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**REPORT ON THE IMPLEMENTATION OF THE 1999 WORK
PROGRAMME FOR MONITORING AND EVALUATION**

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Background

1. The purpose of this report is to give the Executive Committee an overview of the results of the first part of the implementation of the 1999 work programme for Monitoring and Evaluation, which was approved at the 27th meeting of the Executive Committee (Dec. 27/11).
2. The report consists of the following main sections:
 - I Evaluation of Refrigeration Sector Projects
 - II Evaluation of Institutional Strengthening (IS) Projects
 - III Summary of the Desk Study on the Evaluation of Foam Projects
 - IV Consolidated Project Completion Report
 - V Computerized Information System for Monitoring and Evaluation
3. As foreseen in the work programme 1999, evaluation studies have been prepared on refrigeration and institutional strengthening projects. The evaluation process, the sample of projects selected, the missions organized, and the consultant teams contracted are described. Due to time constraints the final versions of the consultants' report are not yet available. A preliminary summary of their conclusions and recommendations will be presented to the Executive Committee in an addendum to this document shortly before the 29th meeting.
4. The desk study on foam projects is available on request. The main evaluation issues identified as well as the methodological approach chosen for the main phase of this evaluation are outlined below.
5. Finally, a consolidated report on project completion reports received since the last consolidated report submitted to the 26th meeting in November 1998 is presented.

I Evaluation of Refrigeration Sector Projects

(a) Evaluation Process

6. The evaluation proceeded with the following steps:
 - Desk review of refrigeration projects by the Senior Monitoring and Evaluation Officer and presentation to the MEF-Subcommittee at the 28th meeting of the Executive Committee. The paper was essentially based on reviews of project documents, project completion reports and various databases in the Secretariat.
 - Elaboration of guidelines for structured interviews with enterprises' personnel, testing them in three projects in Egypt, refining the data collection approach, selecting the final sample of projects to be visited and preparing the travel schedules.
 - Visits to the selected sample of 27 projects in Asia, Africa and Latin America in August and September 1999.

- The visits were conducted jointly with the parallel evaluation of institutional strengthening projects. In this context, the evaluation team analyzed the role of the national ozone units in project identification, preparation, implementation and monitoring as well as the quality of co-operation with the Implementing Agencies.
- The preparation of case studies for each enterprise visited was followed by the elaboration of synthesis reports that summarize the findings of the different case studies.

(b) Evaluation Team, duration of travel, support by the Ozone Offices and Implementing Agencies

7. The consultants have been recruited on the basis of an international tender and a direct search for appropriate candidates. The latter became necessary when the request for proposals sent to a selected list of 12 international consulting companies did not give enough names of appropriately qualified consultants. The consultants were chosen from Article 2 and 5 countries as well as from different regions.

8. Each team needed to combine the following qualifications:

- extensive evaluation experience
- experience with industrial projects and their economics
- familiarity with international environmental issues
- knowledge of the Multilateral Fund and the functioning of the UN system
- experience with conversion from CFC-based production in refrigeration companies to non-ODS substitutes
- neutrality in terms of not being consultants to the Montreal protocol units of the Implementing Agencies
- knowledge of institutional capacity building

9. These teams met the criteria listed above. It was not possible to include national consultants, as originally foreseen. This was due to time constraints and the large number of countries visited. In one case only, a local consultant was engaged to reinforce the team (Costa Rica).

10. Joint missions for the evaluation of refrigeration and Institutional Strengthening projects were organized in Asia (17 August to 10 September), Latin America and the Caribbean (11 September to 1 October) and Africa (8 to 28 September 1999).

11. The combination of the two studies in joint regional missions was economical and enriched the discussions. The data collection approach (interview guidelines, list of issues to be discussed) proved to be appropriate. It was possible to adhere to the tight schedule for company visits and to collect the relevant information, although it also became clear that for large countries, particularly China and India, visits of only a few days can only be a beginning in terms of evaluation activities.

12. The Senior Monitoring and Evaluation Officer of the Multilateral Fund Secretariat participated in some field visits, particularly in the early stages, in order to supervise the work of the evaluation team and to support the fine-tuning of the evaluation approach.

13. The governments of all countries visited had been informed beforehand, and their concurrence had been obtained. The positive response of all countries was encouraging and the Teams were very well received and supported by the Ozone Offices in the countries visited. The Ozone Officers prepared the visits to the companies, and in many cases, accompanied the evaluation team. Information requested on companies and national policies, including experiences gained during project implementation, was readily provided. In the majority of visits, representatives of the companies were very cooperative and accessible.

14. In spite of the short notice of the missions, the Implementing Agencies were supportive as well. UNIDO sent project officers to accompany the Team on visits to companies in Vietnam, Egypt and Tunisia. One local UNIDO officer accompanied the Team on a visit to Hualing/China. The World Bank sent a consultant to Mexico and instructed the financial intermediary (NAFIN) to support the mission, while in other countries like Thailand and India the local Ozone officer organized the meetings with the financial agent of the World Bank. UNDP requested the local UNDP offices to support the evaluations and to give information as needed, which they did in most cases.

15. The Implementing Agencies submitted project completion reports (PCR) for all projects, some of them shortly before the visits. The PCRs were useful in terms of preparing and structuring the discussions in the enterprises, in spite of the fact that they lacked important information, which is required according to the PCR format.

