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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Thirty-fifth Meeting
Montreal, 5-7 December 2001

REPORT ON THE IMPLEMENTATION OF THE MONITORING AND EVALUATION WORK PROGRAMME FOR THE YEAR 2001

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I. Introduction

1. The purpose of this report is to give the Executive Committee an overview of the results of the implementation of the first part of the 2001 work programme for Monitoring and Evaluation, which was approved at the 32th meeting of the Executive Committee (Dec. 32/22).

2. The consolidated report on project completion reports received during the reporting period, that means since the 32th meeting in December 2000 is presented in Section II. It includes also the schedule for next years submission of PCRs due.

3. Information on the follow-up to decision 33/2 concerning the evaluation of foam projects is provided in Section III.

4. A summary of a desk study on the evaluation of completed aerosol projects is presented in Section IV. It describes main findings, evaluation issues and the methodological approach chosen for the main phase of the evaluation.

5. Section V contains a Progress Report on the extended desk study on clearing house activities implemented by UNEP. Terms of reference showing the focus on recent information exchange activities and a Workplan for carrying out this evaluation, in particular the user survey, are presented. The final report will be submitted to the 36th meeting of the Executive Committee, as foreseen in the 2001 Monitoring and Evaluation work programme.

6. The final report on the evaluation of solvent projects which was prepared as part of the 2001 Monitoring and Evaluation work programme, is presented in a separate document (Doc/UNEP/Ozl.Pro/ExCom/35/12)

II Consolidated Project Completion Report 2001

(a) Overview

7. Implementing and bilateral agencies have submitted as of 12 October 2001 a total of 714 project completion reports (PCRs) for investment projects and 306 PCRs for non-investment projects, representing 74.5% (compared to 61.6% last year) of PCRs due for investment and 77.3% (60.8% last year) for non-investment projects completed as of 31 December 2000 (without considering project preparations, country programmes, recurrent activities like networking and information exchange, as well as extended institutional strengthening projects.

8. The total number of PCRs received for investment projects in the year 2001 increased to 234 (compared to 184 in 2000). Thus, the total number of PCRs still outstanding for these projects has decreased from 284 to 235. For non-investment projects, the total number of outstanding PCRs has likewise decreased (from 146 to 85). This reflects the exclusion of recurrent activities and extended IS projects from the list of PCRs due. Recurrent activities are reported upon in the annual progress reports while terminal reports are provided on each phase of IS projects, jointly

with the request for extension. The decline of delivery of PCRs for non-investment projects from 162 last year to only 32 during the current reporting period is nevertheless unsatisfactory. Tables 1 and 2 present more detailed data by agency including comparative figures for the previous two reporting periods.

Table 1
Investment Projects Overview

Agency	Completed Projects up to December 2000	Total PCR(s) Received for Projects Completed up to December 2000	PCR(s) Received in			PCR(s) still due
			1999	2000	2001	
France	7	6	0	3	3	1
Germany	2	1	1	0	0	1
IBRD	287	236	51	62	45	51
UNDP	459	292[1]	23	101	128	167
UNIDO	192	178[2]	47	34	58	14
USA	2	1	0	1	0	1
Total	949	714	122	194	234	235

[1] In addition, UNDP submitted 1 PCR for a cancelled project, 6 PCRs for project completed in 2001 and 2 PCRs for subprojects (not included in Table 1).
[2] In addition, UNIDO already submitted 3 PCRs for project completed in 2001 and 3 cancellation reports (not included in Table 1).

Table 2
Non-Investment Projects Overview
(Except Project Preparations, Country Programmes, Ongoing Projects like Networking and Clearing House activities as well as Institutional Strengthening projects)

Agency	Completed Projects up to December 2000	Total PCR Received for Projects Completed up to December 2000	PCR Received in			PCR(s) still due
			1999	2000	2001	
Australia	7	0	0	0	0	7
Austria	1	1	N/A	1	0	0
Canada	13	12	0	12	0	1
Denmark	1	1	0	0	1	0
France	10	5	1	2	1	5
Germany	9	0	0	0	0	9
IBRD	22	19	11	4	0	3
Japan	2	0	N/A	N/A	0	2
Singapore	2	0	0	0	0	2
South Africa	1	1	0	0	0	0
Sweden	1	0	N/A	N/A	0	1
Switzerland	2	2	0	2	0	0
UNDP	110	83[3]	25	38	10	27
UNEP	146	128	44	67	20	18
UNIDO	24	16	8	10	0	8
USA	40	38	3	27	0	2
Total	391	306	92	162	32	85

[3] In addition, UNDP submitted PCRs for two transferred projects and for 8 technical assistance projects after 12 October 2001 (not included in Table 2).

9. Since the 32nd Meeting of the Executive Committee, all Implementing Agencies made efforts to comply with the PCR delivery schedule agreed upon, which focussed in particular on the sectors under evaluation. Until 12 October 2001, UNDP delivered 100 of 159 PCRs scheduled for submission until the end of this year. The World Bank provided 45 of 72 outstanding PCRs, UNEP 20 out of 22, and UNIDO sent significantly more than scheduled. There are, however, still some PCRs due, in particular, from UNDP, which supplied the largest number of PCRs, but had also the largest backlog as illustrated in Table 3.

TABLE 3: Schedule for Planned Submission of PCRs in 2001 and Actual Delivery*

	Schedule	Sector	Investment PCRs		Non-Investment PCRs	
			Schedule	Received	Schedule	Received
UNDP	31 Mar 01	UNDP will concentrate on foam PCRs until 15th February 2001, and will deliver the outstanding solvent PCRs until 31st January 2001 and the three aerosol PCRs and one halon PCR by end-February 2001. After that, the remaining PCRs would be primarily in the foam and refrigeration sectors.	30	31*	10	0
	30 June 01		30	4 SOL, 6 REF, 20 FOA	10	9 TAS**
	30 Sept 01		30	6SOL, 12HAL, 11FOA, 1REF	10	0
	31 Dec 01		29		10	
			* Includes two revised PCRs (received on February 2001) to replaced PCRs submitted for foam evaluation in December 2000 (CPR-32, CPR-54) which are not counted against December 2000 submission. **Excludes 1 revised PCR (GLO-69) already submitted in October 2000			
	Total		**119**	**91**	**40**	**9**
Status at October 12, 2001* **				**+1**		**-21**
	Schedule	**Sector**	**Non-Investment PCRs**			
			Schedule		**Received**	
UNEP	31 Jan 01	TAS	20		18	
	31 Jan 01	Training	2		2	
	Total		**22**		**20**	
Status at October 12, 2001					**-2**	
	Schedule	**Sector**	**Investment PCRs**			
			Schedule		**Received**	
UNIDO	31 Jan 01	Foam	7		5 FOA	
	31 Mar 01	Aerosol	2		3 ARS	
	31 Mar 01	Refrigeration	22		10 REF, 4 FOA	
	31 Apr 01				2ARS, 1SOL, 9REF	
	31 May 01				1REF	
	31 June 01				3 REF, 2 SOL	
	31 Jul 01	Refrigeration	2			
	31 Aug 01				5 REF, 5 FOA	
	31 Oct 01				1ARS, 5REF, 1FOA	
	Total		**33**		**57**	
Status at October 12, 2001					**+24**	
	Schedule	**Sector**	**Investment PCRs**		**Non-Investment PCRs**	
			Schedule	**Received**	**Schedule**	**Received**
IBRD	31 Jan 01	Foam (13) Solvent (2) Compressor (3)	18	12 FOA, 1 SOL, 11 REF, 3 Compressor		
	31 Feb 01	Halon (0) Refrigeration (5) All Sectors (5)	10	3 FOA, 9 REF, 2 Compressor, 3 PRO, 1 STE		
	31 Mar 01	All Sectors	10			
	31 Apr 01	Aerosol (3) All Sectors (10)	13			
	31 May 01	All Sectors	6			
	31 Jun 01	TAS (2) INS (2)			4	
	31 Jul 01	Foam (1) All Sectors (7) TAS (1)	8		1	
	Total		**67**	**45**	**5**	
Status at October 12, 2001** **				**-12**		**-4**

* The schedule was presented to the 32nd Meeting of the Executive Committee (Doc. 32/19 p. 6), taken note of and attached to the final report of this meeting (doc. 32/44).

