

AFRICAN DEVELOPMENT BANK GROUP



BENIN

**NATIONAL TELECOMMUNICATIONS NETWORK
MAINTENANCE IMPROVEMENT PLAN**

Abridged Project Performance Evaluation Report (PPER)

**OPERATIONS EVALUATION DEPARTMENT
(OPEV)**

18 August 1999

1. PROJECT BACKGROUND AND FORMULATION

1.1 This abridged Project Performance Evaluation Report (PPER) is an evaluation of the National Telecommunications Network Maintenance Improvement Plan (PNAM) in Benin. The project, whose total cost is estimated at UA 12.095 million, was prepared by Benin's "Office des postes et télécommunications" (OPT) (Posts and Telecommunications Authority) and the International Postal Union (ITU). It was appraised in April/May 1987 and the corresponding ADF loan amounting to UA 10.721 million was approved on 26 October 1987, signed on 26 February 1988 and became effective on 25 May 1989, 15 months later.

1.2 OPEV's evaluation of the Project Completion Report (PCR), distributed in October 1997 with the reference ADF/BD/IF/97/179, considered its quality satisfactory despite the absence of an analysis of the institutional capacity and sector policy aspects. It was recommended that an abridged Project Performance Evaluation Report should be prepared; subsequently, a full evaluation of the recently completed Communications Development Project should be conducted, upon preparation of the PCR, to facilitate evaluation of OPT's institutional capacity as well as its sector policy trend and privatization prospects for the sector. This report evaluates and supplements the information in the PCR; it is based on data from the said PCR, the Appraisal Report and other project and sectoral documents.

1.3 PNAM, which is the subject of this PPER, is the first Bank operation in the sector in Benin. According to the Bank portfolio review report for Benin prepared in 1996, (i) the implementation performance of the public utilities sector, which includes Telecommunications, is considered very satisfactory and (ii) on the whole, project implementation is behind schedule and suffers from inadequacies in its institutional system in general and, in particular, delays in the transmission of disbursement requests by the Autonomous Sinking Fund to the Bank and delays in providing the counterpart contributions and setting up project implementation units.

2. PROJECT SECTOR GOALS, OBJECTIVES AND OUTPUTS

2.1 Project Objectives

2.1.1 PNAM is an integral part of the Telecommunications Master Plan of Benin which aims at making the national telecommunications network reliable and creating conditions for its development. With the establishment of a coherent maintenance system, the project aims at improving the quality of service to users, satisfying the pending demand and making previous investments on the network profitable. PNAM has some multidimensional activities which need to be undertaken immediately to limit the degradation of the network and lay the foundation for adequate and sustainable operation and maintenance. Its objectives are consistent with the concerns and guidelines of multilateral financing institutions of PANAFTEL network, which gave priority to telecommunications network maintenance improvement projects.

2.1.2 There was no Logical Framework Approach (LFA) at the time of project appraisal; consequently, the objectives at appraisal were numerous, vague and had no quantifiable indicators to assess their implementation rate. The project retrospective matrix in Annex 2 of this report supplements that prepared by the PCR.

2.2 **Outputs**

2.2.1 The components defined for the achievement of PNAM objectives were: (i) the procurement and installation of sundry equipment, spare parts and tools required for the switching (telephone and telex exchanges), transmission, and power systems as well as for local cable networks, (ii) the supply of equipment and tools required for maintenance and support services, (iii) staff training, (iv) technical assistance for studies, monitoring and supervision of implementation and (v) the procurement of equipment for the Programme Management Unit.

2.2.2 Modifications, approved by the Bank, were made to the project during implementation to take into account the participation of other donors in the financing of the overall programme and technological advances in the sector. The modifications did not affect the achievement of project objectives and contributed to the improved performance of the overall programme by helping to ensure better management of resources offered by the donors.