(c) Sample of Projects Visited

16. Most refrigeration projects visited were in Asia (12) followed by Latin America (11) and Northern Africa (5). The total number of 28 projects visited exceeded the planned figure (about 20 as presented to the 28th meeting of the Executive Committee) and the regions with the largest number of projects have been covered. However, due to limitations of time and budget as well as availability of consultants it was not possible to include all regions with the consequence that Sub-Saharan Africa, Middle East and Europe are not represented.

LATIN AMERICA and THE CARIBBEAN		ASIA		AFRICA	
Chile	3	China	3	Egypt	3
Colombia	3	India	3	Tunisia	2
Costa Rica	1	Malaysia	2		
Mexico	4	Thailand	3		
		Vietnam	1		
TOTAL	11		12		5

Figures indicate the number of refrigeration projects visited in the respective country

17. The evaluation covered projects implemented by all three Implementing Agencies, as well as bilateral donors (Germany and USA).

IMPLEMENTING AGENCY	NUMBER OF PROJECTS EVALUATED	NUMBER OF PROJECTS COMPLETED
IBRD	12	61
UNDP	8	34
UNIDO	7	48
Bilateral	1	1
TOTAL	28	144

18. The 15 domestic and 13 commercial refrigeration projects evaluated, have chosen different conversion technologies, e.g. HFCs, HCFCs, hydrocarbons, blends for refrigerant conversion, and HCFC141b and Cyclopentane for insulation foam.

Technology Choice	Number of projects evaluated	Total number of projects completed
CFC-11 to Cyclopentane	6	45
CFC-11 to HCFC-141b	15	57
CFC-11 to HCFC-123	1	1
CFC-12 to Drop-in blend	1	5
CFC-12 to HCFC-22	1	3
CFC-12 to HFC-134a	20	106
CFC-12 to HFC-152a/HCFC-22	1	1
CFC-12 to RC-404a	1	2
CFC-12 to Isobutane	1	2

19. The sample included projects of all sizes in terms of funding. Although the emphasis was laid on projects of medium size, some small and some large projects were also included.

	Under US \$ 100,000	US \$ 100,000-500,000	US \$ 500,000-1,000,000	Above US \$ 1,000,000	Total
NUMBER OF PROJECTS EVALUATED	3	11	9	5	28
NUMBER OF PROJECTS COMPLETED	6	51	43	44	144

20. As the following table shows, care was taken to select projects that were approved in different years in order to enable the verification of trends and the effects of policy changes.

YEAR OF APPROVAL	NUMBER OF REFRIGERATION PROJECTS EVALUATED	TOTAL NUMBER OF PROJECTS COMPLETED
1991	2	6
1992	3	10
1993	2	17
1994	11	54
1995	4	30
1996	2	13
1997	4	13
1998	0	1
TOTAL	28	144

21. As foreseen in the terms of reference, retroactively funded projects were included as well as some projects with long implementation delays and several with a large participation or majority ownership of multinational companies. Contrary to the planning, it has not been possible due to time constraints to visit companies where conversion and phase-out have been realized without assistance from the Multilateral Fund.

(d) Main Evaluation Issues

22. The evaluation analysed the following aspects:

- project identification and preparation
- project review and approval process
- choice of technology
- institutional arrangements
- bidding procedures and experiences with supplier companies
- implementation delays
- project costs
- results and effectiveness in terms of ODS phase out
- sustainable impact in terms of non-reversible conversion of technology
- project monitoring, reporting and evaluation.

23. The detailed evaluation issues elaborated in the desk review were transformed into a guideline for interviews in the companies which structured the discussions and the case studies.

(e) Main Findings and Recommendations

Due to time constraints, the Consultants' reports are still in a draft form, and neither the Secretariat nor the Implementing Agencies and the National Ozone Units had the occasion to review them and to comment on them. An addendum to this report containing a preliminary summary of findings and recommendations will be prepared by the Senior Monitoring and Evaluation Officer and will be issued before the 29th Meeting. The consolidated final evaluation report containing comments of the Secretariat, the Implementing Agencies and the National

Ozone Units on the findings and recommendations of the Consultants, including proposals for the follow up actions, will be presented to the 30th Meeting of the Executive Committee.

II Evaluation of Institutional Strengthening (IS) Projects

(a) Evaluation Process

24. The evaluation proceeded with the following steps:

- Desk review of institutional strengthening projects by a consultant (Universalia/Montreal) and presentation to the MEF-Subcommittee at the 28th meeting of the Executive Committee. The desk review was essentially based on reviews of project documents, project completion reports and various databases in the Secretariat.
- Elaboration of guidelines for structured interviews with Ozone officers, testing them with the Ozone unit in Egypt, refining the data collection approach, selecting the final sample of IS projects to be visited and preparing the travel schedules.
- Visits to the selected sample of projects in all regions. The evaluations of the IS projects were conducted in parallel with evaluations of refrigeration projects in the country visited. Each visit resulted in a project case study.
- Synthesis Reports on institutional strengthening projects which summarize the findings of the different case studies and present recommendations for consideration by the Executive Committee at its 29th Meeting, were prepared by the Team Leaders.

(b) Sample of Projects Visited

25. The IS projects visited were situated in Asia (5), Latin America (6) and Africa (6). The total number of 17 projects visited exceeded the planned figure (about 10-15 as presented to the 28th meeting of the Executive Committee) and the regions with the largest number of projects have been covered. However, due to limitations of time and budget as well as availability of consultants it was not possible to include all regions with the consequence that the Middle East and Europe are not represented.

