumption in Bosnia and Herzegovina, its unique situation notwithstanding, increased strongly (to 230 ODP tonnes compared to a baseline of 24.2 ODP tonnes). In Guinea Bissau and St. Vincent and the Grenadines the latest consumption is only slightly above the baseline.
- 24. Thirty six countries shown in Table 4 below were for one or several years in non-compliance with the CFC consumption freeze as decided by the Meetings of the Parties. (It should be noted that for CFC for the years 1999-2001 compliance is assessed based on 12-month data July-June, while for 2001-2002 it is based on July 2001-December 2002).

25. Out of the 36 countries, 30 or 83% were LVC countries. Available data showed that 99 of 142 Article 5 countries (70%) were LVC countries while 43 (30%) were non-LVC countries. In the 1999-2000 control period, 16 of 21 countries (76%) in non-compliance were LVC countries, while in 2000-2001, LVC countries represented 82% (of 22 countries). This means that LVC countries are to some extent over-represented in the group of countries in non-compliance with the CFC freeze.

<u>Table 4: List of Countries in Non-Compliance with the CFC Consumption Freeze</u>

July 1999-2004

Country	Status	MP Ratification	MOP Non- Compliance Decision	Baseline ODP Tonnes	1999 ODP Tonnes	2000 ODP Tonnes	2001 ODP Tonnes	2002 ODP Tonnes	2003 ODP Tonnes	2004* ODP Tonnes
Albania	LVC	8-Oct-99	Decs. XIV/18, XV/26	40.8	53.1	61.9	68.8	49.9	35.0	36.6
Bahamas	LVC	4-May-93	Dec.XIV/19	64.9	53.8	65.9	63.0	55. 0	24.6	
Bangladesh	Non-LVC	2-Aug-90	Dec. XIV/29	581.6	800.60	805.00	807.90	328.00	333.00	333.0
Belize	LVC	9-Jan-98	Decs. XIII/22, XIV/33	24.4	25.1	15.5	28.0	21.7	15.1	12.2
Bolivia	LVC	3-Oct-94	Decs. XIV/20, XV/30	75.7	72.2	78.8	76.70	65.5	32.1	
Bosnia and Herzegovina	LVC	6-Mar-92	Decs. XIV/21, XV/30	24.2	151.0	175.9	199.7	243.6	230.0	187.9**
Cameroon	LVC	30-Aug-89	Decs. XIII/23, XIV/32 and XV/32	256.9	361.5	368.7	364.1	226.00	220.5	148.5
Chad	LVC	7-Jun-94	Dec. XIII/16	34.6	37.5	36.5	31.6	27.1	22.8	14.2
Comoros	LVC	31-Oct-94	Dec, XIII/16	2.5	2.5	2.7	1.9	1.8	1.2	1.1
Dominica	LVC	31-Mar-93	Dec. XV/21	1.5	1.1	2.1	1.6	3.0	1.4	
Dominican Republic	Non-LVC	18-May-93	Dec. XIII/16	539.8	752.1	401.9	485.80	329.8	266.5	310.4
Ethiopia	LVC	11-Oct-94	Decs. XIII/24, XIV/34	33.8	39.2	39.2	34.6	30.0	28.0	16.0
Guatemala	LVC	7-Nov-89	Decs.XIV/17, XV/34	224.6	191.1	187.9	265.0	239.6	147.1	65.4
Guinea Bissau	LVC	12-Nov-02	Dec. XVI/24	26.3	26.0	26.0	26.9	27.4	29.4	25.8
Haiti	LVC	29-Mar-00	Dec. XV/21	169.0	-	169.0	169.0	181.2	115.9	
Honduras	LVC	14-Oct-93	Dec. XIII/16	331.6	334.8	172.3	121.6	131.2	219.1	
Kenya	LVC	9-Nov-88	Dec. XIII/16	239.5	241.1	203.3	168.6	152.3	168.6	
Libya	Non-LVC	11-Jul-90	Decs. XIV/25, XV/36	716.7	894.0	985.40	985.4	985.4	704.1	459.0
Maldives	LVC	16-May-89	Decs. XIV/26, XV/37	4.6	1.5	4.6	14.0	2.8	0.0	0.0
Mongolia	LVC	7-Mar-96	Dec. XIII/16	10.6	12.4	11.2	9.3	6.9	5.7	4.1
Morocco	Non-LVC	28-Dec-95	Dec. XIII/16	802.3	870.6	564.0	435.2	668.6	474.8	329.0
Namibia	LVC	20-Sep-93	Dec. XIV/22, XV/38	21.9	16.8	22.1	24.0	20.0	17.2	7.7
Nepal	LVC	6-Jul-94	Decs. XIV/23, XV/39 and XVI/27	27.0	25.0	94.0***	0.0	0.0	0.0	

<u>Table 4: List of Countries in Non-Compliance with the CFC Consumption Freeze</u>

July 1999-2004

Niger	LVC	9-Oct-92	Dec. XIII/16	32.0	58.3	39.9	29.1	26.6	24.5	23.0
Nigeria	Non-LVC	31-Oct-88	Decs. XIII/16, XIV/30	3,650.0	4,286.2	4,094.8	3,665.5	3,286.7	2,662.4	
Oman	LVC	30-Jun-99	Dec, XIII/16	248.4	259.6	282.1	207.3	179.5	134.5	98.7
Pakistan	Non-LVC	18-Dec-92	Dec. XIV/17	1,679.4	1,421.8	1,945.3	1,666.3	1,647.0	1,124.0	
Papua New Guinea	LVC	27-Oct-92	Dec. XIV/17, XV/40	36.3	35.5	47.9	15.0	34.6	22.7	17.2
Paraguay	LVC	3-Dec-92	Dec. XIII/16	210.6	345.3	153.5	116.0	96.9	91.8	141.3
Peru	LVC	31-Mar-93	Dec. XIII/25	289.5	295.6	347.0	189.0	196.5	178.4	
Samoa	LVC	21-Dec-92	Dec. XIII/16	4.5	6.1	0.6	2.0	2.2	0.0	
Sierra Leone	LVC	29-Aug-01	Dec, XV/21	78.6	75.9	75.9	92.9	80.8	66.3	64.5
Solomon Islands	LVC	17-Jun-93	Dec. XIII/16	2.0	6.2	0.3	0.6	0.5	0.8	1.1
St Kitts and Nevis	LVC	10-Aug-92	Dec. XV/21	3.70	2.6	7.0	6.6	5.3	2.8	
St Vincent and the Grenadines	LVC	2-Dec-96	Decs. XIV/24,XV/42 and XVI/30	1.8	10.0	6.0	6.9	6.0	3.1	2.1
Uganda	LVC	15-Sep-88	Dec. XV/43	12.8	12.2	12.7	13.4	12.7	4.1	

^{*} Figures in italics: Data submitted to MLF Secretariat on progress of implementation of country programmes

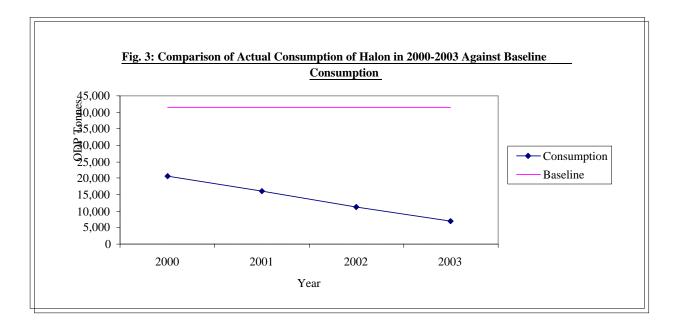
IV.2 Halons

26. The freeze in halon (Annex A Group II) consumption came into effect only on 1st January 2002, which means 2½ years later than for CFCs. Nevertheless, halon consumption reported by Article 5 countries declined rapidly before and after the freeze, falling to 49.4% of the baseline consumption in 2000 and 38.8% in 2001. In the first two years of the freeze period, 2002 and 2003, the total halon consumption was only 26.9% and 16.7% respectively of the amounts permissible under the Protocol. This places the overall reduction of this ODS far ahead of the first reduction step to 50% of the baseline consumption in 2005. As in the case of CFCs figure 2 below also illustrates the sharp decline in halon occurring in the compliance period for the controlled substance.

All data are based on A7 data reports unless otherwise stated; data rounded to one decimal place; shaded cells show non-compliance.

^{**} In potential non-compliance, insofar as only country programme data have been reported.

^{***} An illegal shipment of 74 ODP tonnes was seized and is being gradually released in the following years.