2.2.3 Consequently, the rehabilitation of the Cotonou and Porto Novo local networks, initially provided for in the project, was handed over to other donors and replaced with the extension and rehabilitation of the Bohicon and Abomey networks, which are smaller in size; this first important modification to the project is a clear indication of superficial project appraisal by the Bank, which approved the significant inadequacies in OPT's scheduling and financing of investments. Bank funds made available by these modifications were used to finance the extension of the Cotonou automatic electronic switching unit. Advances in technology as well as the probable and rapid obsolescence of the installed equipment also justified the installation of a new automatic telex switching unit rather than the rehabilitation of the old one. Lastly, the training component, initially financed by the Government of Benin alone, was included in contracts for the supply and installation of equipment, thereby enabling it to finance the significant cost overruns noted in the other components.

3. **PROJECT IMPLEMENTATION PERFORMANCE**

3.1 **Implementation Performance**

3.1.1 The Loan Agreement became effective 15 months after signature, 9 months more than the generally accepted period. Project implementation, expected to cover three years, was on the whole, 68 months (about 6 years) behind schedule; it was marked by the following, in particular:

- i) widespread administrative delays, especially in the procurement of goods and services, generally due to ignorance or lack of familiarity with Bank procedures;
- ii) frequent sanctioning of the country (for about three years), as a result of failure to repay loans or late loan repayments,
- iii) lax monitoring of fulfilment of the clauses of the contracts,
- iv) delay in the approval of various modifications to the project by OPT and the Bank,
- v) dissolution of the Project Management Unit during implementation.

3.1.2 The Loan Agreement was subject to ten conditions, including eight precedent to loan effectiveness, three of which were a duplication of those in the General Conditions applicable to Loan and Guarantee Agreements (commitment by the Borrower to include the counterpart financial contribution in the budget, finance cost overruns and not to use loan proceeds to finance taxes and duties on goods and services required for the project). Out of the seven other conditions, three concerned the coverage and collection of debts, one concerned on-lending of the funds to OPT and the three others concerned policy aspects and institution building. Apart from the condition stipulating the establishment of a principal maintenance centre in the province, a centre which turned out later to be irrelevant, all the conditions were fulfilled even though far behind schedule.

3.1.3 The procurement methods provided for at appraisal were implemented and the relevant procedures generally followed, though with some delays. The dissolution of the management unit during project implementation seriously handicapped project implementation performance and regular submission of quarterly progress reports to the Bank. The final audit of project accounts was not conducted.

3.1.4 The final project cost stands at UA 13.232 million, which is 7.8% higher than the estimated cost at appraisal, particularly in the part financed by OPT which practically doubled. Such increase in some components and local costs is due to the modifications to the components as well as late project completion, compounded by the devaluation of the CFA Franc in 1994. The table below shows the evolution of the costs of the various project components and highlights differences of more than 10% over the original cost.

Table 3.1 – Evolution of Project Component Costs (in UA thousand)

Components	Estimated Cost			Actual Costs			Difference (%)		
	F.E.	L.C.	Total	F.E.	L.C.	Total	F.E.	L.C.	Total
Networks	2,741	328	3,069	2,736	459	3,195	-0.2	+ 39.9	+ 4.1
Power	1,450	130	1,580	1,421	182	1,603	-2.0	+ 40.0	+ 1.5
Switching	1,327	34	1,361	1,063	41	1,104	-19.9	+ 20.6	- 18.9
Transmission	1,585	232	1,817	1,585	279	1,864	0	+ 20.3	+ 2.6
Logistics	1,298	157	1,455	1,267	715	1,982	-2.4	+ 355.4	+ 36.2
Training	8	8	10	10	-			+ 25.0	+ 25.0
Project Unit	132	106	238	132	211	343	0	+ 99.1	+ 44.1
Technical Assistance	507	25	532	507		507	0	- 100.0	- 4.7
Service equipment	1,480	83	1,563	1,518	117	1,635	+2.6	+ 40.9	+ 4.6
Total excl. cont.	10,520	1,103	11,623	10,229	2,014	12,243	-2.7	+ 82.6	+ 5.3
Contingencies	201	270	471	201	583	784	0	+ 115.9	+ 66.5
Grand Total	10,721	1,373	12,094	10,430	2,597	13,027	-2.7	+ 89.2	+ 7.7

3.1.5 The Bank ultimately contributed UA 10.43 million (80%) to the financing of the project costs, as against UA 10.72 million estimated at appraisal, and the Government of Benin contributed UA 2.596 million (20%), as against UA 1.374 million estimated at appraisal. No significant disbursement incident was recorded, apart from the extension of disbursement periods. The final undisbursed balance of UA 84,650 (0.8%) had not yet been cancelled from the Bank's accounts by July 1999.