REGION/COUNTRY	IMPLEMENTING AGENCY	PHASE	ODS CONSUMPTION ²	LVC ³
(a) Asia				
China	UNDP	3	90,511	
India	UNDP	2	14,816	
Malaysia	UNDP	3	3,659	
Thailand	UNDP	1	5,304	
Vietnam	UNEP	1	612	
(b) Latin America and the Caribbean				
Bahamas	UNEP	1	32	X
Chile	IBRD	2	857	
Colombia	UNDP	2	2,223	
Costa Rica	UNDP	2	606	
Mexico	UNDP	3	1,805	
Nicaragua	UNEP	1	59	X
(c) Africa				
Ethiopia	UNEP	1	62	X
Egypt	UNIDO	2	2,785	
Ghana	UNDP	3	52	X
Ivory Coast	UNEP	2	149	X
Mauritius	UNEP	1	30	X
Tunisia	IBRD	2	1,156	

² Latest data from national sources for either 1997 or 1998 (UNEP/OzL.Pro 11/ImpCom/22/3)

³ Low volume consuming country (less than 360 tonnes of annual ODS consumption)

26. The countries visited represented different levels of ODS consumption.

27. Projects of all four Implementing Agencies have been evaluated. The relative large number of projects implemented by UNDP results from combining the two evaluation missions. Most refrigeration projects are located in some large countries where the IS projects are in the majority of cases implemented by UNDP. The low share of UNIDO results from the fact that the majority of the six IS projects this agency implements are in Europe and the Middle East which were not covered by the evaluation. Nevertheless, the typical features of implementing Institutional Strengthening projects were identified for each agency. Consultants for briefing and debriefing visited UNDP headquarters, field offices and UNEP/DTIE.

IMPLEMENTING AGENCY	NUMBER OF PROJECTS EVALUATED	TOTAL NUMBER OF PROJECTS IMPLEMENTED
UNDP	8	45
UNEP	6	74
IBRD	2	10
UNIDO	1	6
TOTAL	17	135

28. Projects in different phases of implementation have been included in the evaluation in order to enable an analysis of trends and to compare the problems encountered by the Ozone Units in their preliminary stages with more mature ones.

	Phase I	Phase II	Phase III	Phase IV	TOTAL
Number of IS Projects evaluated	6	7	4	0	17
Total number of ongoing IS Projects	66	24	5	2	97

(c) Main Evaluation Issues

29. The evaluation issues, identified in the desk review and further elaborated by the MEF Subcommittee in its report to the 28th Meeting of the Executive Committee (UNEP/OzL.Pro/ExCom/28/4, Paragraphs 49-51), were used to structure the interviews in the Ozone units and to prepare the case studies. The main issues analyzed were the following:

- Project preparation and planning
- Position, influence and credibility of the NOU
- Organization of Ozone Offices
- Project implementation and results
- Funding level and sustainability
- Monitoring and reporting system
- NOU and the Implementing Agencies
- NOU and the Industries
- NOUs and Regional Networks
- General lessons learnt

(d) Main Findings and Recommendations

Due to time constraints, the Consultants' reports are still in a draft form, and neither the Secretariat nor the Implementing Agencies and the National Ozone Units had the occasion to review them thoroughly and to comment on them. An addendum to this report containing a preliminary summary of findings and recommendations will be prepared by the Senior Monitoring and Evaluation Officer and will be issued before the 29th Meeting. The consolidated final evaluation report containing comments of the Secretariat, the Implementing Agencies and the National Ozone Units on the findings and recommendations of the Consultants, including proposals for the follow up to the report, will be presented to the 30th Meeting of the Executive Committee.

III Summary of the Desk Study on the Evaluation of Foam Projects

30. This section identifies evaluation issues and proposes a preliminary work plan for the evaluation of foam projects funded by the Multilateral Fund. It is based on a desk study by the Senior Monitoring and Evaluation Officer who reviewed databases of the Multilateral Fund Secretariat, analyzed progress reports and project completion reports, and discussed with staff of the Secretariat. The desk study is available upon request.

31. A brief overview of foam projects from the beginning of the Fund's operations until the end of 1998 is followed by a presentation of the main evaluation issues and an outline of the evaluation methodology to be used in the main phase of the evaluation. In spite of repeated reminders, the Secretariat received only 70 PCR for 248 projects completed so far which seriously limited the value of the desk study.

(a) Overview of the Foam Sector

32. Since the beginning of the Fund's operations until the end of 1998, 591 foam projects were approved, 26% of the projects are implemented by the World Bank, 62% by UNDP and 11% by UNIDO which started relatively late. Total funding approved for these projects amounted to US \$184,600,688 with peaks in the years 1994 and 1997. This represents 24 % of the total funding approved for investment projects until the end of 1998. Further 100 foam projects were approved in 1999.

33. The largest number of projects has been approved for rigid foam (222 or 38 %) followed by flexible slabstock (148 or 25 %), integral skin (80 or 13%), polystyrene (63 or 11%), insulation refrigeration (35 or 6%) and others (43 or 7%).

34. As the table below indicates, in the majority of projects (248), CFC-11 has been substituted by HCFC-141b. Conversion to Methylene Chloride (120) and Water/Carbon Dioxide (93) were the next options; hydrocarbons replaced CFC-11 in 42 cases and CFC-12 in another 56 projects. All three Implementing Agencies have implemented projects involving all these technologies and no trend has emerged to one particular technology over the years.