- 27. Ten countries which were in non-compliance with the halon consumption freeze for the period from 2002 to 2003 as per decisions of the Meetings of the Parties are listed in Table 5. Six are non-LVC countries while the other four are LVC countries. Five of the countries which were initially in non-compliance returned to compliance in the second year, while one country which was initially in compliance came to be in non-compliance in the second year.
- 28. In 2002, five of nine countries (56%) which were in non-compliance with the halon freeze were non-LVC countries, while the rest (44%) were LVC countries. In 2003, two out of four countries in non-compliance were LVC countries.

<u>Table 5: List of Countries in Non-Compliance with Halon Consumption Freeze</u> 2002-2004

Country	Status	MP Ratification	MOP Non- Compliance Decision	Baseline ODP Tonnes	2002 ODP Tonnes	2003 ODP Tonnes	2004* ODP Tonnes
Cameroon	LVC	30-Aug-89	Dec. XV/32	2.4	9.0	2.0	2.0
Congo, DR	Non-LVC	30-Nov-94	Dec. XV/33	218.7	492.0	27.9	22.9
Lesotho	LVC	25-Mar-94	Dec. XVI/25	0.2	1.8	1.0	0.0
Libya	Non-LVC	11-Jul-90	Dec. XVI/26	633.1	532.7	714.5	714.5**
Mexico	Non-LVC	31-Mar-88	Dec. XV/22	124.6	147.3	103.8	105.6
Nigeria	Non-LVC	31-Oct-88	Dec. XV/22	285.3	412.1	191.2	
Pakistan	Non-LVC	18-Dec-92	Dec. XVI/29	14.2	17.0	15.0	
Qatar	LVC	22-Jan-96	Dec. XV/41	10.7	13.6	8.3	
Somalia	LVC	1-Aug-01	Dec. XVI/19	17.7	24.5	25.7	
Vietnam	Non-LVC	26-Jan-94	Dec. XV/45	37.1	97.6	0.0	0.0

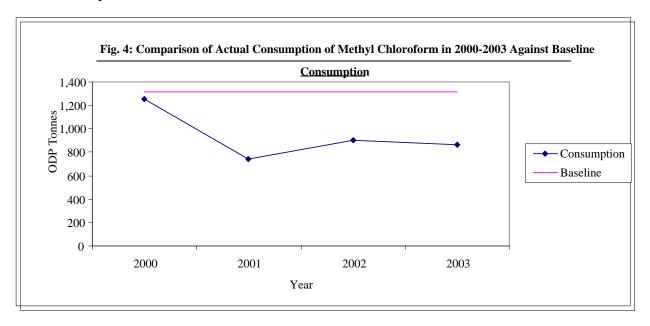
^{*}Figures in italic: Data submitted to MLF Secretariat on progress of implementation of country programmes.

All data are based on A7 data reports unless otherwise stated; data rounded to one decimal place.

^{**} In potential non-compliance, insofar as only country programme data have been reported.

IV.3 Methyl Chloroform

- 29. The freeze for methyl chloroform (or TCA) came into effect on 1 January 2003, the first reduction step of 30% starts on 1 January 2005.
- 30. As shown in figure 3 below a marked decrease in overall consumption prior to the freeze was observed by analyzing the methyl chloroform consumption data. In fact, consumption in 2003 was at a level of 65.3% of the overall baseline consumption, almost 5% ahead of the first reduction step in 2005.



- 31. In 2000, out of 46 countries reporting consumption, eight had consumption above the baseline. In 2003 when the freeze came into effect, 51 countries reported consumption, six of them above the baseline.
- 32. Although the number of countries reporting consumption that was higher than the baseline has remained relatively stable since 2000 (8, 9, 7 and 7 for 2000, 2001, 2002 and 2003 respectively), their aggregate consumption, when compared with the baseline, has severely increased. This is mainly due to a sharp increase of reported consumption in Iran which claims that figures reported earlier, including the baseline, were underestimated.
- 33. Six countries which were in non-compliance with the methyl chloroform consumption freeze in 2003 (beginning of the freeze) as per decisions of the Meetings of the Parties are listed in Table 6. Three are non-LVC countries while the remaining three are LVC countries.

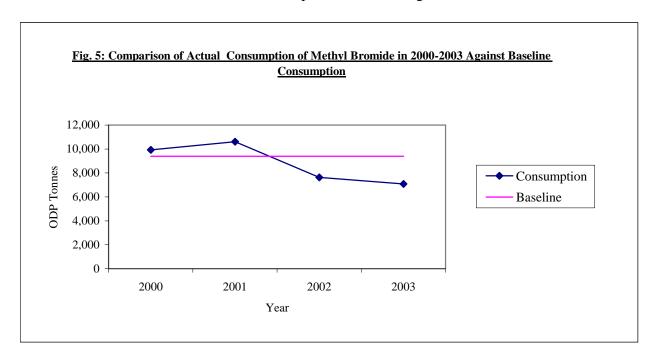
<u>Table 6: List of Countries in Non-Compliance with the Freeze in Methyl Chloroform Consumption</u> in 2003-2004

Country	Status	MP Ratification	MOP Non- Compliance	Baseline ODP	2003 ODP	2004* ODP
			Decision	Tonnes	Tonnes	Tonnes
Bangladesh	Non-LVC	2-Aug-90	Dec. XVI/20	0.867	0.892	0.55
Bosnia and Herzegovina	LVC	6-Mar-92	Dec. XVI/20	1.548	3.600	2.440**
Chile	Non-LVC	26-Mar-90	Dec XVI/22	6.445	6.967	
Ecuador	LVC	30-Apr-90	Dec. XVI/20	1.997	3.484	
Iran	Non-LVC	3-Oct-90	Dec. XVI/20	8.667	386.800	
Oman	LVC	30-Jun-99	Dec. XVI/28	0.000	0.003	0.000

^{*}Figures in italics: Data submitted to MLF Secretariat on progress of implementation of country programme.

IV.4 Methyl Bromide

34. The freeze in consumption of methyl bromide took effect from 1st January 2002 while the first reduction step of 20% of the baseline began on 1st January 2005. As shown in Figure 3 below, the consumption values in the two years prior to the freeze were among the highest. In 2000 and 2001, the total reported consumption exceeded the total baseline consumption by 5.6% and 12.9% respectively. However, in the first year of the freeze (2002), there was a significant drop in consumption of about 20% compared to the baseline. This trend continued in 2003, when overall consumption was reported as 26% below the baseline level. In the first year of the freeze in 2002 19 countries were in non-compliance, decreasing to 7 countries in 2003.



All data are based on A7 data reports unless otherwise stated; because of Oman and Bangladesh rounding to 3 decimal places.

^{**}In potential non-compliance, insofar as only country programme data have been reported.

35. Seventeen countries in non-compliance with the methyl bromide consumption freeze in 2002 and/or 2003 as per decisions of the Meetings of the Parties are listed in Table 7. Two are non-LVC countries while the rest are LVC countries. Ten of the countries which were initially in non-compliance returned to compliance in the second year, while two countries which were initially in compliance came to be in non-compliance in the second year. Data received for 2004 show that three out of 10 countries reporting are still in non-compliance (two based on Art.7 data and one potentially in non-compliance based on CP data), while seven are in compliance, two of which potentially in compliance based on CP data. About 80% (17 out of 21) countries in non-compliance were LVC countries.

<u>Table 7: List of Countries in Non-Compliance with Methyl Bromide Consumption Freeze</u> $\underline{2002-2004}$

Country	Status	MP Ratification	MOP Non- Compliance	Baseline ODP	2002 ODP	2003 ODP	2004* ODP
			Decision	Tonnes	Tonnes	Tonnes	Tonnes
Barbados	LVC	16-Oct-92	Dec. XV/25	0.1	0.4	0.0	0.0
Bosnia and Herzegovina	LVC	6-Mar-92	Dec. VX/30	3.5	11.8	9.8	7.56**
Botswana	LVC	4-Dec-91	Dec. VX/31	0.1	0.6	0.3	
Cameroon	LVC	30-Aug-89	Dec. VX/32	18.1	25.4	9.9	9.0
Chile	Non-LVC	26-Mar-90	Dec. XVI/22	212.5	165.2	274.3	
Egypt	Non-LVC	2-Aug-88	Dec. XV/25	238.1	270.0	238.0	219.0
Fiji	LVC	23-Oct-89	Dec. XVI/23	0.7	0.3	1.50	2.1
Guatemala	LVC	7-Nov-89	Dec. XV/34	400.7	709.4	527.7	484.2
Honduras	LVC	14-Oct-93	Dec. XV/35	259.4	412.5	366.50	
Mozambique	LVC	9-Sep-94		3.4	4.5	1.0	
Nicaragua	LVC	5-Mar-93		0.4	8.2	0.0	
Papua New Guinea	LVC	27-Oct-92		0.3	1.3	0.0	0.0
Paraguay	LVC	3-Dec-92	Dec. XV/25	0.9	0.9	-0.2	0.17
Saint Kitts and Nevis	LVC	10-Aug-92	Dec. XV/25	0.3	0.30	0.0	
Thailand	Non-LVC	7-Jul-89	DecXV/25, VXI/31	183.0	470.5	178.0	181.4
Uganda	LVC	15-Sep-88	Dec. XV/43	6.3	30.0	24.0	
Uruguay	LVC	8-Jan-91	Dec. XV/44	11.2	17.7	8.7	11.1

^{*}Figures in italics: Data submitted to MLF Secretariat on progress of implementation of country programme.