3.1.6 The project risks, outlined at appraisal, were those inherent in late implementation, which would lead to an increase in project costs and a shortfall in the operating phase. This risk and its consequences materialized, especially on local costs which increased by 89% on the whole; the complexity of the project and the modifications made it difficult to evaluate the shortfall.

3.2 **Operational, Economic and Financial Performance**

3.2.1 Programme outputs, after the modifications, concerned (i) the modernization and extension of the Abomey and Bohicon local networks, whose subscribers increased by 48%, (ii) solar power supply to 8 relay stations, equipment of various centres with rectifiers, batteries, generators as well as the earthing and protection of 12 centres against lightning, to make operation of the centres safe, (iii) the installation of an automatic telex switching unit and extension of the automatic electronic switching unit in Cotonou, (iv) the installation of multiplex equipment on the Cotonou-Bohicon, Bohicon-Parakou and Parakou-Natitingou links and (v) increase in maintenance logistics (vehicles, equipment, and measuring instruments).

3.2.2 The physical outputs of the project were implemented in line with professional standards and the specifications at appraisal. Their operation is satisfactory and project objectives have been achieved as reflected by the indicators in the table below which show undeniable improvement in the quality of OPT's services.

Table 3.2 – Evolution of OPT Capacities and Performance

	<u>1988</u>	<u>1995</u>	<u>Improvement (%)</u>
1. <u>Connection capacity</u> (lines)			
National	11,496	26,557	+131
Bohicon/Abomey	765	1,442	+ 89
2. <u>Service improvement</u>			
Rate of fault clearance in 7 days	70%	90%	+ 29
No. of line faults/subscriber/year	3	0.76	+ 75
Efficiency of local calls (%)	55	99.5	+ 81
Dial tone delay (%<3 sec)	95	99.9	+ 5
3. <u>Staff productivity</u> (workers/00 lines)	139	49	+180

3.2.3 According to the PCR, at completion the programme recorded satisfactory financial and economic rates of return of 32% and 29% respectively; the financial rate of return is 1.5 point above the estimated rate at appraisal (27.47%), because of the modifications to the project, which provided more connection capacity and relatively faster use of the additional capacities. The rate of return on OPT investments in telecommunications was erratic and attained a satisfactory level of 13% only in 1996, and again improved in 1997 to reach 26.6% (see Annex 6). This slow increase in the rate of return on investments in telecommunications is due mainly to the recent development programme and technological upgrading of the network.

3.2.4 OPT's status changed during project implementation from an industrial and commercial public establishment to a privately managed public commercial enterprise; furthermore, its structures were reorganized and the staff regulations modified. The prospect of a sectoral restructuring and eventual privatization of its activities has encouraged OPT Management to review the current structure so as to improve its efficiency and performance. The present organization chart no longer seems efficient because it concentrates decision-making and coordination in the hands of the General Manager; however, it would seem that other measures, in particular the delegation of powers, will be introduced to complete the system, which was aimed at making the senior officers of OPT more responsible.

3.2.5 The project strengthened OPT's capacities in maintenance and established a culture of maintenance with the introduction of periodic maintenance programmes followed strictly in all the network components. As regards the training programme proposed at appraisal, its achievements are not specific because it was included in the supply contracts by the Benin Government, which totally financed the component and also had to bear the increase in its contribution to the financing due to the modifications to the project and other implementation delays.

4. PERFORMANCE OF THE BORROWER, EXECUTING AGENCIES AND THE BANK

4.1 The performance of the Borrower and OPT, beneficiary of the loan and project executing agency, is not satisfactory because of: (i) delays in loan effectiveness and in project implementation, (ii) dissolution of the project unit before project completion, and (iii) lax management of the contracts of some suppliers who were not sanctioned despite violation of the

contractual delivery clauses, in particular.