** The table shows expected PCRs for projects completed as of 31 December 1999 and takes into account the number of outstanding PCRs as of 31 October 2000. The Implementing Agencies agreed to submit in addition to the above schedule, PCRs in 2001 for projects completed through 2000 and up to June 30, 2001.

*** In addition, UNDP submitted 8 PCRs for TAS projects after 12 October 2001. Further 28 PCRs for investment projects and 23 for non-investment projects are scheduled to be submitted until the end of 2001.

**** The World Bank plans to submit further 18 PCRs for investment projects and 1 PCR for a non-investment project until the end of 2001.

(b) Detailed Analysis of project completion reports for investment projects

(i) PCRs received and due

10. Until the end of 2000, UNDP completed 459 investment projects for which it submitted 292 PCRs (63.5 per cent of total) as at 12 October 2001, UNIDO completed 192 projects for which it submitted 178 PCRs (92.2 per cent), the World Bank completed 287 projects and submitted 236 PCRs (80.2 per cent), Germany and the U.S.A. each completed two projects and submitted one PCR (50 per cent), and France completed 7 projects and submitted 6 PCRs (85.7 percent of PCRs due).

Table 4
PCRs for Investment Projects Received and Due by Implementing Agency, Sector and Year
(For Projects Completed Until the End of 2000)

Agency	Sector	PCR(s) Received					PCR(s) Due						
		1998	1999	2000	2001	Total	Before 1997	In 1997	In 1998	In 1999	In 2000	In 2001	Total
UNDP	Aerosol	1	-	9	4	14	-	-	-	-	3	4	7
	Foam	20	33	76	65	194	-	1	6	8	39	76	130
	Halon	-	-	3	11	14	-	-	-	-	-	1	1
	Refrigeration	1	22	2	27	52	-	-	-	4	14	11	29
	Solvent	3	-	-	15	18	-	-	-	-	-	-	-
	Total	**25**	**55**	**90**	**122**	**292**	**-**	**1**	**6**	**12**	**56**	**92**	**167**
UNIDO	Aerosol	6	6	11	6	29	-	-	-	-	-	1	1
	Foam	6	23	3	14	46	-	-	-	1	-	5	6
	Halon	1	-	-	-	1	-	-	-	-	-	-	-
	Refrigeration	10	27	10	29	76	-	-	-	2	2	3	7
	Solvent	4	14	5	3	26	-	-	-	-	-	-	-
	Total	**27**	**70**	**29**	**52**	**178**	**-**	**-**	**-**	**3**	**2**	**9**	**14**
World Bank	Aerosol	4	6	6	-	16	-	-	1	-	-	1	2
	Foam	12	31	38	16	97	-	-	1	2	8	4	15
	Halon	2	1	1	-	4	-	-	-	-	-	-	-
	Multiple Sectors	-	1	1	-	2	-	-	-	-	-		-
	Others	-	-	2	-	2	-	-	-	-	-	-	-
	Production	1	-	-	-	1	-	-	-	-	-	-	-
	Refrigeration	13	29	23	25	90	1	1	1	12	4	12	31
	Solvent	13	6	3	1	23	1	-	1	-	-	1	3
	Sterilant	-	-	-	1	1	-	-	-	-	-	-	-
	Total	**45**	**74**	**74**	**43**	**236**	**2**	**1**	**4**	**14**	**12**	**18**	**51**
Bilateral	Aerosol	-	-	-	-	-	-	-	-	-	-	1	1
	Foam	-	-	3	2	5	-	-	-	-	-	1	1
	Halon	-	-	1	-	1	-	-	-	-	-		
	Refrigeration	-	1	1	-	2	-	-	-	-	1		1
	Total	**-**	**1**	**5**	**2**	**8**	**-**	**-**	**-**	**-**	**1**	**2**	**3**
Grand Total		**97**	**200**	**198**	**219**	**714**	**2**	**2**	**10**	**29**	**71**	**121**	**235**

11. The largest number of PCRs received were for completed foam projects, but the number of PCRs still outstanding for this sector is still high, particularly for UNDP foam projects. The second largest number was received for the refrigeration sector. However, it is also the sector with the second largest number of outstanding reports. The backlog of PCRs for early investment projects completed until the end of 1996 has been reduced to 4 (from 16 last year).

12. The 234 PCRs received in the reporting period as of 12 October 2001 represent projects completed in 35 countries. A large part of the completion reports (58.9 per cent) are for projects implemented in five countries (Brazil, People's Republic of China, India, Indonesia, and Malaysia).

(ii) ODS phase-out achieved

13. ODS phase out in the projects reported upon in the project completion reports is found to be as planned in most investment projects, the total phase out reported being slightly more than the planned amount (see Table 5 below). However, information in the PCRs is often neither complete nor coherent. In many cases, unit production and ODS consumption data before and after the conversion are not completed. Also, the ODS phase-out data reported in the PCRs are in 121 cases out of 234 different from the ODS data reported in the 2000 Progress Report .

Table 5
ODS Phased Out by Projects with PCRs Submitted

Agency	Number of Projects	PCR	2000 Progress Report	
		ODP to be Phased Out	ODP to be Phased Out	ODP Phased Out
France	3	65.40	65.40	-
IBRD	45	2,370.25	2,376.44	2,334.95
UNDP	128	5,032.16	5,016.00	4,900.00
UNIDO	58	5,660.70	5,575.26	5,466.88
Total	234	13,128.51	13,033.10	12,701.83

(iii) Implementation Delays

14. Delays for project implementation show a great deal of variance in the project completion reports. Out of 234 projects, 61 projects were completed before the planned date, 12 projects were completed on time, 159 projects showed delays ranging from one month to 57 months and two PCRs did not indicate the date of completion. In 85 of 234 projects, (36%), delays of more than 12 months occurred compared to 100 or 53% out of 188 projects completed last year. Delays cannot be attributed to particular sectors or implementing agencies. They tended to be longer than average for large projects. Completion dates in 33 PCRs differed from the dates indicated in the 2000 Progress Reports resulting also in differences of average delays. Average delays for projects reported as completed in 2001 were slightly less than in the years before (see Table 6 below).