IV.5 CFC-Consumption in Countries with Recent Change in Status

36. Three countries, Armenia, Kyrgyzstan and Turkmenistan recently (during the freeze compliance period) had their status changed from non-Article 5 to Article 5. Armenia and

All data are based on A7 data reports unless otherwise stated; figures were rounded to 1 decimal place.

^{**} In potential non-compliance, insofar as only country programme data have been reported.

Turkmenistan have not received any assistance from the MLF, but have received some funding from GEF. Armenia and Kyrgyzstan have met the CFC consumption freeze while Turkmenistan has experienced erratic consumption pattern, being initially in compliance with the freeze but reporting 2001 consumption which was 35% above its baseline. For 2003, Turkmenistan withdrew its earlier data report. (See Table 8 below). Although Armenia has met the freeze requirements the rate of CFC reduction has not matched the general trend of sharp decline in consumption shown by most Article 5 countries during the freeze compliance period. Thus Armenia's 2003 CFC consumption was only about 10% lower than its baseline. It appears that Armenia and possibly Turkmenistan would require a more determined phase-out effort in order to meet and sustain the 50% reduction step.

Diff. 2003 2003 & Data as 1998 1999 2003 Country **Baseline** 2000 2001 2002 Baseline Per Cent Data **Baseline** 9.00 25.00 172.70 172.70 -23.80 Armenia 196.50 185.90 162.70 87.9 -9.88 Georgia 22.48 26.00 21.50 21.50 18.80 15.50 12.60 56.0 Kyrgyzstan 72.85 56.84 52.40 53.45 53.00 38.00 33.00 45.3 -39.85 Moldova 23.50 18.90 73.31 40.45 11.10 31.66 29.60 25.8 -54.41 Turkmenistan 37.33 25.30 18.60 21.02 57.72 10.49

Table 8: CFC Consumption of CEIT Countries Reclassified as Article 5 Countries

V. Non-compliance and Actions Taken by the Executive Committee

- 37. Over the years the Executive Committee has engaged in a constant review of the progress of countries towards complying with the Protocol's obligations, in particular their ability to meet the ODS consumption and production reduction steps. This process has usually led to identification of countries at risk of non-compliance with their current or future reduction obligations. Through its business planning procedures and relevant decisions, appropriate country specific actions have been put into place to mitigate the perceived potential problems. Substantial funding has also been provided to UNEP's Compliance Assistance Programme including regional networking activities to further facilitate compliance by Article 5 countries.
- 38. Between 2000 and 2002, critical years for compliance by Article 5 countries, the Executive Committee identified 35 countries which had been declared by the MOP to be in non-compliance, or were considered by the Executive Committee to be at risk of being in non-compliance with the freeze and subsequent 50% reduction in CFC consumption. As of the 45th meeting of the Executive Committee, 49 countries had thus been identified and appropriate measures including national ODS phase-out plans, RMP updates, terminal phase-out management plans (TPMP) and project preparations had been approved to assist these countries. Similarly, between 2000 and 2004, 28, 60 and 18 countries, were either in non-compliance or at risk of being in non-compliance with the freeze and relevant consumption reduction steps for halon, methyl bromide (MB) and methyl chloroform (TCA) respectively. Appropriate measures taken to assist the countries included halon banking, generally, and, where appropriate, halon

production and consumption phase-out plans; MB phase-out projects or plans; and TCA phase-out projects.

- 39. It should be noted that, as shown in detail in Annex I, all necessary actions have been taken by the Executive Committee to provide needed assistance to countries that have been found by the MOP to be in non-compliance with the above control measures.
- 40. Table 1 in Annex I provides information on the consumption levels of the countries at risk of non-compliance with the freeze in CFC consumption and the actions taken by the Executive Committee to assist them in their return to compliance. Table 1 also shows the tendency of countries to increase consumption in the years preceding the freeze compliance period. Tables 2-4 provide information on countries at risk of non-compliance with the freeze in consumption of halon, methyl chloroform and methyl bromide. Similar increases in consumption prior to the freeze could be observed to some extent.

VI. Analysis of Causes of Non-Compliance with the Freeze and Return to Compliance by Country

VI.1. Additional Methodological Considerations

- 41. The factors identified in paragraphs 11 and 12 above were further elaborated to identify possible reasons for a sample of countries being in non-compliance with the freeze in consumption of the ODS in question as well as for returning to compliance, where this has occurred. This analysis was done for CFC, halon and methyl bromide. It was not done for methyl chloroform since data was available only for the initial year of the freeze (2003) and also the consumption figures involved are relatively insignificant except for Iran. However, a summary of possible causes of non-compliance and reasons for possible return to compliance in future were provided. These causes can be identified only tentatively on the basis of documented data, and further analysis and discussions with the Implementing Agencies and countries concerned would be required to clarify remaining questions.
- 42. Representative samples ranging from five (for halon) to thirteen (for CFC) countries were selected for analysis. Two sets of spreadsheets were developed to review and analyze the country by country situation for each ODS. One set of spreadsheets based on the factors elaborated in paragraph 11 as well as those stated below was used to analyze possible causes of non-compliance, while another set of spreadsheets based mainly on factors indicated in paragraph 12 was used to analyze the possible reasons for return to compliance. The conclusions reached from the analysis were summarized in tables that have been included as Annexes VIA-VIC. The additional factors considered included:
 - (a) Recent accession to the Montreal Protocol, defined as accession after the grace period with 1999 being the cut-off date;
 - (b) Recent submission and approval of country programme and institutional strengthening project, recent request for project preparation, recent project

- approval and implementation, all defined as activities that occurred after the grace period;
- (c) Incorrect or irregular consumption data, defined as historical data which appeared to involve discrepancies or anomalies, such as possible inclusion of data on exempted uses or potential mix-up of controlled substances;
- (d) For methyl bromide, also recent accession to the Copenhagen Amendment, defined as accession following Decision IX/5 of the 9th Meeting of the Parties (1997) which allocated extra funding to boost methyl bromide phase-out activities.

VI.2. CFCs, Halons and Methyl Bromide

- 43. Tables 9-11 below provide summaries of possible causes of non-compliance with the consumption freeze of CFCs, halons and methyl bromide by selected countries as well as possible reasons for their return to compliance if they had done so as of 2003 or 2004 where data is available. It should be noted that a Party's compliance status with the Protocol's control measures is determined on the basis of the data it reports pursuant to Article 7 of the Protocol up to 30th September each year. The annual Meeting of the Parties decides whether a Party is in non-compliance, with reference to the recommendations of the Implementation Committee under the Non-compliance Procedure of the Protocol. Country Programme data, reported up to 1st May each year to the Fund Secretariat can only be used to assess a country's potential non-compliance.
- 44. For all three substances it appears that there are a number of factors that could negatively affect the countries ability to comply with the reduction schedules of the Protocol or appear to be characteristic of countries that are in non-compliance with the reduction schedules. These include:
 - (a) Delays in establishing institutional mechanisms for receiving assistance from the MLF;
 - (b) Instability or civil conflict;
 - (c) Inaccuracies and/or anomalies in data collection and reporting, such as problems in separating half-yearly data for CFC in 1999 and 2000, mixing recycled and virgin substances for halons, and inclusion of QPS in controlled uses of methyl bromide;
 - (d) Delays and weaknesses in the implementation of institutional strengthening project;
 - (e) Delays in implementation of approved projects;
 - (f) Inability to comply with ODS phase-out agreements with the Executive Committee in a timely manner;

- (g) Inability to monitor and/or account correctly for ODS phase-out from completed projects;
- (h) Delays in becoming Parties to the Protocol (post 1999) and, specifically for methyl bromide, delays in ratifying the Copenhagen Amendment.
- 45. Similarly it appears that there are several factors that influence the countries' ability to return to compliance. These include:
 - (a) Intervention by the Implementation Committee and the Meetings of the Parties;
 - (b) Assistance of the Multilateral Fund and intervention by the Executive Committee;
 - (c) Intervention by UNEP through its CAP programme, including special compliance assistance sessions at regional network meetings, and intervention by other implementing agencies project implementation and technical advice to NOUs.
 - (d) Country to country assistance on specific non-compliance issues;
 - (e) Specific country actions such as adoption of national plans for return to compliance, rules and regulations;
 - (f) Unspecified reduction measures;
 - (g) Acceleration of implementation of approved projects;
 - (h) Ability to account for consumption phased out from approved projects ensuring permanent ODS elimination. Two specific examples of apparent inability to account for eliminated consumption are the cases of Cameroon and Guatemala where the phase-out of large amounts of CFCs would have assisted the countries not only to return to compliance but to make considerable progress towards the next reduction step. However, the phase-out reported from completed projects was significantly less than the reductions in consumption indicated through data reported under Article 7.