Technology Choice for Conversion in Completed Foam Projects

ODS Replacement	Number of Projects
CFC-11 to HCFC-141b	248
CFC-11 to Methylene Chloride	120
CFC-11 to Water /Carbon Dioxide	93
CFC-11 to Hydrocarbon	42
CFC-11 to Others	112
CFC-12 to Hydrocarbon	56
CFC-12 to HCFC-22/HCFC-142b	1
CFC-12 to HCFC-141b	1
CFC-12 to Others	3

35. 248 projects, or 42% of the approved projects were completed by the end of 1998. Of these projects 62 were completed by the World Bank, 147 by UNDP, and 39 by UNIDO. In terms of geographical distribution the World Bank focussed on the larger countries mainly in Asia (44 projects) followed by Latin America (9 projects). UNDP and UNIDO implemented the

majority of their projects in these regions also, in addition to a number of projects in Africa. The largest number of projects happened to be in China (110) followed by India (94), Malaysia (61), Brazil (60), Thailand (60) and Indonesia (48).

Completed Foam Projects by Region
(According to Progress Reports)

Agency	Africa	Asia and the Pacific	Europe	Latin America and the Caribbean	Total
IBRD	2	44	7	9	62
UNDP	17	101	0	29	147
UNIDO	11	17	4	7	39
Total	30	162	11	45	248

36. In terms of funds approved per project, 6 of 248 completed foam projects had funding levels between US \$1,000,000-\$2,000,000 while only 1 project had a level of funding of more than US \$2,000,000. 90 of 248 completed projects had a funding level between US \$ 100,000 and US \$250,000, followed by 66 projects between US \$ 250,000 and US \$500,000 and 50 projects with funding of below US \$100,000. The average project funding decreased from US \$513,163 in 1993 to US \$279,621 in 1998. The World Bank and UNIDO had a relatively larger portion of larger scale projects.

37. Only a minority of foam sector projects were implemented within the project duration planned while for the large majority substantial delays occurred. This is particularly true for early projects and concerned all three implementing agencies. At the 22nd meeting of the Executive Committee the agencies were allowed to present up-dated planned dates for completing the old projects which improved the picture in comparison to the originally planned completion dates. Nevertheless, 19% of the projects completed still had a delay factor of more than six months, 17% of more than a year and 0.4% of more than two years.

38. Total ODP phase out achieved for the 70 projects for which PCRs are available reached 5,515 Tonnes, which is 10% more than the target figure approved (5,022 Tonnes). The over-achievement occurred particularly in the category of projects with a funding level between US \$100,000-\$500,000 and concerned mainly World Bank projects.

39. Total expenditure for the 70 projects for which PCRs were received so far (including counterpart funding whose purpose is not specified in the PCRs) amounted to US \$32,325,631, 16% more than the approved funding of US \$27,867,139. Expenditures for incremental capital costs were US \$24,173,145 (an increase of 9% of what was approved) while expenditures for operating costs were US \$4,138,865 thus bypassing the approved amount by 22 % (again including non-documented counterpart funding).

(b) Main Evaluation Issues

40. The evaluation will analyse the following aspects (detailed evaluation issues were elaborated in the desk review):

- project identification and preparation
- project review and approval process
- choice of technology
- institutional arrangements
- bidding procedures and experiences with supplier companies
- implementation delays
- project costs
- results and effectiveness in terms of ODS phase out
- sustainable impact in terms of non-reversible conversion of technology
- project monitoring, reporting and evaluation.

(c) Evaluation Methodology

41. The methodology will consist of the following steps:

- An in-depth desk review by the technical expert(s) in preparation for the field visits. This will essentially consist of a review of project documents, project completion reports and other pertinent information from various databases available in the Secretariat.
- Elaborating guidelines for structured interviews to be conducted with enterprises' personnel, testing them in two or three projects, refining the data collection approach, selecting the final sample of projects to be visited and preparing the travel schedules.
- Visits to the selected sample of projects in all regions. Each visit will result in a project case study.
- Synthesis report which summarizes the findings of the different case studies and presents recommendations for consideration by the Executive Committee at its 30th meeting in Spring 2000.

(d) Evaluation Team(s)

42. The Evaluation Team(s) will include:

- Technical expert as Team Leader: The expert should have demonstrated experience with conversion from CFC-based production in foam projects to non-ODS substitutes, and should not have been directly involved in the preparation or implementation of projects financed by the Multilateral Fund.
- Representative of the evaluation units/departments of the Implementing Agencies as member of the team knowing about evaluation methodologies and the UN system; in addition, the participation of project officers as resource persons would be welcome.

- Representative of the Multilateral Fund Secretariat: The Senior Monitoring and Evaluation Officer and/or the responsible project officer should participate in some field visits, particularly in the early stages, in order to supervise the work of the evaluation team(s) and to act as a resource person for fine tuning the evaluation approach for further project visits.

Depending on the number of projects to be visited and the time schedule for the field visits there would be a second and third team proceeding to further visits in parallel to the first team.

(e) Sample of Projects to be Visited

43. A representative sample would include about 25 projects of the 248 foam projects completed as of December 1998. The sample should be composed using the following criteria:

- The Implementing Agencies should be covered in proportion to the volume of their activities, i.e. the sample could include 13 UNDP projects, 7 World Bank projects, and 5 projects implemented by UNIDO.
- The geographical regions should be covered in terms of number of projects implemented, that means that there should be 15 projects in Asia and the Pacific, (of which at least 2 each in China and India), 5 in Latin America and the Caribbean, 3 in Africa and 1 in Europe.
- The different technological options for substitute products should be presented as well as the different sub-sectors, and the sample should include projects of all sizes in terms of funding and projects in different years of approval.
- Moreover, in terms of implementation modalities, there should be a number of retroactively funded projects included as well as some projects with a large or majority ownership of multinational companies.
- It would be desirable, for reasons of comparison, to visit some companies where the conversion and phase-out have been realized without assistance from the Multilateral Fund.
- The sample will also include, as pertinent, a few projects with long implementation delays in order to better understand their specific problems.