Table 6
Implementation Delays
(Figures in brackets show last year for comparison)

Agency	Number of Projects	Average Delays as per PCR (Months)	Average Delays as per 2000 Progress Report (Months)
France	3	25.67	21.63
IBRD	45	15.44	16.29
UNDP	128	6.98	7.39
UNIDO	58	10.80	8.49
Total	234 (188)	9.80 (12.61)	9.56 (12.28)

15. An analysis of common causes of implementation delays, based on information in PCRs and evaluation as well as progress reports is currently under preparation by the Secretariat.

(iv) Quality and completeness of information received

16. Some further progress has been made with regard to the completeness of PCRs. Key elements are missing less frequently than during the previous reporting period and the new PCR format is generally providing more information than the previous one. Problems persist particularly with regard to information about incremental operating costs and to some extent the destruction of equipment and the annual consumption of ODS and substitutes (see Tables 7a and 7b).

Table 7a
Information provided in 130 Old Investment Project Completion Reports Received During this Reporting Period

	Provided		Not Provided		Incomplete		"Not Applicable"[19]	
	Number of Projects	Percentage %	Number of Projects	Percentage %	Number of Projects	Percentage %	Number of Projects	Percentage %
List of Annual Consumption of ODS and substitutes	74	54%	13	10%	46	34%	3	2%
List of Capital Equipment	130	96%	6	4%	0	0%	0	0%
Operating Cost	25	18%	57	42%	13	10%	41	30%
List of Destroyed Equipment	71	52%	16	12%	22	16%	27	20%

[19] According to indications of Implementing Agencies

Table 7b
Information provided in 104 New Investment Project Completion Reports Received During this Reporting Period

	Provided		Not Provided		Incomplete		"Not Applicable"[19]	
	Number of Projects	Percentage %	Number of Projects	Percentage %	Number of Projects	Percentage %	Number of Projects	Percentage %
List of Annual Consumption of ODS and substitutes	64	65%	0	0%	33	34%	1	1%
List of Capital Equipment	97	99%	1	1%	0	0%	0	0%
Operating Cost	52	53%	5	5%	21	21%	20	20%
List of Destroyed Equipment	57	58%	7	7%	25	26%	9	9%

[19] According to indications of Implementing Agencies

17. For the Incremental Operating Cost (IOC) reported actual expenditures of 17,058,163 Mio. US $ were 4% lower than approved expenditures (see Table 8). However, the World Bank reported about one per cent higher than planned expenditures while for UNDP and UNIDO actual expenditures were 9% and 2% lower than planned expenditures (see table 8). Only 77 PCRs (33%) of the 234 PCRs received provided details of operating costs, 62 PCRs (26%) did not provide such details, 34 (15%) gave some but incomplete data, and 61 PCRs (26%) responded to this question with "not applicable". Although in the new PCR format some more data were provided than in the old one, overall the information on actual IOC or Incremental Operating Savings (IOS) remains very limited, that means a significant part of approved funding is not clearly accounted for. The implementing agencies report difficulties to obtain data on IOC or IOS from the enterprises, which rarely made detailed figures available. This is confirmed by the experience made during the evaluations of foam, compressor and solvent projects. During the months after handover of the new equipment, a better chance exists that enterprises deliver data on recent production figures as well as costs and quantities of new materials used, especially if the Implementing Agency withholds parts of project funding, wherever this is applicable until such data have been provided.

Table 8
Incremental Operating Costs

Agency	Number of Projects	Approved Operating Cost (US $)	Actual Operating Costs (US $)
France	3	-7,024	31,395
IBRD	45	4,629,660	4,697,945
UNDP	128	6,568,550	5,974,808
UNIDO	58	6,512,666	6,354,015
Total	234	17,703,852	17,058,163

18. Equipment destruction or disposal is required to be reported in the PCRs for investment projects. Out of the 234 PCRs received, 126 (54%) provided information, 47 (20%) gave incomplete data, 23 (10%) did not report and 36 (15%) reported "not applicable" (see Tables 7a and 7b above). Performance and reporting with regard to equipment destruction improved to some extent in comparison to last year, in particular in the new PCR format, but is still not satisfactory. In future, the names of certifying staff / experts should always be indicated and photos of the destroyed equipment be attached. Moreover, the list of equipment to be destroyed as well as the modalities for such destruction should already be specified in the project document.

19. The implementing agencies have been requested to provide until the end of November 2001, missing data on IOC and equipment destruction in the PCRs submitted during the reporting period.

(v) Overall assessment and rating

20. During the reporting period, implementing agencies submitted PCRs using two different rating schemes that are in the old and the new PCR format. In the old PCR format, used for 130 projects, 36% of investment projects were marked either satisfactory or highly satisfactory, 60% as satisfactory though not as planned, and only 1.5% indicated as unsatisfactory and 2.5% as not applicable (see Table 9a). Those with the new overall assessment scheme represent 104 PCRs. 8% were indicated as highly satisfactory, 42% as satisfactory and 50% as less satisfactory which appears as a more balanced and realistic overall picture, being more in line with the evaluation on foam, compressor and solvent projects carried out during the current year (see Table 9b).

Table 9a
Old Overall Assessment of Project Implementation by the Agencies in the Old PCR format

Old Assessment	France	IBRD	UNDP	UNIDO	Total	% of Total
Highly satisfactory, more than planned	-	1	14	4	19	15%
Satisfactory, as planned	1	9	11	7	28	21%
Satisfactory, though not as planned	2	33	41	2	78	60%
Unsatisfactory, less than planned	-	2	-	-	2	1.5%
Unacceptable	-	-	-	-	-	0%
Not Applicable (cancellation report)	-	-	-	3	3	2.5%
Total	3	45	66	16	130	100%

Table 9b
New Overall Assessment of Project Implementation by the Agencies in the New PCR Format

New Assessment	UNDP	UNIDO	Total	% of Total
Highly satisfactory	1	7	8	8%
Satisfactory	24	20	44	42%
Less satisfactory	37	15	52	50%
Total	62	42	104	100%

(vi) Experiences with the new PCR format

21. The experience with the new PCR format for investment projects, which is being used since early 2001, following decision 32/18 of the Executive Committee, has overall been positive. As said above, so far 104 PCRs in the new format have been received. Some initial difficulties with the reporting format and the enhanced word template were encountered by the Implementing Agencies. Minor adjustments to the format and software were and are being made and the Implementing Agencies' staff and their Consultants as well as the companies and financial intermediaries become accustomed to using it.

(c) Non-investment project completion reports

22. The largest number of PCRs received and also those due concern technical assistance projects, implemented mainly by UNDP and UNEP. The backlog in PCRs for training projects, implemented mostly by UNEP, has almost been eliminated whereas for bilateral training projects there are still 14 PCRs due.