Table 9: Summary of Possible Reasons for Non-Compliance with the Freeze in CFC Consumption from 1999* onwards and for Return to Compliance in Selected Article 5 Countries

Country	Reasons for Non-compliance	Reasons for Return to Compliance
Albania	Late accession to the Montreal Protocol (in 1999) at a high level	Albania returned to compliance in 2003 consistent
	of consumption relative to the baseline, combined with the fact	with its proposed action plan as per Decision
	that implementation of key components of the approved national	XV/26. 2004 data reported under Article 7 of the
	phase out plan has been delayed. Delays in the implementation	Protocol indicates the Party has maintained its
	of the institutional strengthening project might also have	compliance status. The reason for the reductions
	impaired the development of institutional capacity to manage	achieved appear to be directly linked to ImpCom
	the Multilateral Fund programme.	intervention. There was no direct impact of
		approved investment projects while the impact of
		non-investment projects is not evident and needs
		to be clarified. UNEP CAP facilitated South-South
		cooperation with Macedonia providing assistance.
		Compliance assistance group (UNEP, UNIDO,
		Macedonia, Croatia) set up to assist.

^{*}The initial compliance with the freeze in CFC consumption was based on consumption data for the one year period 1 July 1999 – 30 June 2000.

Table 9: Summary of Possible Reasons for Non-Compliance with the Freeze in CFC Consumption from 1999* onwards and for Return to Compliance in Selected Article 5 Countries

Bosnia & Herzegovina	Very low level of baseline in relation to current consumption as a result of war disrupting industrial activities during the baseline years, late access to resources of the MLF (CP preparation, IS and project funding), delays in IS and some project implementation, unmitigated growth in consumption resulting from possible weaknesses in the institutional structure or control. Regulatory and institutional measures at early stage of development and implementation.	Country appears to be in non-compliance in 2004. Data on the progress of implementation of the country programme suggests that the country continues to be in non-compliance with the freeze and has, in addition, not met its agreed upon CFC reduction benchmark (Decision XV/30)
Cameroon	Status of non-compliance appears to be due to the difficulties in implementation of institutional strengthening projects especially at the beginning of the freeze compliance period. Another important cause for non-compliance could be attributed to delays in project preparation as well as project implementation. It is possible that the problems associated with the implementation of the institutional strengthening projects might have affected the speed of project implementation during the compliance period. Analysis of the historical data points to irregularities in the consumption data reported by the country. The impact of the amounts of CFC reported to have been phased out from projects are not reflected in the annual consumption data reports. For instance, while 250 tonnes were reported to have been phased out in 2002, consumption data for 2003 shows only a net reduction of 5.5 tonnes.	Cameroon returned to compliance in 2002 after reducing 2001 consumption by 140 tonnes. Although the reductions in consumption appear to be directly linked to ImpCom intervention, the most significant impact is the phase-out achieved through the completed projects. However, the ODS phased out in subsequent years did not yield the expected impact on the countries CFC reductions. 250 tonnes were reported to have been phased out in 2002, but consumption data for 2003 showed only a net reduction of 5.5 tonnes. Either the CFC phase-out was not correctly reported or monitoring and regulatory measures did not work and industry continued to consume CFC. Thus, although there is evidence of rules and regulations for control of ODS their impact is not clearly discernible, probably because the IS project was in hiatus. If the situation persists it could seriously hamper future reduction efforts. UNEP CAP assisting in
Guatemala	Status of non-compliance appears to be due in part to the delay in implementation of institutional strengthening projects. The delay of a major investment project at the beginning of the freeze compliance period might also be a factor. Analysis of the historical data points to irregularities in the consumption data reported by the country. The impact of the amounts of CFC reported to have been phased out from projects are not reflected in the annual consumption data reports. For instance, while 68.3 tonnes were reported to have been phased out in 2001, consumption data for 2002 shows only a net reduction of 25.43 tonnes thus putting the country in a situation of preventable noncompliance.	reorganization of NOU and review of regulations. Guatemala returned to compliance in 2002 after reducing consumption by 92 tonnes. The country also exceeded its agreed upon CFC reduction benchmark by about 30 tonnes (Decision XV/34), 2004 data reported under Article 7 of the Protocol indicates the Party continues to exceed its CFC reduction benchmarks and maintain its compliance status. The reduction in consumption appears to be directly linked to ImpCom intervention. However, the most significant impact is the phase-out achieved through the completed projects, although the full extent of this was not realized as the reported consumption data was not consistent with the phase-out achieved. The impact of the institutional measures in the reductions is not evident and needs to be further clarified, especially since there was no ODS phase out from approved projects equivalent to the reported reduction of 92 tonnes in 2003.
Guinea Bissau	Primarily due to the fact that the country became a Party recently and consequently impact of assistance from Multilateral Fund has not been fully realized.	2004 data on the progress of implementation of the country programme suggests that the country has returned to compliance with the freeze and has exceeded its agreed upon CFC reduction benchmark (Decision XV/34). Reduction achieved appears to be directly linked to ImpCom intervention.

^{*}The initial compliance with the freeze in CFC consumption was based on consumption data for the one year period 1 July 1999 – 30 June 2000.

Table 9: Summary of Possible Reasons for Non-Compliance with the Freeze in CFC Consumption from 1999* onwards and for Return to Compliance in Selected Article 5 Countries

Libya	Although the country is one of the early Parties to the Protocol (since 1990) participation in the Multilateral Fund programme is recent (2000). Thus the country did not benefit from the Multilateral Fund assistance during the grace period. The institutional structure for managing the MP programme was not established over four years after approval (in 2000) of the institutional strengthening project and the country does not appear to be active in regional network activities. There appears to be a consequent delay in implementation of projects that could have reduced considerable amounts of CFC.	Libya returned to compliance in 2003 after reducing 2002 consumption by 281 tonnes, consistent with its proposed action plan as per Decision XV/36. The reductions achieved appear to be directly linked to ImpCom intervention. There is no direct impact of approved investment projects since no ODS phase out was recorded from 2000 to 2003. The preparation and approval of the national ODS phase-out plan were accelerated however the impact will be realized only at the end of 2005. The effects of non-investment projects and institutional measures are not evident and need to be clarified. The country appears to be inactive in the regional network activities but its participation would probably improve its performance.
Maldives	Although the Maldives became a Party to the Protocol in 1989, and its country programme was approved in 1993, preparation of projects for phasing out its consumption were only submitted in 2000. Thus the country did not benefit from the Multilateral Fund assistance during the grace period, and the establishment of institutional capacity to manage the MP programme was impaired as a result of a long delay in implementing the institutional strengthening project. There appears to be a consequent delay in implementation of projects that could have reduced considerable amounts of CFC equivalent to 80 % of the baseline consumption.	The Maldives were in non compliance for one year in 2001 and returned to compliance in 2002 after reducing their 2001 consumption by over 11 tonnes (80%) as per the approved action plan (Decision XV/37). 2004 data reported under Article 7 of the Protocol indicates the Party met its CFC benchmark of zero ODP tonnes contained in its action plan. Consistent with the action plan, there will be no consumption in the Maldives in 2005 and consumption for 2006 will be 2.3 tonnes or 50% of its baseline, to be completely phased out by 2008. It appears that the consumption in 2001 might relate to buying in bulk for future use. UNEP CAP assisted in data collection and development of a licensing system.
Namibia	Status of non-compliance appears to be due in part to the delay in implementation of institutional strengthening projects as well as delayed implementation of the RMP. Analysis of the historical data points to irregularities in the consumption data reported by the country. The impact of the amount of CFC reported to have been phased out from the only project that resulted in a phase-out prior to the freeze period is not reflected in the annual consumption data reported. While 5.1 tonnes were reported to have been phased out in 1999, consumption data for 2000 shows an increase of 5.3 tonnes. This inability to sustain the phase-out turned the country into non-compliance in 2000 and 2001.	Namibia returned to compliance in 2002 after reducing 2001 consumption by 4 tonnes. The country also exceeded its agreed upon CFC reduction benchmark by about 3 tonnes (Decision XV/38). 2004 data reported under Article 7 of the Protocol indicates the Party continues to exceed its CFC reduction benchmarks and maintain its compliance status. The reductions in consumption appear to be directly linked to ImpCom intervention. 5.4 tonnes phased out in 1998 did not have sustainable impact on the country's CFC reductions. The impact of the institutional measures on the reductions is not evident and needs to be further clarified, especially since there was no ODS phase out from approved projects after 1998.