44. The final selection of the project sample should be left to the evaluation team leader in cooperation with the Senior Monitoring and Evaluation Officer of the Multilateral Fund Secretariat in order to guarantee an independent and neutral choice of projects to be evaluated. However, the Executive Committee and the Monitoring, Evaluation and Finance Sub-Committee could request to include specific projects in the evaluation.

45. After the choice of projects to be evaluated has been made, the countries concerned will be contacted to obtain the agreement of the Government authorities and the companies concerned.

46. The visits in the countries will be co-ordinated with the parallel evaluation of training projects.

(f) Volume of Consultants Work

47. It is anticipated that the evaluation will require up to a total of 50 person-days for the team leader and 40 days for each of the other team members. The detailed work plan will be established once the project sample has been selected.

48. A request for proposals will be sent to a selected list of international consultants asking for detailed proposals concerning the implementation of this evaluation. The most appropriate offer in terms of methodology, experts and budget will be selected.

IV Consolidated Project Completion Report

49. Decision 23/8 mandates the Secretariat to submit a consolidated project completion report to the Executive Committee at its third meeting each year. The consolidated report is prepared in compliance with this decision, and:

- (a) provides an overview of the project completion reports (PCR) received;
- (b) analyzes the numbers of PCR received and due for investment projects;
- (c) analyzes the number of PCR received and due for non-investment projects;
- (d) comments on the suitability of the PCR format;
- (e) examines the information provided in the reports from the standpoint of their quality and adequacy, and
- (f) provides recommendations for improving the situation.

50. The report takes into account all Project Completion Reports submitted by implementing agencies since the 26th Meeting of the Executive Meeting (15 November 1998 to 15 October 1999).

a) Overview

51. Until the end of 1998, 501 investment projects and 891 non-investment projects (including 402 projects preparations and 115 country programmes) have been completed. The Secretariat has so far received a total number of 223 PCR for investment projects and 151 for non-investment projects. They represent 44.5% and 31.6% (without considering project preparations and country programmes) of all PCR due for completed investment and non-investment projects, respectively.

52. Since the 26th Meeting of the Executive Meeting, all Implementing Agencies increased substantially the number of PCR submitted, in particular for the sectors under evaluation. During this period, a total of 122 PCR for investment projects and 114 for all non-investment projects have been received. While this is a positive development all agencies but particularly UNDP have still an important number of PCR to submit for investment and non-investment projects completed in 1997 and 1998. Moreover, as discussed repeatedly during 1999 with the Implementing Agencies and shown in Table 1b for investment projects and Table 5b for non-investment projects, a major problem remains concerning the backlog of PCR due for projects completed until the end of 1996. This particularly concerns UNDP and also the World Bank and UNEP.

b) Analysis of Project Completion Reports Received and Due for Investment Projects

53. Three implementing agencies, UNDP, UNIDO and World Bank implemented and completed investment projects in all sectors (Table 1a). Until the end of 1998, UNDP completed 202 investment projects and submitted only 46 PCRs (23 percent of PCR due), UNIDO completed 128 projects and submitted 78 PCRs (61 percent), World Bank completed 169 projects and submitted 98 PCRs (60 percent), and Germany completed 1 project and submitted 1 PCR (100 percent). In total, the Secretariat received 223 PCR (44%) for 501 investment projects completed until the end of 1998.

Table 1a
Investment Projects Overview

Agency	Completed Projects up to December 1998	Total PCR Received	PCR Received in the Reporting Period ⁴	PCR Due
UNDP	202	46	23	156
UNIDO	128	78	47	50
World Bank	169	98 ⁵	51	71
Germany	1	1	1	0
U.S.A.	1	0	0	1
Total	501	223	122	277

⁴ From the 26th Meeting of the Executive Committee (15 November 1998 to 15 October 1999)

⁵ In addition, the World Bank already submitted five PCR for projects completed in 1999 (not included in Table I)

Table 1b
Project Completion Reports Received and Due for Investment Projects

Agency	Sector	PCR Received		PCR Due				
		In 1998	In 1999	Before 1997	In 1997	In 1998	In 1999	Total
UNDP	Refrigeration	1	22	1	-	6	4	11
	Foam	20	-	10	27	43	48	128
	Aerosol	1	-	2	-	1	-	3
	Solvent	3	-	2	2	6	-	10
	Halon	-	-	-	2	2	-	4
	Total	25	22	15	31	58	52	156
UNIDO	Refrigeration	10	25	-	-	-	13	13
	Foam	7	12	-	-	-	20	20
	Aerosol	6	-	-	-	2	12	14
	Solvent	4	13	-	-	1	2	3
	Halon	1	-	-	-	-	-	-
	Total	28	50	-	-	3	47	50
World Bank	Refrigeration	14	23	2	8	4	13	27
	Foam	11	20	1	9	7	18	35
	Aerosol	4	5	-	-	1	4	5
	Solvent	13	5	1	-	1	1	3
	Halon	1	1	-	-	-	1	1
	Production	5	-	-	-	-	-	-
	Multiple sector	1	-	-	-	-	-	-
Total	49	54	4	17	13	37	71	
Bi-Lateral	Refrigeration (Germany)	-	1	-	-	-	-	-
	Halon (U.S.A.)	-	-	1	-	-	-	1
	Total	-	1	-	-	-	-	1

54. The 122 PCR received in the reporting period represent completed projects in 29 countries. A large part of the completion reports (45 percent) are for projects implemented in 5 countries (Malaysia, India, Indonesia, People's Republic of China, and Egypt).