Table 10
Project Completion Report Received and Due for Non-Investment Projects
(for projects completed until the end of 2000)

Agency	Sector	See PCR(s) Received so far for Year Due					PCR(s) Still Due						
		1998	1999	2000	2001	Total	Before 1997	In 1997	In 1998	In 1999	In 2000	In 2001	Total
UNDP	Demonstration	-	-	5	-	5	-	-	-	-	1	1	2
	Technical Assistance*	-	6	38	10	54	-	2	3	10	7	3	25
	Training	-	18	6	-	24	-	-	-	-	-	-	-
	Total	**-**	**24**	**49**	**10**	**83**	**-**	**2**	**3**	**10**	**8**	**4**	**27**
UNEP	Technical Assistance	1	61	3	18	83	-	-	-	-	1	14	15
	Training	8	34	1	2	45	-	-	-	-	3	-	3
	Total	**9**	**95**	**4**	**20**	**128**	**-**	**-**	**-**	**-**	**4**	**14**	**18**
UNIDO	Demonstration	-	-	-	-	-	-	-	-	-	4	2	6
	Technical Assistance	-	6	8	-	14	-	-	1	-	1	-	2
	Training	-	1	1	-	2	-	-	-	-	-	-	-
	Total	**-**	**7**	**9**	**-**	**16**	**-**	**-**	**1**	**-**	**5**	**2**	**8**
World Bank	Demonstration	1	-	-	-	1	-	-	-	-	-	-	-
	Technical Assistance	4	5	6	-	15	1	-	-	1	-	1	3
	Training	-	3	-	-	3	-	-	-	-	-	-	-
	Total	**5**	**8**	**6**	**-**	**19**	**1**	-	-	**1**	-	**1**	**3**
Bilateral	Demonstration	5	5	12	-	22	-	-	-	1	3	2	6
	Technical Assistance	-	-	13	1	14	4	-	1	-	1	3	9
	Training	1	3	19	1	24	5	1	1	-	1	6	14
	Total	**6**	**8**	**44**	**2**	**60**	**9**	**1**	**2**	**1**	**5**	**11**	**29**
Grand Total		**20**	**142**	**112**	**32**	**306**	**10**	**3**	**6**	**12**	**22**	**32**	**85**

* 8 PCRs received by UNDP after 12 October 2001 for TAS projects are not counted here.

23. According to Decision 29/4, country programmes, project preparation, as well as UNEP's recurrent activities including networking, no longer require PCRs. According to the same decision, institutional strengthening projects are now jointly reported upon with the extension requests; such reports will be counted as PCRs in the future (See table 11)

Table 11
Overview of Institutional Strengthening

Agency	Completed Projects up to December 2000	PCR Received for Projects Completed up to December 2000	Terminal Reports Received With Extension Requests
France	1	1	0
IBRD	8	7	1
UNDP	39	2	37
UNEP	39	18	21
UNIDO	3	2	1
USA	1	0	1
Total	91	30	61

24. After its approval at the 32nd Meeting of the Executive Committee, the new formats for Terminal Reports and Extension Requests for IS projects have been applied. The Terminal Reports usually provide much more complete and clearer information than before on the results achieved during the previous implementation phase, and link these results to the tasks described in the action plans for the following year.

25. For the analysis of their content, only the 32 PCRs for non-investment projects received as of 12 October 2001 were taken into account in this section.

26. Total actual expenditures were reported to be 86.5% of the planned expenditures which indicates slight overall savings (see Table 12).

Table 12
Budgets reported in PCRs received for Non-Investment Projects

Agency	Number of Projects	Approved Funds (US$)	Actual Funds (US$)	Average Delays (Months)
Bilateral	2	231,560	192,685	21.32
UNDP	10	1,185,400	1,060,991	11.97
UNEP	20	1,310,000	1,105,062	16.22
Total	32	2,726,960	2,358,738	15.21

27. The delays realized for project implementation show a great deal of variance. Out of 32 non-investment projects, 3 were completed before the schedule date, 4 projects were completed on time and there were delays in 25 projects ranging from one month to 57 months. In 14 projects, delays of more than 12 months occurred. No particular patterns with regard to delays are observable. The average delay for non-investment projects is 15.2 months beyond the planned completion date.

28. All PCRs did report an overall assessment. 6% of the projects were marked as highly satisfactory, 44% as satisfactory as planned, 50% as satisfactory though not as planned and none as unsatisfactory although less than planned or unacceptable (see Table 13).

Table 13
Overall Assessment of Non-Investment Projects by Agencies

Assessment	UNDP	UNEP	Bilateral	Total	% of Total
Highly satisfactory, more than planned	2	-	-	2	6%
Satisfactory, as planned	5	9	-	14	44%
Satisfactory, though not as planned	3	11	2	16	50%
Unsatisfactory, less than planned	-	-	-	-	0%
Unacceptable	-	-	-	-	0%
Total	10	20	2	32	100%

(d) Schedule for Submission of PCRs in 2002

29. The Implementing Agencies submitted, as in previous years, schedules for submission of PCRs due. UNDP continues its efforts to eliminate the backlog of PCRs for projects completed in earlier years, while the World Bank has only a few such projects left for reporting, and UNIDO and UNEP have eliminated the backlog. Table 14 shows expected PCRs for projects completed as of 31 December 2000 and takes into account the number of outstanding PCRs as of 12 October 2001. The Implementing Agencies will, in addition to the above schedule, submit PCRs in 2002 for projects completed through 2001 and up to June 30, 2002.

Table 14: Schedule for Submission of Outstanding PCRs in 2002*
(In brackets PCR due as of 12 October 2001)

	Schedule	Sector	Investment PCRs	Non-Investment PCRs
UNDP	31 Mar 02	UNDP will concentrate on: Completing Inv. PCRs for projects completed in 97, 98, 99 and 00. For Non-Inv complete at least 30 by Dec 02.	35	
	30 Jun 02		35	
	30 Sept 02		35	
	31 Dec 02		35	
	Total		**140**	**30**
Total PCRs Due as of 12 October, 2001			**167**	**27**
	Schedule	**Sector**	**Investment PCRs**	**Non-Investment PCRs**
UNEP	Schedule to be delivered			
	Total			
Total PCRs Due as of 12 October, 2001				**18**
	Schedule	**Sector**	**Investment PCRs**	**Non-Investment PCRs**
UNIDO	End of December 2001	Refrigeration (7) Foam (5) Demonstration (6)	12	6
	March 2002	Foam (1)	1	
	June 2002	Aerosol (1)	1	
	Will be determined	Technical Assistance (2)		2
	Total		**14**	**8**
Total PCRs Due as of 12 October, 2001			**14**	**8**
	Schedule	**Sector**	**Investment PCRs**	**Non-Investment PCRs**
IBRD	February	Aerosol (2) Refrigeration MAC (1) Foam (4)	7	
	April	Refrigeration MAC(1) Foam (2) Refrigeration (3)	6	
	June	Foam (3) Refrigeration (6) Several (1)	9	1
	August	Refrigeration (6)	6	
	October	Refrigeration (5)	5	
	Total		**33**	**1**
Total PCRs Due as of 12 October, 2001			**51**	**3**

* Some of the PCRs due as of 12 October, 2001, will already be submitted in 2002, as indicated in Table 3 above.

(e) Recommendations

30. The Executive Committee might:

(a) Take note of the schedule for submission of PCRs due in 2002.

(b) Request the implementing agencies to report on measures taken to improve submission of data for PCR from beneficiary companies, in particular on experiences made with withholding a part of projects funds until such data have been delivered and proof of equipment destruction has been provided as authorized by the Executive Committee in its decision 32/18.

(c) Request the implementing agencies to specify in the project documents the list of equipment to be destroyed and the modalities for such destruction including the certification, as well as the data required for the PCR.

(d) Request the implementing agencies to ensure consistency of data reported in the PCRs and in their Annual Progress Reports.