^{*}The initial compliance with the freeze in CFC consumption was based on consumption data for the one year period 1 July 1999 – 30 June 2000.

Table 9: Summary of Possible Reasons for Non-Compliance with the Freeze in CFC Consumption from 1999* onwards and for Return to Compliance in Selected Article 5 Countries

Nigeria	Delay in preparation of the country programme (nearly 5 years) resulting in temporary halt to investment project approvals appears to have been the primary reason for non-compliance. A contributing factor also appears to be the delay in implementation of the initial phase of the institutional strengthening project.	Nigeria returned to compliance in 2002 after reducing 2001 consumption by 380 tonnes. It remained in compliance after further reductions of 624 tonnes from 2002 consumption. Although the reductions in consumption appear to be directly linked to ImpCom intervention, the most significant impact is the phase out achieved through the completed projects. It also appears that acceleration of the implementation of approved projects as well as implementation of institutional measures might have played a role in sustaining the return to compliance. UNDP has established a national office to expedite implementation of the phase-out plans and other projects.
Papua New Guinea	Although PNG became a Party to the Protocol in 1992, preparation of projects for phasing out its consumption were only submitted in 2002. Thus the country did not benefit from the Multilateral Fund assistance during the grace period, and the establishment of institutional capacity to manage the MP programme was impaired as a result of a long delay in implementing the institutional strengthening project. There appears to be a consequent delay in implementation of projects that could have reduced considerable amounts of CFC, equivalent to 90 % of the counties baseline consumption.	PNG returned to compliance in 2001 after reducing its consumption by over 32 tonnes (70%). The country subsequently submitted an action plan in 2003 as per Decision XV/40 and 2004 data reported under Article 7 of the Protocol indicates the Party continues to exceed its CFC reduction benchmarks and maintain its compliance status, albeit with an erratic consumption pattern. The reductions in consumption appear not to be directly linked to ImpCom intervention. The impact of the institutional measures on the reductions is not evident and needs to be further clarified, especially since there has been no ODS phase-out from approved projects. The recently approved TPMP is expected to be completed in 2005. UNEP through CAP/South Pacific Regional Environment Programme making effort to get IS back on track.
Saint Kitts and Nevis	The non-compliance appears to be a result of the country not availing itself of the assistance of the Multilateral Fund long after it had become a party to the Protocol. Also the possible lack of institutional capacity to manage the Multilateral Fund program as evidenced by the long delay in establishing the ozone unit as well as implementing the approved RMP might have played a role.	Saint Kitts returned to compliance in 2003 after reducing consumption by 2.55 tonnes, roughly 50%. The reasons for the reduction achieved appear to be directly linked to ImpCom intervention. There is no direct impact of approved investment projects since no ODS phase out was recorded from 2000 to 2003 (the projected phase out from the RMP has not been realized as per the approved completion date in 2001 and is about 46 months delayed). The effects of non-investment projects and institutional measures are not evident and need to be clarified. Assistance from UNEP's regional CAP team and St. Lucia's NOU could also have contributed to achieving compliance.
St. Vincent & the Grenadines	Primarily due to the fact that the country became a Party relatively recently and consequently impact of assistance from Multilateral Fund has not been fully realized.	Country in non-compliance as at end 2003. 2004 data reported under Article 7 of the Protocol indicates continued non-compliance with the freeze but has met its agreed upon CFC reduction benchmark per action plan. (Decision XVI/30). The reason for the reductions achieved appear to be directly linked to ImpCom intervention as well as UNEP CAP intervention and regional cooperation (technical advice from St Lucia NOU) facilitated by CAP.

^{*} The initial compliance with the freeze in CFC consumption was based on consumption data for the one year period 1 July 1999 – 30 June 2000.

Table 10: Summary of Possible Reasons for Non-Compliance with the Freeze in Halon Consumption from 2002 onwards and for Return to Compliance in Selected Article 5 Countries

Country	Reasons for Non compliance	Reasons for return to compliance
Cameroon	No halon project developed prior to the approval of the regional halon bank coupled with apparent difficulties in the implementation of the institutional strengthening projects. Additionally, there appears to be possible discrepancies in historical halon consumption data reported.	The country returned to compliance in 2003 by reducing its consumption from 9 to 2 ODP tonnes. 2004 data reported under Article 7 of the Protocol indicates that the Party continues to be in advance of its commitments to phase-out halon, as contained in decision XV/32, and prescribed under the Protocol.
Congo, D.R.	The country's particular situation appears to have affected the data collection efforts and consequent phase-out activities. This is reflected in the erratic nature of the halon consumption data ranging from 33 to 492 ODP tonnes in 2002, the year of non-compliance. As a consequence, the only activity to phase out halon is the regional halon bank approved in 2002.	The country is now in compliance with the freeze having reduced its 2002 consumption of 492 ODP tonnes to 27.86 ODP tonnes in 2003. It is not certain whether the reduction achieved will be permanently sustained given the historical consumption pattern.
Libya	Libya had a peak consumption of 1,400 ODP tonnes in 1998 which was drastically reduced to about 500 ODP tonnes and maintained from 1999 to 2002. Consumption subsequently increased to over 700 ODP tonnes in 2004 putting Libya in non-compliance (baseline is 633 ODP tonnes), prompting the ImpCom to intervene and to request submission of a plan of action (Decision XVI/26). The non-compliance appears to be due to absence of any MF activities coupled with possible institutional weaknesses in the management of MF activities.	Country is in non-compliance for 2003 and the ImpCom intervened in 2004 requesting a plan of action to be presented (Decision XVI/26). The outcome of this intervention would depend on how soon the on-going project preparation will be finalized and how a future MF project would progress, and finally how effectively the identified institutional weaknesses are addressed.
Pakistan	Delay and difficulty in establishing effective institutional structure (52 months delay) for monitoring and managing phase-out programmes could have contributed to a slow-down in the formulation and implementation of MF projects generally in the country. Thus the project for phasing out the use of halons was approved only in 2003.	Country is in non-compliance with the freeze as of 2003. 2004 Meeting of the Parties noted plan that includes Pakistan's commitment to reduce halon consumption from 15.0 ODP tonnes in 2003 to its freeze level in 2004 and comply with the Protocol's halon phase-out schedule thereafter.
Somalia	The particular situation (civil conflict) of the country has prevented any effective MF activities to be carried out.	Country remains in non-compliance although the ImpCom has intervened in 2004 requesting a plan of action to be presented (Decision XVI/19); the outcome of this intervention would probably depend on how MF projects progress in the future in this country.

Table 11: Summary of Possible Reasons for Non-Compliance with the Freeze in Methyl Bromide Consumption from 2002 onwards and for Return to Compliance in Selected Article 5 Countries