55. Table 2 shows that 11 of the PCR submitted were for projects with approved budgets of US\$ 100,000 or less, 57 projects had budgets between US\$ 100,000-500,000, 38 projects with a value between US\$ 500,000-1 million, and 16 with budgets varying between US\$ 1 million and US\$ 3 million. Overall there is no significant correlation between project size and implementing agency as all three implemented various sizes of projects. The largest projects (for which project completion reports were received) were projects from the World Bank and UNDP while UNIDO reported on a relatively larger number of small projects.

Table 2
Size of Projects by Implementing Agency

Agency	Less than \$100,000	\$100,001-\$500,000	\$500,001-\$1M	\$1M-\$3M	Total
UNDP	1	10	6	6	23
UNIDO	9	19	17	2	47
World Bank	1	28	15	7	51
Bilateral	-	-	-	1	1
Total	11	57	38	16	122

56. Impact of the projects reported upon in terms of phase-out is found to be as planned in most investment projects, and the total phase-out of ODS is slightly more than the planned amount. However, information in the PCR is often not complete and coherent. In many cases production and ODS consumption data before and after the conversion are not complete. This is a serious shortcoming. Also in many cases destruction of ODS using equipment is not specified. This is also serious since the project completion report is the only notice of the destruction of equipment that is provided to the Executive Committee.

Table 3
Size of Projects, ODS Phase Out, Implementation Delays

Size	Number of Projects	Phase-out approval (in ODP Tons)	ODS Phased Out (in ODP Tons)	Average Delay (Months)
Less than \$100,000	11	166.3	166.3	4.0
\$100,001-\$500,000	57	2,632.3	2,821.7	11.4
\$500,001-\$1M	38	2,291.4	2,235.6	12.6
\$1M-\$3M	16	6,339.4	6,254.7	13.7
Total	122	11,429.5	11,478.4	11.4

57. Delays for project implementation show a great deal of variance. Out of 122 projects, 19 projects were completed before the planned date, 13 projects were completed on time and there was a delay in 90 projects ranging from one month to 61 months. In 55 projects, delays of more than 12 months occurred. Delays cannot be attributed to particular sectors or implementing agencies but tended to be longer than average for large projects, usually due to the fact that contract negotiations took more time than expected.

58. PCRs require that the implementing agencies carry out a self-assessment exercise. As indicated in Table 4, only 1 PCR in investment projects failed to do so. 46% of investment projects were marked either satisfactory or highly satisfactory, 51% of investment projects as satisfactory though not as planned and only 2% indicated as unsatisfactory. The categories need clearer and quantitative definitions in order to be employed in an objective and unambiguous way.

Table 4
Self-Assessment of Agencies in the PCR

Assessment	UNDP	UNIDO	World Bank	Bilateral	Total	% of Total
Highly satisfactory, more than planned	2	5	1	-	8	7%
Satisfactory, as planned	3	18	26	1	48	39%
Satisfactory, though not as planned	17	24	21	-	62	51%
Unsatisfactory, less than planned	-	-	3	-	3	2%
Not Provided	1	-	-	-	1	1%
Total	23	47	51	1	122	100%

c) Analysis of Project Completion Reports Received and Due for Non-Investment Projects

59. All implementing agencies, UNIDO, UNDP, UNEP, the World Bank and bilateral agencies implemented non-investment projects (Table 5a and 5b). With respect to the quantitative analysis of PCR received and due it has to be borne in mind that for project preparations and country programmes, submission of PCR has been suspended until the Secretariat has developed a simplified format. They are therefore shown in a separate table (Table 6). For institutional strengthening projects a mixture of PCR and terminal reports as part of extension requests has been received. This calls for a revised procedure to avoid double reporting and the Secretariat will develop proposals in this respect based among other elements on the results of the evaluation of IS projects. Nevertheless, these projects are included in the analysis as, according to the current regulations, PCR are requested for them.

60. During the reporting period, UNDP submitted 25 PCR of 115 completed projects (22 percent), UNIDO submitted 8 PCR of 17 completed projects (47 percent), UNEP submitted 44 of 213 completed projects (20.6 percent), the World Bank submitted 11 PCR of 218 completed projects (5 percent) and the bilateral agencies submitted 4 PCR for 99 completed project (4 percent).

Table 5a
Non-Investment Projects Overview (except Project Preparations and Country Programmes)

Agency	Completed Projects up to December 1998	Total PCR Received for Projects Completed up to December 1998	PCR Received in the Reporting Period ⁶	PCR Due
UNDP	115	25 ⁷	25	90
UNEP	146	59 ⁸	44	87
UNIDO	17	8 ⁹	8	9
World Bank	33	17	11	16
Australia	6	-	-	6
Canada	10	-	-	10
Denmark	1	-	-	1
France	5	2	1	3
Germany	3	-	-	3
Singapore	2	-	-	2
South Africa	1	1	-	-
Switzerland	2	-	-	2
U.S.A.	33	5	3	28
Total	374	117	92	257

⁶ From the 26th Meeting of the Executive Committee (15 November 1998 to 15 October, 1999).

⁷ In addition, UNDP submitted two PCRs for two transferred projects which were not yet completed in 1998.

⁸ In addition, UNEP submitted two PCRs for two bilateral projects (South Africa and France) which were not yet completed in 1998.

⁹ In addition, UNIDO and the World Bank submitted one PCR for each project completed in 1999 which has not yet been included in the number of projects completed in 1998.