III. Follow-up on decision 33/2 concerning the evaluation of foam projects

(a) Comments on individual project case studies and country evaluation reports

31. After considering the final synthesis report on the evaluation of foam projects at its 33nd Meeting, the Executive Committee requested implementing agencies and the National Ozone Units concerned to provide comments on country reports and project evaluation case studies, and particularly explanations on the projects where the evaluation had left questions open. It also requested the Senior Monitoring and Evaluation Officer to present a synthesis of such comments and explanations in the consolidated project completion report to the Thirty-fifth Meeting of the Executive Committee (Decision 33/2, paragraph i).

32. Comments were received during the months from May to September, 2001 as summarized in Table 1. In case no comments were received, it may be assumed that no corrections were required. The comments from UNDP and UNIDO were quite detailed and project specific while those from the World Bank were more general. The NOUs commented mainly on the country reports, except for the Financial Agent of the World Bank in Turkey who provided detailed comments on some individual Project Evaluation Reports.

Table 1: Comments Received on Evaluation Reports of Foam Projects				
Country	**NOU**	**Implementing Agency**		
		UNDP	**UNIDO**	**IBRD**
Argentina	None	Yes	None	n.a.
Brazil	None	Yes	n.a.	(Yes)
Chile	(Yes)	n.a.	n.a.	(Yes)
China	Yes	Yes	n.a.	(Yes)
Malaysia	Yes	Yes	None	n.a.
Nigeria	None	Yes	n.a.	n.a.
Syria	None	n.a.	Yes	n.a.
Thailand	Yes	Yes	n.a.	(Yes)
Turkey	F.A.	n.a.	Yes	(Yes)

Yes: Comments received, (Yes): General comments received
None: No comments received
n.a.: No projects implemented by the IA in this country
F.A.: Financial Agent

33. The comments were forwarded to the evaluation consultants who agreed with some of them and disagreed with others. In the former case, adjustments and corrections were made in the final project evaluation reports (PER) and the country evaluation reports (CER). In case of persistent differences, comments of both sides were either inserted in the reports or were attached to them. In few cases where comments arrived late, it was not possible to obtain further feedback from the consultants as they had moved forward to other tasks. In these cases, the Senior Monitoring and Evaluation Officer finalized the reports. The final versions of the PERs and CERs have been (or will be) sent before the 35th Meeting of the Executive Committee to the Implementing Agencies and the concerned NOUs. They will be available on request in a printed version and will be placed also on the Secretariat's web-site in the section "Executive Committee, Evaluation Reports".

34. For a number of PERs, differences of opinions and assessments between the consultants and the Implementing Agencies persist. These concerns mainly the following issues:

(a) the qualitative assessments in the overall rating scheme which by nature are to some extent subjective;

(b) estimates of baseline ODS consumption in some projects where the consultants maintain their doubts about the original figures established during project preparation;

(c) differences of assessments on the appropriateness of certain technologies and technology changes, in particular concerning LCD technology and high pressure machines;

(d) persistent controversies about the eligibility for some equipment including cases, where retrofitting was considered by the evaluation consultants as a sufficient alternative to new equipment; or contradictions between lists and costs of equipment approved and reported and the reality observed in some companies;

(e) general lack of data concerning incremental operating costs or savings;

(f) equipment not yet destroyed or destruction not sufficiently documented / certified.

35. In several cases, only detailed audits of company records would possibly allow to clarify the outstanding issues. As the results of such additional inquiries are uncertain, and in view of the limited amounts of funds disputed and the difficulty of recovering them, one option is to focus on lessons learnt and to apply them for future projects, as it was done by the Executive Committee in adopting decision 33/2 and related decisions in the 34th Meeting. Another option is that the Executive Committee requests the Secretariat to send an evaluation consultant jointly with a financial auditor who is familiar with the local language and conditions to verify the records in selected projects. A third options is to request the Implementing Agencies to organize audits of selected projects implemented with MLF funds in a more systematic way, including field visits in cooperation with the auditing authorities of the countries concerned, and to report regularly on the results of such audits to the Executive Committee. The second and the third option might imply the need for additional budgetary resources to organize such missions.

36. In the two sections b and c below, further information is provided with regard to project duration which was addressed in Decisions 33/2, paragraph b and 34/15, and fire incidences (Decision 33/2 paragraph n). Information on issues related to the validation of CFC baseline consumption (Decision 33/2, paragraph c, and Decision 34/14), costs for technical assistance, international consultants and trials (Decision 33/2, paragraph h, j, k and Decision 34/16) are provided in the overview of issues identified during project review (Document UNEP/OzL.Pro/ExCom/35/20).

37. The finalization of the guidelines for equipment destruction by the Secretariat, in cooperation with the Implementing Agencies, and the review of the agreement on eligibility of high pressure machines for rigid foam insulation projects (Decision 33/2, paragraph m) have not yet been accomplished but are foreseen for completion by the end of this year.

(b) Duration of Foam Projects

38. In its 34th Meeting, the Executive Committee, in keeping with the requirements of Decision 33/2, decided:

(a) To request the Secretariat and the implementing agencies to review the duration of individual foam projects with a view to shortening the time for the completion of HCFC-141b conversions, and to report their findings to the Sub-Committee on Monitoring, Evaluation and Finance at its 15th Meeting (decision 34/15).

39. This decision relates to a finding in the foam evaluation report that the actual average duration for implementation of approved foam projects has decreased in recent years, while new projects are approved with implementation duration of generally 36 months, even in projects replacing CFCs with HCFC-141b, where only limited scope of equipment and process changes are required. The Secretariat discussed this issue with Representatives of the Implementing Agencies during the Interagency Coordination Meeting (Montreal, September 2001).

Table 2: Average of Duration of Completed HCFC-141b Projects (in months)

By Subsector and Implementing Agency

Subsector	France	IBRD	UNDP	UNIDO	Total Average Duration	Total Number of Projects
Flexible molded	41.57		18.23		29.90	2
Flexible slabstock			29.47		29.47	1
Integral skin		28.08	23.34	17.27	23.65	27
Multiple-subsectors		18.28	26.79		25.37	12
Rigid	37.53	34.86	22.62	15.73	24.10	169
Rigid (insulation refrigeration)		44.47	29.36	18.32	32.79	20
Total average.	39.55	34.97	23.42	16.18	24.94	n.a.
Total number of Projects	2	37	177	15	n.a.	231

40. Table 2 shows that the World Bank has the longest average duration of completed HCFC-141b projects (35 months), while UNDP projects took an average of 23 months to complete, and UNIDO projects 16 months. This is the basis for the recommendation of the evaluation and subsequent decision of the Executive Committee "to request the implementing agencies, in cooperation with the Secretariat, to determine proposed project duration on a case-by-case basis, taking into account the particular circumstances, instead of presenting all projects with the same standard duration" (Decision 33/2 paragraph b).

41. Past experience as presented in Table 3 below shows, that UNDP realized for HCFC-141b foam projects average project durations of below 25 months in the countries which had the vast majority of completed projects of this type. UNIDO projects were mostly implemented in less than 18 months, while the World Bank shows a variable record, with average project duration of below 20 months in Turkey and above 40 months in Brazil, Chile, México and Uruguay. However, the data in this table do not allow identifying "difficult" countries or regions as the number of projects in countries with consistently above average project duration is fairly small. A separate analysis did not show a significant correlation between project size and duration either.