Country	Reasons for non-compliance	Reasons for return to compliance
Bosnia & Herzegovina	War in the country resulted in low consumption of ODS, and hence low baseline, as well as delay in submitting CP and request for institutional strengthening and project funding. Increase in ODS consumption as a result of resumption of industrial and commercial activities. Delay in ratifying Copenhagen Amendment leading to late project approval (2003).	Bosnia & Herzegovina was in non-compliance in 2003 and its data on the progress of implementation of its country programme suggests it may also be in non-compliance in 2004, its consumption being 9.8 and 7.6 ODP tonnes respectively (baseline: 3.53 ODP tonnes). The MB phase-out project approved by the ExCom at the 44 th meeting will be implemented according to the agreement (ExCom Decision 41/45) then the country would be able to meet its agreed upon obligation of reducing its MB consumption to 5.6 ODP tonnes by 2005 (Decision XV/30). The Party has committed to a plan of action contained in decision XV/30. Its first MB reduction benchmark is 5.61 ODP tonnes in 2005.
Cameroon	The consumption of MB in 1998 more than doubled in 1999 and remained at that level until 2002. A demonstration project approved for this sector in 1998 was completed in December 2004 with 53 months delay. The reason for noncompliance appears to be directly linked to the fact that the demonstration project has taken more than four years to bear final results as the latest report in 2004 indicates a further extension of the demonstration activities to conduct "technical and economic analysis of utilization of the two proposed alternatives to MB" (resulting from the demonstration project).	Cameroon returned to compliance in 2003 by reducing its 2002 consumption of 25.4 ODP tonnes to 9.9 ODP tonnes in 2003, ie nearly 50% of its baseline consumption. The reasons for Cameroon's return to compliance seem to be directly linked to ImpCom intervention. Apart from the implementation of a demo project by UNIDO, there is no evidence of any phase-out from approved projects and there was no information on the role non-investment projects and institutional measures played in this reduction; this would need to be further clarified. UNEP, however, is providing guidance to the NOU on accuracy in data collection as part of its action to assist compliance.
Chile	Chile was in compliance with the freeze in 2002 but fell into non-compliance in 2003 when the consumption increased by 165 ODP tonnes to 274 ODP tonnes. However, from 1998 to 2001, Chile's MB consumption had exceeded its baseline in all years but in 1999 (with consumption ranging from 107 to 298 ODP tonnes). Four implementing agencies have been active in the MB sector in Chile since December 1994 undertaking project preparation and demonstration projects. The available information shows considerable delay in the implementation of some of the demonstration projects and project preparation activities. It also appears from the records that business plan activities for Chile in the MB sector did not materialize according to the business plan allocations. Three project preparation activities which have been completed do not appear to have resulted in any approved investment projects.	Chile is currently in non-compliance and has been requested in 2004 to present a plan of action as a matter of urgency (decision XV/22). Contrary to the statement in the agreement between Chile and the ExCom (Decision 32/55) in 2000 to the effect that Chile would exceed subsequent phase-out requirements of the Protocol, the 2003 MB data reported by Chile placed it in non-compliance. Based on this 2003 consumption Chile would require a reduction of 62 ODP tonnes in order to meet the freeze and of 104 ODP tonnes to meet the 20% reduction step in 2005. Chile's non-compliance appears to be directly linked to lack of positive results in the activities in the MB sector.

Table 11: Summary of Possible Reasons for Non-Compliance with the Freeze in Methyl Bromide Consumption from 2002 onwards and for Return to Compliance in Selected Article 5 Countries

Guatemala	Delay in ratifying Copenhagen Amendment (in 2002) appears to have affected approval of MB investment projects. There doesn't appear to be any follow up project for a completed project preparation project for the phase out of 800 ODP tonnes of MB in melon crops which was approved in Nov 99 and completed in Dec 2002 (with a 24 month delay). The only investment project is the national phase out plan approved in 2002 following the ratification of the Copenhagen Amendment .	Guatemala is in non-compliance with the freeze of MB consumption; however, its data submitted pursuant to Article 7 indicate that it is in advance of its agreed upon MB benchmark for 2004 as per Decision XV/34. The country's ability to meet the agreed upon MB consumption reductions appears to be directly linked to ImpCom intervention and the ExCom Decision 38/42 which approved a national phase-out plan for Guatemala to phase out 468 ODP tonnes by 2005. UNIDO reported a partial phase-out of 260.6 ODP tonnes in 2003.
Honduras	Delay in ratifying Copenhagen Amendment (in 2002) appears to have affected approval of MB investment projects as project preparation could not start until early 2001, pending ratification by the country of the Copenhagen Amendment.	Honduras is in non-compliance with the freeze of MB consumption. It has, however, met its agreed upon MB benchmark for 2003 as per Decision XV/35. The country's ability to meet the agreed upon MB consumption reductions appears to be directly linked to ImpCom intervention and to the approved national MB phase-out plan whose implementation appears to have been accelerated. Honduras reported a phase-out of 103 ODP tonnes as a result of the MB phase-out plan. Should this phase-out result in permanent and sustained aggregate reduction, the 2004 consumption would be substantially decreased and Honduras could be on its way to meeting the freeze in MB consumption in addition to meeting its agreed upon benchmark.
Uganda	Non-compliance might have been caused in part by late ratification of the Copenhagen Amendment (in 2000) and by apparent lack of control on MB consumption (which increased from 11 ODP tonnes in 1999 to 30 ODP tonnes in 2002 relative to a 6.3 ODP tonnes baseline). The implementation of the institutional strengthening project shows an 84 month delay which is probably the result of weaknesses in the institutional structure for controlling MB use in the country. This may require further clarification.	Uganda is in non-compliance with the freeze of MB consumption; however, it has met its agreed upon MB benchmark for 2003 as per Decision XV/43. The country's ability to meet the agreed upon MB consumption reductions appears to be directly linked to ImpCom intervention. There is no evidence of the impact of the approved project nor of any institutional measures on the reductions achieved. Uganda has an obligation to reduce MB consumption from 24 ODP tonnes in 2004 and to 6 ODP tonnes in 2005, while only 12 ODP tonnes are projected to be phased out by the only investment project approved by the ExCom to phase out MB in cut flowers (Decision 34/55). Unless non-investment projects and institutional measures are put in place to address the phase-out of the remaining MB consumption, the country is likely to remain in non-compliance. There is some discrepancy in the MB baseline data as reported in ExCom Decision 34/55 and ImpCom Decision XV/43 which needs to be resolved.

Table 11: Summary of Possible Reasons for Non-Compliance with the Freeze in Methyl Bromide Consumption from 2002 onwards and for Return to Compliance in Selected Article 5 Countries

Thailand

Thailand got approval for the change of its MB consumption baseline from 164.9 to 182.97 ODP tonnes. In spite of this change Thailand's MB consumption exceeded its baseline in all the years from 1998 to 2002 except in 1999 (its consumption ranging from 172.2 to 470.5 ODP tonnes). Therefore, in 2002, in spite of the upward revision of its baseline, Thailand was in noncompliance with the freeze. Apart from the high level of MB consumption, preparation of its phaseout strategy and implementation of a key demonstration project were delayed by 23 to 35 months. These delays could also have affected Thailand's ability to reduce its consumption in a timely manner to meet the freeze.

Thailand returned to compliance in 2003; its reported consumption was reduced from 470.5 ODP tonnes in 2002 to 178 ODP tonnes in 2003 (a reduction of 292 ODP tonnes, roughly 62%). The high level of reported 2002 consumption might have contained anomalies (such as inclusion of OPS usage in the consumption data). Compliance with the freeze in 2003 and also in 2004 as indicated by data reported on the implementation of the country programme is directly linked to ExCom Decision 44/44 by which Thailand was to be assisted to achieve the 2002 freeze obligation as well as the 20% reduction step in 2005. The increased baseline level as a result of Decision XVI/31 also facilitated Thailand's ability to meet the freeze. UNEP CAP providing advice in data collection and reporting regarding QPS and non-QPS applications. World Bank assisting with preparation of MB strategy expected to be completed in 2004.

VI.3. Methyl Chloroform

- 46. Analysis of the TCA data shows that the consumption above the baseline is minor for five of six countries in non-compliance in 2003 (from 3 Kg to 3 ODP tonnes). The only country with a serious compliance problem is Iran whose consumption in 2003 was reported to be 386.8 ODP tonnes with a baseline of 8.67 ODP tonnes which the country claims to be unrealistically low and mis-calculated. Moreover, Bosnia and Herzegovina which has a low baseline has difficulties returning rapidly to compliance as the economy picked up again after the war years.
- 47. Pursuant to the non-compliance status of these countries, the Implementation Committee requested the countries concerned to submit, as a matter of urgency, explanations and/or action plans for return to compliance. There is also currently a number of ongoing approved TCA phase-out projects or national phase out plans with a TCA phase-out component which would enable most of the countries to return to compliance.
- 48. Therefore it is expected that the return to compliance will mainly be due to the Implementation Committee intervention which took place at the 16th Meeting of the Parties (Decisions XVI/20, 22 and 28) as well as to the effective implementation of institutional measures and of the approved projects.