Table 5b
Project Completion Report Received and Due for Non-Investment Projects

Agency	Sector	PCR Received		PCR Due				
		In 1998	In 1999	Before 1997	In 1997	In 1998	In 1999	Total
UNDP	Technical Assistance	-	6	27	12	12	6	57
	Institutional Strengthening	1	-	1	8	5	8	22
	Training	-	18	1	2	1	2	6
	Demonstration	-	-	4	1	-	-	5
	Total	1	24	33	23	18	16	90
UNIDO	Technical Assistance	-	6	3	-	6	-	9
	Institutional Strengthening	-	2	-	-	-	-	-
	Training	-	1	-	-	-	-	-
	Demonstration	-	-	-	-	-	-	-
	Total	-	9	3	-	6	-	9
World Bank	Technical Assistance	4	4	9	4	1	2	16
	Institutional Strengthening	1	5	-	-	-	-	-
	Training	-	3	-	-	-	-	-
	Demonstration	1	-	-	-	-	-	-
	Total	6	12	9	4	1	2	16
UNEP	Technical Assistance	9	2	39	13	14	17	83
	Institutional Strengthening	-	10	-	-	1	-	1
	Training	8	34	2	-	1	-	3
	Total	17	46	41	13	16	17	87
Bilateral	Technical Assistance	-	-	14	1	2	3	20
	Institutional Strengthening	-	-	1	-	-	-	1
	Training	1	3	20	1	3	-	26
	Demonstration	5	-	3	1	4	2	10
	Total	6	3	38	3	9	5	55

Table 6
Project Preparations and Country Programmes¹⁰

Agency	Completed Projects up to December 1998	Total PCR Received	PCR Received in the Reporting Period ¹¹	PCR Due ¹²
UNDP	144	-	-	144
UNEP	67	32	20	35
UNIDO	85	2	2	81
World Bank	185	-	-	185
Bilateral	36	-	-	36
Total	517	34	22	481

¹⁰ All for Country Programmes except for two PCRs for Project preparations submitted in pilot format by UNIDO

¹¹ From the 26th Meeting of the Executive Committee (15 November 1998 to 15 October 1999).

¹² Pending until a simplified reporting format has been developed and agreed upon.

61. For the non-investment projects reported upon, actual expenditures were on average about 94% of the planned expenditures. This is valid with some variations for projects of all sizes in terms of budget. However, this report refrains from drawing any conclusions concerning efficiency since this would need further data and analysis. (See Table 7)

Table 7
Analysis of Project Completion Reports Received for all Non-Investment Projects

Agency	# of Projects	Approved Funds (US\$)	Actual Expenditures (US\$)	Average Delays (Months)	ODS Phased Out for TAS projects (ODP Tonnes) ¹³	
					Approved	Actual
UNDP	25	1,906,550	1,654,292	7.57	94	94
UNEP	64	4,911,710	4,884,735	3.97	-	-
UNIDO	10	1,320,650	1,291,982	6.94	78	78
World Bank	11	2,037,469	1,739,076	9.26	4	-
Bilateral	4	418,260	413,722	0	-	-
Total	114	10,594,639	9,983,807	5.39	176	172

¹³ Several technical assistance projects have reported phase out (The World Bank(1), UNDP(4) and UNIDO(3)).

62. The delays realized for project implementations show a great deal of variance. Out of 114 non-investment projects, 26 projects were completed before the schedule date, 25 projects were completed on time and there was a delay in 63 projects ranging from one month to 64 months. In 20 projects, delays of more the 12 months occurred. No particular pattern in delays is observable. The average delay for non-investment projects is 5.39 months beyond the planned completion date.

63. In terms of self-assessment of non-investment projects (Table 8), 10 PCRs failed to report their assessments. 73% of the PCRs were marked either satisfactory or highly satisfactory, 17% as satisfactory though not as planned and only 2% indicated as unsatisfactory.

Table 8
Self-Assessment of Non-Investment Projects

Assessment	UNDP	UNEP	UNIDO	World Bank	Bilateral	Total	% of Total
Highly satisfactory, more than planned	8	16	2	1	4	25	22%
Satisfactory, as planned	8	39	4	7	-	58	51%
Satisfactory, though not as planned	9	5	4	1	-	19	17%
Unsatisfactory, less than planned	-	-	-	2	-	2	2%
Not Provided	-	10	-	-	-	10	8%
Total	25	64	10	11	4	114	100%

d) Suitability of the Project Completion Report Format

64. Discussions with the Implementing Agencies as well as National Ozone Units and companies during the evaluations showed that the PCR format for investment projects is largely accepted. Also, the consultants who implemented the evaluations found the format appropriate. Some overlaps in the format will be eliminated and the Secretariat will transform the format into a data base file and provide this to the Implementing Agencies.

65. The PCR format for non-investment projects needs adaptation for project preparations and country programmes, as indicated above. A simplified version of non-investment PCR for these types of projects will be elaborated in early 2000 by the Secretariat in consultations with the Implementing Agencies. For institutional strengthening projects the Secretariat will develop a revised reporting procedure to avoid double reporting in PCR and terminal reports as part of extension requests.

e) Quality of Project Completion Reports Received

66. The following paragraphs are largely based on observations made by external consultants during their recent evaluations of 28 refrigeration and 17 institutional strengthening projects. They also refer to results of reviews of 15 PCR for refrigeration projects by three external technical experts and five foam projects by one expert. These reviews were sent to the Implementing Agencies and comments were requested but so far only the World Bank responded.