Table 3: Average of Duration of Completed HCFC-141b Project (in months) By Country and Implementing Agency						
Country	**France**	**IBRD**	**UNDP**	**UNIDO**	**Total Average Duration**	**Total number of Projects**
Argentina			32.47		32.47	3
Brazil		45.64	21.23		23.33	35
Chile		55.33			55.33	4
China		39.55	49.20		44.38	4
Colombia			13.20		13.20	1
Egypt			25.15		25.15	5
Guatemala			24.33		24.33	1
India		36.97	22.37		24.14	58
Indonesia			19.73		19.73	18
Jordan		25.33			25.33	1
Lebanon	39.55				39.55	2
Macedonia				7.13	7.13	1
Malaysia			24.15	14.71	22.53	35
Mexico		52.75	21.93		28.10	10
Morocco			17.23		17.23	2
Nigeria			29.07		29.07	3
Panama			61.90		61.90	1
Paraguay			25.33		25.33	1
Philippines			35.53		35.53	4
Thailand		25.97	23.62		24.66	27
Tunisia				17.27	17.27	1
Turkey		19.50			19.50	5
Uruguay		57.83	29.47		43.65	2
Venezuela				18.57	18.57	7
Total Average Duration	39.55	34.97	23.42	16.18	24.94	n.a.
Total Number of Projects	2	37	177	15	n.a.	231

42. UNIDO agreed to reduce the duration on a case by case basis, where possible, but still brought 3 projects with a duration of 30 months and one with 24 months to the 34th Meeting, all of which were approved by the Executive Committee. UNDP based the proposed project duration for foam projects presented to the 34th meeting on an analysis of past performance of completed and on-going projects by subsector and country but not by technology. Proposed duration varied between 30 months for projects and countries considered to allow smooth implementation and 36 months for projects facing more difficult conditions. The vast majority of the 37 foam projects with conversions to HCFC-141b approved at the 34th Executive Committee Meeting for implementation by UNDP were in India (11 projects with 30 months duration and 4 with 36 months) and in Brazil (18 projects with 36 months duration). However, in the past, the actual duration for 51 similar completed UNDP projects in India was 22 months and for 32 projects in Brazil 21 months. The World Bank did not commit to a reduction of the average duration of certain types of projects and did not present HCFC-141b foam projects to the 34th meeting.

43. In view of the data above, and in the light of requirements of the compliance period, the Executive Committee may wish to request the Implementing Agencies, in cooperation with the Secretariat, to take further actions with a view to shorten in particular the time for the completion of conversions to HCFC-141b in foam projects.

(c) Report on Incidences of Fire

44. Decision 33/2, paragraph n, had requested the Implementing Agencies to report on incidences of fire resulting from conversion projects, to conduct safe inspection where applicable and to up-date safety guidelines, as required.

45. There have been a total of three fire incidences reported to the World Bank in ODS foam projects which took place after conversion and which can be attributed to the conversion technology. These incidences all took place in China and involved Liquified Petroleum Gas (LPG) or hydrocarbon technology in one case and methylene chloride technology in two cases. In the case of the project involving LPG technology for the production of extruded polyethylene and polystyrene foam, several small fires were caused by over-heating in the foam or sparks. In all incidents at this plant, the fires were controlled by factory workers with fire extinguishers and no property or equipment damage occurred. Both methylene chloride projects were at enterprises producing flexible polyurethane foam. The fires at the enterprises were caused by an exothermic reaction in the core foam block. Damage was estimated at over US $ 60,000 in one case and over $ 250,000 in the other case and new conversion equipment was damaged in both cases. A tragic consequence of the fire in one enterprise was the loss of a life. The two enterprises were compensated by their insurance companies, made necessary repairs and replacements, and have resumed production. The enterprise which suffered the most material damage in terms of equipment has installed an additional smoke detection system to its safety equipment. In all three cases, the enterprises had passed safety audits conducted by the local fire fighting bureaus immediately after conversion.

46. UNDP reported on four incidences of fires in companies with foam projects, in addition to the one reported by the evaluation for THA/FOA/13/INV/36 - PORNSRI. In two companies in Egypt the fires were not related to the projects under implementation, but may result in delays in one case while for the other no complications are expected. In another company in Malaysia, the reasons for the fire had not yet been reported, and in one enterprise in Panama, the factory was still using CFC-12 at the time of the fire, and the incident was unrelated to the project. However, settlement of insurance claims and the reconstruction took considerable time and caused implementation delays. Project completion is expected for mid-2002.

47. UNIDO has informed that no reports had been received on fires in foam projects.

48. In view of the above, there seems to be no need for additional actions by the Executive Committee, Implementing Agencies or NOUs. The current practices foresee the funding of safety equipment and training, where needed, and safety inspections by local fire authorities are regularly implemented according to national rules.

IV. Summary of the Desk Study on the Evaluation of Aerosol Projects

(a) Background

49. As foreseen in the 2001 Monitoring and Evaluation Work Programme, a desk study has been prepared by a consultant on 58 completed aerosol projects, based mainly on an analysis of project documents, summary sheets and completion reports. This study was then summarized by the Senior Monitoring and Evaluation Officer.

50. A brief overview of aerosol projects from the beginning of the Fund's operations until today is followed by a presentation of the main findings of the desk study, evaluation issues identified and an outline of the evaluation methodology to be used in the main phase of the evaluation. As usual, for desk studies, the findings are preliminary, except for the assessment of the quality of project documents and completion reports. The problems found in project preparation and implementation need further analysis and corroboration during field visits and discussions with stakeholders concerned, primarily the companies and the implementing agencies.

(b) Overview of the aerosol sector

51. Since the beginning of the Fund's operations, in 1992, a total of 103 aerosol projects were approved, with a total funding volume of 26 Mio US $. Most of these projects were approved during the years 1995 to 1998. The average funding volume per project is steadily becoming smaller in recent years along with the declining average size of the beneficiary companies.

Table 1: AEROSOL INVESTMENT PROJECTS APPROVED

	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total
Number of Projects Approved	6	2	4	14	18	25	13	11	10	103
Total Funds Approved	6,453,995	394,348	2,162,391	4,689,844	3,862,911	4,463,989	1,985,455	1,342,906	726,729	26,082,568
Average Size of Projects Approved	1,075,666	197,174	540,598	334,989	214,606	178,560	152,727	122,082	72,673	253,229

52. The 103 approved projects used 10 different technology choices (some projects used several technologies). In 148 cases CFC's (CFC-11, 12 or 13) were replaced with various hydrocarbon propellants, two projects replaced them with carbon dioxide, two changed to HFC-134a, and one to dimethyl ether (DME). This shows the pre-eminence of the hydro-carbon propellants - called Liquid Petroleum Gas (LPG's) or Hydrocarbon Aerosol Propellants (HAP's) rather interchangeably.

53. The World Bank focused on projects in the P.R. of China, Malaysia, India, Tunisia and Jordan, UNDP and UNIDO have each implemented a larger number of projects than the World Bank but managed together less than half of the total funding. UNDP completed projects in some Asian Countries (India, Malaysia, Thailand and Vietnam), while UNIDO concentrating on Africa, the Middle East, and some European Countries increased its share strongly during recent years.