VII. General Conclusions

- 49. The grace period was very important and was the key to enabling Article 5 countries to meet the freeze requirements of the Protocol. Everything points to the fact that it is this period which facilitated countries in working towards future phase-out without affecting their economic development. In the case of halon for instance, in spite of the fact that the freeze period started two and a half years later than for CFCs, the actions taken during the grace period facilitated rapid phase-out and later compliance with the freeze.
- 50. In spite of the fact that overall aggregate consumption was usually below the baseline prior to the freeze coming into effect, the available information pointed to some stockpiling (possibly even significant in a few cases) taking place prior to the freeze coming into effect, especially for CFCs. However, as mentioned earlier, this was followed by a rapid reduction in consumption and for many countries in such a situation there was no persistent non-compliance. One would expect a similar trend to emerge with subsequent reduction steps. But in view of the early interventions of the Implementation Committee and Executive Committee and reduced production capacity of ODS, especially CFC, the stockpiling phenomenon is not likely to recur on a large scale in many countries.
- 51. From the progress reports of implementing agencies, especially where agencies have devoted sections of the report to activities in countries in non-compliance it could be seen that in many countries, particularly LVC countries, other than implementation of approved projects, interventions such as dialogue with the NOU, are playing an important role in assisting countries in non-compliance to return to compliance. UNEP's CAP, according to its 2003 and 2004 progress reports to the Executive Committee, has played a significant role in fostering South-South cooperation and other means of transfer of expertise to countries in non-compliance or at the risk of non-compliance to enable them to return or remain in compliance. It is possible that some countries' return to compliance is also attributable mainly to country specific national measures rather than to direct impact of implementing investment projects. However, it was difficult to discern with the information available what specific role was played by measures taken at the national level. Thus there may be a need to include information in the annual reporting on the implementation of the country programme that reflects the impact of measures taken by the country on compliance with the phase-out schedules.
- 52. Institutional weaknesses identified as possible cause for non-compliance, though not the norm, could be a serious impediment to sustainable compliance for a limited number of countries. These need to be better understood in order to anticipate and/or intervene in such a way as to avoid future non-compliance. Future studies of non-compliance would need to clearly identify and document the role of institutional measures and their effect on compliance. The role of UNEP's CAP, as well as that of the other implementing agencies, with regard to enhancing the institutional capacity of countries to address compliance issues also needs to be better understood.
- 53. LVC countries constitute about 70% of the number of Article 5 countries. However, their share of non-compliance with CFC freeze was disproportionately higher. The only two remaining countries in non-compliance with the CFC freeze in 2004 were LVC countries. The situation is the reverse for halon consumption where a much larger share (in terms of level of

consumption as well) is taken by non-LVC countries. With methyl bromide, 80% of non-compliance countries are non-LVC countries, but consumption levels of some LVC countries in non-compliance are just as high, or even higher than some non-LVC countries.

54. Some countries which were formerly classified as non-Article 5 Parties but were recently reclassified as Article 5 countries may have difficulty sustaining compliance with the freeze and next reduction steps, probably due to the fact that such countries could not avail themselves of institutional and technical support from the MLF as well as the monitoring processes of the Executive Committee which have been a major vehicle for rapid phase-out in Article 5 countries during the compliance period. The progress of these countries needs to be monitored.

Actions Taken by the Executive Committee for Countries in Non-Compliance or at Risk of Non-Compliance with the Freeze

Table 1: CFC

Table 1: CFC								
Country		nsumption (
	Baseline	1998	1999	2000	Actions Taken by Executive Committee			
Albania	40.75	46.50	53.10	61.90	National ODS Phase-Out Plan as per Decision 39/43			
Antigua and Barbuda	10.70	26.46	-1.98	4.95	Total CFC Phase-Out Plan as per Decision 44/47			
Bahamas	64.87	54.59	53.80	65.90	Total CFC phase out funded as per Decision 35/52			
Bahrain	135.44	149.50	129.00	113.10	RMP Approved at 26 th Meeting			
Bangladesh	581.59	830.37	800.61	805.02	National ODS Phase-Out Plan as per Decision 42/19			
Barbados	21.53	22.49	16.51	8.08	LVC Country with RMP update as per Decision 31/48			
Belize	24.38	25.03	25.08	15.51	LVC Country with RMP update as per Decision 31/48			
Bolivia	75.67	74.07	72.25	78.82	LVC Country with RMP update as per Decision 31/48			
Bosnia and Herzegovina	24.17	45.10	150.97	175.93	National ODS Phase-Out Plan as per Decision 41/50			
Brazil	10,525.78	9,542.89	11,611.9 7	9,275.05	Total CFC Phase-Out Plan as per Decision 37/54			
Burundi	58.96	64.49	59.59	53.84	LVC Country with RMP update as per Decision 31/48			
Cameroon	256.89	311.82	361.50	368.70	LVC Country with RMP update as per Decision 31/48			
Chad	34.56	38.10	37.48	36.50	LVC Country with RMP update as per Decision 31/48			
Comoros	2.50	3.65	2.45	2.72	LVC Country with RMP update as per Decision 31/48			
Dominican Republic	539.84	311.40	752.10	401.95	Terminal CFC Phase-Out Plan as per Decision 45/41			
Ethiopia	33.84	38.24	39.24	39.20	LVC Country with RMP update as per Decision 31/48			
Gabon	10.27	12.04	7.84	13.74	LVC Country with RMP update as per Decision 31/48			
Georgia	22.48	26.00	21.50	21.50	LVC Country with RMP update as per Decision 31/48			
Ghana	35.81	50.33	46.76	47.03	LVC Country with RMP update as per Decision 31/48			
Guatemala	224.65	188.70	191.10	187.90	LVC Country with RMP update as per Decision 31/48			
Guinea Bissau	26.27	27.12	25.98	26.04	LVC Country with RMP update as per Decision 31/48			
Iran	4,571.67	5,571.00	4,399.00	4,156.53	National CFC Phase-Out Plan as per Decision 41/20 and 41/55			
Jamaica	93.23	199.04	210.38	59.75	Terminal CFC phase out as per Decision 37/58			
Kenya	239.46	245.30	241.14	203.35	National CFC Phase-Out Plan as per Decision 44/50			
Korea DPR	441.67	112.00	106.00	77.00	RMP Approved at 40 th Meeting			
Kyrgyzstan	72.85	56.84	52.40	53.45	LVC Country with RMP update as per Decision 31/48			
Libya	716.71	659.75	893.98	985.38	National CFC Phase-Out Plan as per Decision 41/56			
Maldives	4.57	0.88	1.45	4.57	LVC Country with RMP update as per Decision 31/48			
Mali	108.07	113.11	37.06	29.23	LVC Country with RMP update as per Decision 31/48			
Mauritius	29.10	38.98	18.57	19.07	Terminal Phase-Out Plan as per Decision 41/22			
Mongolia	10.62	13.20	12.44	11.20	LVC Country with RMP update as per Decision 31/48			
Morocco	802.27	923.60	870.60	564.00	Refrigeration Projects approved for Complete Phase-Out of CFC at the 43 rd Meeting			
Namibia	21.85	16.44	16.76	22.13	Terminal Phase Out Plan as per Decision 41/23 . Revised Option as per reponse to BP Letter			
Nepal	27.00	32.90	25.00	94.00***	LVC Country with RMP update as per Decision 31/48			
Niger	32.02	60.73	58.33	39.91	LVC Country with RMP update as per Decision 31/48			
Nigeria	3,649.95	4,761.50	4,286.20	4,094.80	National CFC phase out funded as per Decision 38/48.			
Oman	248.44	261.10	259.64	282.12	LVC Country with RMP update as per Decision 31/48			
Pakistan	1,679.43	1,196.00	1,421.80	1,945.30	Projects for completed phase-out of CFC (Refrigerant Management Plan as per Decision 41/71 and project for phase out of CFC in the refrigeration sector at the 42 nd Meeting)			
Papua New Guinea	36.26	45.22	35.49	47.94	Terminal CFC Phase-Out as per Decision 39/21.			
Paraguay	210.56	113.40	345.28	153.49	LVC Country with RMP update as per Decision 31/48			
Peru	289.53	326.66	295.58	346.99	LVC Country with RMP update as per Decision 31/48			

TABLE 1: CFC (Cont'd)

Qatar	101.43	120.76	88.95	85.80	LVC Country with RMP update as per Decision 31/48
Saint Kitts and Nevis	3.69	1.63	2.57	7.02	RMP Approved at 24 th Meeting
Saint Vincent and the Grenadines	1.77	2.29	9.97	6.04	RMP Approved at 25 th Meeting
Samoa	4.46	2.65	6.08	0.64	LVC Country with RMP update as per Decision 31/48
Trinidad and Tobago	120.01	155.65	81.68	101.28	Terminal CFC Phase-Out Plan as per Decision 40/46
Turkey	3,805.73	3,985.00	1,791.07	820.24	Total CFC Phase-Out Plan as per Decision 35/55
Uganda	12.84	11.35	12.15	12.74	LVC Country with RMP update as per Decision 31/48
Yemen **	1,796.07	1,060.81	1,040.74	1,045.02	RMP Approved at 37 th Meeting

^{*}Shaded cells show non-compliance.