67. With few exceptions, the quality of the PCR was found to be poor. To begin with, there are few documents with dates of elaboration of the PCR, plant addresses or name(s) of the author(s) of the report.

68. It was observed that not much attention was paid to the verification of the basic information such as actual ODS consumption, use of substitutes, incremental capital and operational cost. The detailed lists for capital and operating costs are often not provided. The same applies to the list of equipment destroyed (see Table 9). This information is considered as

vital for the final report. It seems also that the definition of ODS phase out and date of completion are not fully understood in all reports. Moreover, there is often no indication of what the company has added to the funds received from the MLF for the conversion and the total funding may either include these counterpart funds or not. This has important implications for the calculation of the cost-effectiveness, which under these uncertainties cannot be verified and compared to the planned figures. The report must include each of the above information in detail in order to provide some reference point for the evaluation of the projects.

Table 9

Information provided in Project Completion Reports Received for Investment Projects

	Provided	Not Provided	Not Applicable ¹⁴
List of annual consumption	90	30	2
List of capital cost detail	105	17	-
List of operating cost detail	47	47	28
List of equipment destroyed	70	31	21

¹⁴ According to indications of Implementing Agencies

69. In many reports, the section ‘overall assessment’ does not describe clearly enough whether and to what extent the project has reached its objectives and what major problems had to be overcome. The texts are either too brief or go too much into technical details. In some reports, emphasis is put on the reasons for delays only, others again do not explain reasons for delays which took place.

70. The information required for the section ‘overall assessment’ is often found in the section ‘lessons learnt’ which then give an overview and assessment of the project without mentioning lessons learnt for future projects.

71. Sometimes it is obvious that ‘copy-and-paste’ work has been done without addressing the specific aspects of a particular project. The same paragraphs appear in several PCRs, or worse. For example, in the PCR for the projects EGY/REF/15/INV/39,40,42,43, the name of Helwan Company is mentioned as the beneficiary in all four PCRs (in the sections ‘overall assessment’ and ‘reasons for delays’) when, in fact, it is not.

72. In most cases neither the companies nor the National Ozone Units had been involved in the preparation or approval of PCR. They had not been consulted in spite of the fact that there was no indication of any difficulties by evaluation consultants or the NOU in obtaining the information from the companies. This contrasts to statements of the Implementing Agencies that frequently companies and NOU do not reply to requests for providing information for or comments on draft PCR, particularly for post-conversion production data. From discussions with NOU’s it appears that most do not have a requirement for the companies to report their use of non-ODS substitutes but ask only for the reporting of the substitute ODS usage, only.

73. Many of the above described weaknesses were already mentioned in the report of the consultant 'Consolidated Project Completion Reports' presented to the 26th meeting of the Executive Committee (UNEP/OzL.ExCom/26/14) and there were, except some good examples which illustrate how useful a well prepared PCR could be, no overall improvements during 1999 with regard to the quality of PCR received.

f) Recommendations

74. The following recommendations are intended to improve the timeliness of submission of Project Completion Reports:

- (i) A percentage of the administrative cost for each project should not be transferred to the Implementing Agencies at the time of approval, and should be withheld until the project is completed and the completion report and the final financial statement have been received.
- (ii) Support by the NOU for the preparation of PCR by the Implementing Agencies should become an explicit element of the terms of reference for all Institutional Strengthening projects.
- (iii) The Secretariat, in cooperation with the Implementing Agencies, should slightly revise the PCR format by simplifying some overlapping parts and transforming it into a database format; the existing data from the inventory and the progress report databases should be used as much as possible.

75. In order to improve the content of Project Completion Reports, the Implementing Agencies should ensure that they:

- (i) are properly dated and contain the address of project sites;
- (ii) include detailed information of actual ODS consumption. If need be documentation of invoices might be requested;
- (iii) contain detailed information of the actual incremental capital and operational cost showing Multilateral Fund and counterpart funding in order to allow for comparison with the project document approved and with other completed projects;
- (iv) list the principal expenditure items in sufficient detail, including all major pieces of equipment supplied showing manufacturer, model number, capacity, number supplied and, wherever possible, individual costs;
- (v) provide information about actual costs incurred by companies in purchasing CFCs and their substitutes, chemicals, materials and parts, including compressors, before and after conversion;
- (vi) explain reasons for any over-/under-expenditures as well as reasons for delays; and
- (vii) contain clear overall assessments and lessons learnt that are of interest for future projects.

76. The following recommendations aim at improving the quality of Project Completion Reports by adopting the following procedures:

- (i) Implementing Agencies should involve the NOU and the companies concerned in the preparation of PCR. All three parties should be signatories to the report and the name of the project officer or consultant who elaborated the PCR should be indicated. IA should send the final version of the PCR to the Secretariat and to the NOU and the company.
- (ii) The Secretariat should continue the current practice of organizing reviews of PCR by external consultants in the context of the preparation of evaluations and sending these reviews to the agencies for comments and explanations.
- (iii) In accordance with Decision 23/8(g), the Secretariat should develop, in cooperation with the Implementing Agencies, criteria for project success rating, and submit them for approval to the Executive Committee.

V Computerized Information System for Monitoring and Evaluation

77. A common search facility for all databases existing in the Secretariat was developed. It allows the staff to start their own queries with variable criteria from a user-friendly interface; the results of queries being shown as lists and partly in graphical form. This was helpful for the elaboration of desk studies and of statistics for the preparation of the field missions.

78. Contrary to the work plan, no further work was done to prepare the access of external users to the data bases of the Secretariat. Instead priority was given to the implementation of the evaluation studies. The new Information Officer once recruited might conduct further work in this field.