(c) ODS phase-out planned and achieved

54. The key measure of success is the reported phase-out of ODS. Table 2 provides this data, based on a review of 58 Project Completion Reports (PCR's). A phase-out of about 21,084 ODP tonnes (per year) is reported - at an average cost of $ 1.22 (US) per kg, which is a very good cost effectiveness compared with later aerosol projects and also with other sectors. The other 13 completed projects for which no PCRs are yet available added only 855 ODP tonnes to the total phase out achieved, according to data from the agencies progress reports. It is evident that the early big projects realized the largest part of the phase-out, in particular three very large projects implemented by the World Bank in China.

Table 2: RESULTS AND EFFICIENCY OF 58 COMPLETED AEROSOL PROJECTS WITH PCRs

(According to PCR's)

Agency	No of PCR	Total ODS phase-out approved (ODP tonnes)	Total ODS phase-out reported (ODP tonnes)	Average phase-out achieved per project (ODP tonnes)	Average planned cost* per kg of ODS phase-out (US$/Kg)	Average Actual cost* per kg of ODS phase-out (US$/Kg)
IBRD	16	17,381	17,741	1,109	0.94	1.01
UNDP	14	504	504	36	3.08	2.95
UNIDO	28	2,839	2,839	101	2.28	2.20
Total	**58**	**20,724**	**21,084**	**364**	**1.18**	**1.22**

*Funds may include counterpart funding from enterprise in some projects.

55. The ODS phase-out tonnage per year (planned) and (achieved) appear to be very close. The baseline consumption figures come from the fillers, or counterparts, and are hard to verify. Some may have been inflated, to gain various advantages in negotiations. On the other side, aerosol productions in many Art. 5 countries have been expanding at the rate of about 4% per year. Considering a typical three year project duration, ODS emissions might have increased without a conversion by about 12.5% during this period, underlining the importance of the early phase out achieved.

(d) Implementation Delays

56. Despite the efforts made for project preparation and planning, many projects experienced delays, sometimes as long as three years. An analysis of 71 projects, completed by the end of 2000, showed that 11% were completed prior to their initial planned completion date, 1% were completed on time, and 88% had implementation delays between one and 36 months. Most projects with implementation delays show delays of 13-34 months. Countries having the longest delays include India, Jordan and Tunisia. When applying the revised planned dates of completion (revisions were accepted by the Executive Committee at its 22nd, 28th and 31st Meetings) implementation delays decreased to some extent, but were still experienced by 83% of all completed projects.

57. The delays have been precipitated by a number of factors that could in most cases not have been anticipated except by some arbitrary contingency allowance --and then only by approximation. These have included shipping delays, local bureaucratic delays, unplanned activities at the facility, revisions, and so forth.

(e) Funds Approved and Disbursed

58. The difference between the approved and actually disbursed funds are, with a few notable exceptions, fairly small. However, in some cases, particularly in World Bank projects, increased counterpart funding is reported to have covered unforeseen and sometimes important cost increases. Incremental operating savings (IOS), generally of significant importance in this sector, have been much less than planned in World Bank projects, while UNIDO projects had planned little IOS and realized more. These figures need further analysis.

Table 3: FUNDS APPROVED AND DISBURSED FOR COMPLETED AEROSOL PROJECTS

Agency	No. of Completed Projects	Total Funds Approved (US$)	Total Funds Disbursed (US$)	Difference	% of Difference on Total Funds Approved
IBRD	18	9,940,634	10,015,732	75,098	1%
UNDP	21	2,852,381	2,765,196	-87,185	-3%
UNIDO	31	6,612,952	6,497,732	-115,220	-2%
Germany	1	90,400	52,952	-37,448	-41%
Total	71	19,496,367	19,331,611	-164,756	-1%

(f) Project preparation and eligibility issues

59. Project documents do not always transmit clear-cut ideas of what was involved, perhaps due to the diversity of apparent needs at the various filling plants, omissions, exaggerations, language barriers and complexities of negotiations between the implementing agencies and the enterprises. Some fillers received equipment not awarded to others who had similar apparent needs, such as MolSieve systems for LPG (partial) purification. Some projects included replacement water-baths (hot-tanks), where it is not clear why those normally required for CFC aerosols could not have been used equally well for non-ODS aerosols.

(g) Viability of projects

60. Completed projects were viable in that they caused the phase-out of very significant tonnages of ODS. When viewed from other standpoints, they were less viable. Except in the rare instance or two where carbon dioxide was used as an ODS alternative, the resulting aerosol products were more flammable, and frequently had a somewhat disturbing odour.

61. Hydrocarbon propellants have always been substantially cheaper than the ODS types. They are also about 40% as dense, in the liquid form. These aspects have raised filler interest in replacing ODS propellants with hydrocarbons, making it easier for the MLF to effectively promote phase-out programs.

(h) Fate of old equipment

62. The standard format is to require the sledge-hammer or other positive destruction of equipment that is replaced by that awarded to fillers by MLF. Numerous PCS’s indicate that this is indeed done, but certification is often lacking.

63. The only difference between a line satisfactory for ODS aerosol manufacture, and one suited for non-ODS aerosols, in addition to supplementary safety measures required when changing to highly flammable gases, is in the gas-tightness of the propellant gassing machine, particularly at the gassing heads. In the USA, for example, hundreds of aerosol production lines were converted to hydrocarbon filling operations during the 1970s without the need for making any purchases of new machines. This would suggest a market for "ODS lines", provided the gasser was given a complete maintenance regimen.

(i) Learning curve

64. During the decade of the 1990s, consultants have learned their job increasingly well. This is evident from the increasing sophistication of later project documents. Of course, there are still major differences in the technical abilities, writing skills and other attributes of consultants, but the present level is quite acceptable.

(j) Quality of project documents

65. The Implementing Agency and consultants must often deal with complex and multi-faceted projects, sometimes skewed by a lack of information or even mis-information from the counterpart. In view of this situation, the quality of the project documents reviewed is generally acceptable or better, despite the weaknesses observed below.

66. Project documents vary considerably in format, especially between UNDP/UNIDO and the World Bank. Various errors are readily identified; both mathematical and technical. Many of the terms are mis-represented or are vague in their significance. Heavy use of initials, without explanation, can make problems for those unfamiliar with the vernacular and terms. Some specifics are summarized as below. They appear first in the project documents and then again in the Project Completion Reports, for which further remarks are made in a later section.

67. Descriptions of existing and replacement equipment are rarely detailed. For example, if old equipment were to be replaced with new equipment of double the capacity, this information would usually not be included.

68. Terms such as "production line" are used, without further definition. A complete aerosol production line might include 10 to 20 machines, depending upon versatility and complexity. Only a few (at most) would have to be replaced to convert the line from ODS to non-ODS productions.

69. The assumption is uniformly made that all gassers, used for CFC injection, are of inappropriate manufacture or condition, causing them to leak propellant at rates intolerable for flammable (non-ODS) operations. Many will also have standard (non-explosion proof) electricals. Even though retro-fitting might suffice to convert these machines to non-ODS service, their removal from the production line for that up-grading would cause substantial down-time. This has led the MLF to a technical / political decision to replace all gassers with new machines of equal or somewhat larger capacities, and then destroy the old ones. However, it is known that some existing gassers could have been used for non-ODS service, including air-operated types. Also, such gassers could have been alternatively used for carbon dioxide injection.