Table 2: Halon

Country	Consump	tion (ODP T	Connes)*	Actions Taken by Executive Committee	
	Baseline	1998	2001	2002	
Botswana	5.20	0.00	4.50	4.20	Halon Banking Approved
Cameroon	2.38	0.30	7.80	9.00	Halon Banking Approved
Congo	5.00	5.00	8.00	0.00	Halon Banking Approved
Congo, DR	218.67	184.40	492.00	492.00	Halon Banking Approved
Croatia	30.10	13.30	10.00	26.00	Halon Banking Approved
Dominican Republic	4.23	5.40	3.00	0.00	Halon Banking Approved
Egypt	705.00	860.00	790.00	230.00	Halon Banking Approved
Guyana	0.15	0.24	0.06	0.00	Halon Banking Approved
Iran	1,420.00	3,170.00	1,420.00	1,420.00	Halon Banking Approved
Jordan	210.00	245.00	125.00	44.00	Halon Banking Approved
Lesotho	0.20	0.00	1.20	1.80	Halon Banking Approved
Libya	633.07	1,404.50	532.74	532.74	Preparation of halon phase-out plan
Mexico	124.57	212.80	140.40	147.30	Halon Banking Approved
Nigeria	285.33	472.00	412.00	412.10	Halon Banking Approved
Pakistan	14.20	15.00	28.80	16.95	Halon Banking Approved.
Qatar	10.65	43.91	30.72	13.60	Halon Banking Approved
Serbia and Montenegro	3.83	19.50	0.00	0.00	Halon Banking Approved
Somalia	17.70	19.50	23.40	24.48	Part of 2005 UNEP CAP Activities
Thailand	271.67	154.00	500.00	0.00	Halon Banking Approved
Trinidad and Tobago	46.59	46.88	0.00	1.10	Halon Banking Approved
Tunisia	104.33	160.00	45.00	45.00	No Request
Turkey	141.00	203.00	147.00	13.00	Halon Banking Approved
Vietnam	37.07	78.00	0.00	97.60	National Halon Phase-Out Plan as per
					Decision 45/44. Halon Banking Approved
Yemen	140.00	116.00	92.10	72.20	Halon Banking Approved

^{*}Shaded cells show non-compliance.

^{**}Yemen was in non-compliance when its baseline consumption was 349.1 ODP tonnes prior to approval to the change of baseline.

^{***}An illegal shipment of 74 ODP tonnes was seized and is being gradually released in the following years.

Table 3: Methyl Chloroform

Country	Consumption (ODP Tonnes)*				Actions Taken by Executive Committee
	Baseline	1998	2001	2002	
Albania	0.03	0.00	0.05	0.56	Country with approved TCA phase
					out/project
Bangladesh	0.87	1.00	1.50	0.95	Country with approved TCA phase
					out/project.
Bosnia and	1.55	1.04	3.71	3.60	Country with approved TCA phase
Herzegovina					out/project
Burundi	0.09	0.00	0.14	0.14	Country with approved TCA phase
					out/project
Chile	6.44	7.14	5.23	3.48	Country with approved TCA phase
					out/project
Ecuador	2.00	2.43	1.66	2.83	Preparation of methyl chloroform phase-out
					plan
Iran	8.67	14.00	6.00	386.80	Project Preparation awaits clarification of
					baseline by ImpCom
Pakistan	2.33	2.00	3.50	0.00	Solvent sector phase-out plan (including
					TCA)

^{*}Shaded cells show non-compliance.

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Table 4: Methyl Bromide

Country	Consumpt	ion (ODP To	onnes)*		Actions Taken by Executive Committee
·	Baseline	1998	2001	2002	•
Algeria	4.65	6.00	4.20	4.20	Project preparation approved at 22 nd and 34 th Meeting
Argentina	411.30	504.60	358.80	168.60	Country with projects for complete MB phase-out
Bosnia and Herzegovina	3.53	4.20	9.96	11.79	Country with projects for complete MB phase-out
Botswana	0.14	0.00	0.60	0.60	Country with projects for complete MB phase-out
Cameroon	18.09	12.00	25.38	25.38	Country with projects for complete MB phase-out
Chile	212.51	298.14	239.00	165.25	Country with projects for complete MB phase-out
China	1,102.05	1,960.20	1,567.80	1,087.80	Country with projects for complete MB phase-out (Possible additional funding for 100 ODP tonnes of MB used as a soil fumigant in ginsen crop)
Congo	0.89	2.26	0.00	0.01	Country with approved projects that would enable compliance with the 2005 phase out target
Costa Rica	342.45	436.68	390.00	280.02	Country with projects for complete MB phase-out
Cote D'Ivoire	8.14	12.00	18.00	12.00	Country with projects for complete MB phase-out
Cuba	50.48	70.80	15.24	21.06	Country with projects for complete MB phase-out
Dominican Republic	104.24	144.00	144.00	77.12	Country with projects for complete MB phase-out
Ecuador	66.23	91.21	369.75	40.80	Country with approved projects that would enable compliance with the 2005 phase out target
Egypt	238.05	240.00	432.00	270.00	Country with approved projects that would enable compliance with the 2005 phase out target
El Salvador	1.39	0.00	0.00	0.00	Country with projects for complete MB phase-out
Ethiopia	15.60	21.60	14.40	12.00	Technical assistance project approved at 30 th Meeting
Fiji	0.67	0.00	1.20	0.26	Preparation of total ODS phase-out plan
Georgia	13.65	8.40	10.80	10.50	Country with approved projects that would enable compliance with the 2005 phase out target
Guatemala	400.70	579.45	786.60	709.39	Country with approved projects that would enable compliance with the 2005 phase out target
Honduras	259.43	269.12	510.93	412.52	Country with approved projects that would enable compliance with the 2005 phase out target
Indonesia	40.68	37.80	75.60	37.80	Country with projects for complete MB phase-out
Iran	26.70	28.20	27.60	5.40	Investment project for post-harvest approved at 29 th Meeting
Kenya	217.50	234.60	90.00	139.14	Country with projects for complete MB phase-out
Lebanon	236.40	285.60	219.00	197.26	Country with projects for complete MB phase-out
Macedonia	12.23	12.90	19.92	5.32	Country with projects for complete MB phase-out
Malawi	112.74	126.00	67.95	55.41	Country with projects for complete MB phase-out
Malaysia	14.61	0.00	72.22	8.82	Country with projects for complete MB phase-out
Mexico	1,130.80	1,207.49	1,100.12	1,067.49	Country with approved projects that would enable compliance with the 2005 phase out target
Morocco	697.20	960.00	1,621.36	387.00	Country with approved projects that would enable compliance with the 2005 phase out target
Mozambique	3.38	0.00	8.43	4.50	Country with projects for complete MB phase-out
Nicaragua	0.42	0.00	0.00	8.22	Country with projects for complete MB phase-out
Oman	1.02	2.25	0.77	0.00	Country with projects for complete MB phase-out
Pakistan	13.95	0.00	24.00	0.00	Country with projects for complete MB phase-out

TABLE 4: Methyl Bromide (Cont'd)

Papua New Guinea	0.33	0.00	2.16	1.30	No more consumption
Peru	1.28	3.87	0.08	0.06	Country with projects for complete MB phase-out
Philippines	10.32	9.24	34.93	7.80	Country with projects for complete MB phase-out
Romania	111.49	102.63	18.07	70.92	Country with projects for complete MB phase-out
Saint Kitts and	0.27	0.27	0.42	0.30	No more consumption
Nevis					
Sri Lanka	4.08	3.77	1.13	1.94	Country with projects for complete MB phase-out
Thailand	182.97	201.42	291.15	470.52	Country with projects for complete MB phase-out
Tunisia	8.25	7.20	11.40	10.80	Demonstration project approved at 24 th Meeting
Turkey	479.70	415.20	43.80	280.80	Country with approved projects that would enable
					compliance with the 2005 phase out target
Uganda	6.30	11.70	22.20	30.00	Country with projects for complete MB phase-out
Uruguay	11.20	10.77	37.76	17.67	Country with projects for complete MB phase-out
Vietnam	136.50	48.00	51.00	48.00	Demonstration project approved at 24 th Meeting
Yemen	54.45	63.60	65.40	52.80	Country with approved projects that would enable
					compliance with the 2005 phase out target
Zambia	29.34	29.53	14.25	12.59	Technical assistance project approved at 30 th
					Meeting
Zimbabwe	556.95	819.00	544.20	202.27	Country with approved projects that would enable
					compliance with the 2005 phase out target

^{*}Shaded cells show non-compliance.