70. The term "filler" is widely used in documents, where it is fairly obvious that "gasser" would be the operative word. A "filler", or filling machine, is the device used to introduce the product concentrate into containers. For an aerosol hair spray, this might be an alcoholic solution of hair fixative resin and fragrance. The filling machines, used for ODS lines, would be perfectly suitable for non-ODS lines, unless capacities were increased, or (through very bad engineering) the machine was not explosion-proof and was operated quite close to the gasser.

71. The technical reviews by secondary consultants are seen as being of variable quality; they are generally broad and generic, as opposed to incisive and trenchant.

(k) Project completion reports

72. The quality of these reports is considered to range from below expectation to very good. A number of the PCRs display common problem areas. Some of these follow:

(a) There is little or no indication that the consultants who prepared the project documents were regularly provided by the beneficiary companies with such things as blueprints, listings of proposed equipment (and their specifications), fire and explosion control measures, possible risks of project delays and so forth, for their analysis.

(b) Safety issues are not described adequately, such as flammability control training, check lists, ventilation capacity, compensation for power outages, fire extinguishers, warehouse sprinkler systems, evacuation routes, and so forth.

(c) One must assume that equipment orders were given to the lowest bidder, assuming quality, versatility, delivery times and so forth were acceptable. Consultants are known to favour certain equipment suppliers. There is generally no information in the PCRs concerning the source, capacity and other parameters of replacement equipment - and a comparison with the old equipment in likewise missing. Such information was so far not requested in the PCRs; it would be useful for assessing the conversion process correctly, however.

(d) In many reports, cost overruns for certain budget items are either not explained, or are inadequately justified by such terse phrases as "additional safety equipment" or "use of MLF contingency funds".

(e) Implementing Agencies may have a tendency to over-rate their work in the overall assessment section. For example, in CPR/ARS/13/INV/79 (Zhongshan) the project was rated as satisfactory, despite a cost overrun of US $857,680 and other disturbing factors.

(f) Some PCRs simply list the number of aerosol units produced per year, as of the date of the project document produced. There are no data given on enlargement or contraction of production in subsequent years.

(g) At least two reports used the terms "outside gassing" and "gassing room" interchangeably. However, the former option is substantially less costly and just as effective in warm climates.

73. For most of the 58 projects reviewed, it is suggested that various items of further information be supplied by the consultants or implementing agencies, so that an improved clarity can be attained. In some reports there are conflicts of numerical or qualitative data, and some mechanism for ferreting out these anomalies should be developed.

(l) Evaluation issues identified

74. After reviewing documentation on 58 projects, the following evaluation issues emerged which would merit further analysis:

(a) Analyze cases where the ODS phase out does not appear to be transparent, inconsistent or less than approved, assess the viability of technology chosen and the risk of returning to the use of ODS particularly in countries facing difficulties to obtain hydrocarbons at reasonable price and sufficiently low odour quality.

(b) Analyze experiences made with small projects in order to generate lessons of how to deal in future with such projects that might become more frequent. This would be useful in particular for countries with large numbers of small fillers like India.

(c) Analyze experiences gained with the implementation of the only terminal umbrella project approved so far for Malaysia, and explore the obstacles for such projects and other innovative approaches which were called for by the 25th meeting of the Executive Committee, in order to deal with the remainder of the aerosol sector in the Article 5 countries (dec. 25/20).

(d) Identify the reasons for the frequent implementation delays, systematize them and propose solutions to overcome repeated bottlenecks.

(e) Establish actual incremental operating costs or savings for which information provided to the Multilateral Fund Secretariat is generally poor. Identify implications of incremental operating savings (IOS) for the mobilization of counterpart funding and resulting implementation delays. Verify the distribution of actual IOS in case of "contract filler" projects for which decision 17/15 of the Executive Committee was applied.

(f) Examine safety and environment issues, including baseline conditions, in project preparation, implementation as well as in reporting. This is of particular importance as the substitutes used for the conversion are in almost all cases highly flammable hydrocarbons.

(g) Trace the fate of the old equipment, which is supposed to be destroyed or disposed of, and discuss possible and cost effective ways of rendering such equipment unusable or assigning it to non-ODS applications, in order to improve the chances for making the conversion irreversible.

(h) Identify successful management approaches to organize the conversion efficiently within companies and in cooperation with the relevant Government authorities, the Implementing Agencies and the suppliers of equipment and materials. A particular interesting feature is the early phase-out in several Art. 5 countries, mainly by voluntary agreements of local industries and multinational companies.

(m) Evaluation Approach

75. For most of the 58 projects reviewed, it is suggested that some further information should be supplied by the implementing agencies, so that a greater transparency can be achieved. Several projects have been selected as possible candidates for field visits. This list, however, has not been finalised and a few more projects will be added in order to achieve a geographical, sub-sectorial and chronological balance and to take into account the evaluation issues listed above.

76. The general objective of these visits would be to establish lessons learnt that will help future projects to be prepared and implemented in the most efficient manner, and if mistakes were made to find out how they can be avoided in the future.

77. During the field visits, an evaluation report format similar to the one used for the evaluation of foam and solvent projects will be applied. Moreover, technical questions will be specifically formulated for each project, and some questions with regard to the linkages to non-investment projects and policy regulations as well as to the remaining tasks in the sector to achieve full ODS phase out will be added. Common features of projects and policies in a country will be summarized in a country report.

78. The draft case studies will be circulated to the countries visited and to the implementing agencies for their comments. This will be followed by the elaboration of a synthesis paper for presentation to the 37th Meeting of the Executive Committee.

V. Progress Report on the Clearing House Evaluation

79. In the 2001 Monitoring and Evaluation Work Programme, an extended desk study on clearing house activities implemented by UNEP was foreseen with the final report to be submitted to the 36th Meeting of the Executive Committee. The evaluation will focus on recurring and non-recurring information exchange activities implemented by UNEP as defined in Decision 21/14 of the Executive Committee. Other aspects of the clearing house function, such as training as well as networking activities have been covered by earlier evaluations.

80. The activities to be evaluated are: the collection of sectoral data from world-wide sources; updated OAIC diskette version; dissemination of information materials; direct query-response service; maintenance of contact database of experts and mailing list of OzonAction programme publications; halon bank management clearing-house services; publication of the OzonAction newsletter and special supplements; delivery of the OzonAction newsletter and other information through the World Wide Web home page site and e-mail.

81. The evaluation is timely because UNEP has proposed a reorientation of its activities under the Multilateral Fund, as evinced from its draft business plan for the year 2002.

82. The following key issues will be addressed in the evaluation:

(a) Effectiveness and impact of services provided: What are the main activities and outputs of the Clearing-House? Who is using it and for what purpose? What types

of information are the users now looking for, and how they would like to receive this information?

(b) Linkages and Partnerships: Are industries in non-Article 5(1) and Article 5(1) countries cooperating in providing and using information? To what extent do other implementing agencies, including bilateral agencies, coordinate and collaborate with UNEP in planning and using clearing house activities?

(c) Accountability and continuous improvement: What are the monitoring and reporting mechanisms in place? How can feedback from users be better solicited and used for continuous improvement of the services?

(d) Resources: What is the budget and the staff resources used? Is the funding level proportionate to the level of activities undertaken?

83. Two consultants have been selected to implement this evaluation. From October 2001 to January 2002, they will collect and review documentation, visit UNEP/DTIE in Paris, organize a user survey and draft a final report.