4.2 The performance of the consultant, suppliers and enterprises is satisfactory on the whole, except for a supplier whose services fell far behind schedule and affected the other contractors. No technical fault or financial problem was recorded and the quality of services is considered satisfactory.

4.3 Bank performance is not satisfactory; the project, which was not prepared and was not well appraised, did not receive the required attention, as reflected by the following: (i) at start-up, the loan became effective about 10 months behind schedule, (ii) the project management units received no training in Bank procedures, and (iii) there was no project supervision.

5. PROJECT SUSTAINABILITY

5.1 The project outputs allowed for wider exploitation of capacities installed earlier and also strengthened OPT's capacity in the maintenance of its equipment with the introduction of the maintenance system. Prospects for sustainability of project impacts would, according to the PCR, be high given (i) the accumulated OPT skills, (ii) the improved financial situation and maintenance capacities brought about by the project, and (iii) the programme of technological and capacity upgrading of the network introduced by OPT through, in particular, the Communications Development Project financed by the Bank which consolidated PNAM achievements. The evaluation deems that sustainability of project impacts in the future will depend on the continued improvement and stabilization of OPT's financial situation, the strengthening of its institutional capacity and human capital, as well as on the further restructuring of OPT and the sector.

5.2 The major factors which OPT should consider for the improvement of its financial situation are: (i) densification and complete digitizing of the network, (ii) improvement of staff and technical productivity (availability of machines and the network), and (iii) improvement of the quality of services to customers. Actions to be encouraged include the reorganization and rationalization of OPT management (promotion of services to clients as well as commercial and financial services), and the training and upgrading of staff.

5.3 The present context of Telecommunications, a test sector for the concept of globalization, has led to keen competition even in countries where the sector is still State-owned. However, policy aspects (regulation and privatization), which are the major concerns of this fast changing sector in the world, are not considered in the PCR, which does not indicate the current trend of the telecommunications sector in Benin, the current stage of reflection, studies or other reforms carried out to ensure integration within the world context. Benin, whose natural resources are limited and whose economy is based on services, needs to join the movement as soon as possible and embark on the restructuring of the sector, as follows:

- separating postal and telecommunications activities,
- defining and sizing the services to be operated as public services,
- defining the typically commercial niches and services with high value added to be developed, which would be operated in collaboration with the private sector, and
- defining and establishing an autonomous regulatory organ for the sector.

6. PERFORMANCE AND OUTCOME RATINGS

The tables, with detailed ratings and various project performances, are presented in Annex 4 of this report.

6.1 Implementation Performance

The implementation performance is not satisfactory; the project was far behind schedule in implementation and loan effectiveness. These delays and inadequacies at appraisal led to significant differences in costs. The project management and coordination unit was dissolved well before project completion, thereby worsening implementation difficulties.

6.2 Bank Performance

The performance of the Bank, which did not ensure project preparation in particular, is deemed unsatisfactory. The modifications to the project, which were in part due to implementation delays, reflect the inadequacies at project appraisal and studies.

6.3 Programme Outcomes

The project outcomes are satisfactory, the project objectives have been achieved and the financial structure and institutional capacity of OPT improved steadily during project implementation, but are not enough to ensure sustainability of its impacts. The success of the programme, in spite of the inadequacies pointed out in the implementation and Bank performance, stems from the enormous need to improve the maintenance capacity and also from the numerous pending applications in all parts of the country; the number of applications was such that the change of components from one donor to another did not have any adverse financial consequence for the project. Sustainability of project impacts will depend on the restoration of the sector's competitiveness, its restructuring and coherent management of the capacities of the various components of the network (transmission, local networks, and switching) as well as their digitizing.

7. CONCLUSIONS AND LESSONS

7.1 Conclusions

The overall project performance, with an average mark of 2.72 based on the rating of all the indicators, is satisfactory. The project, which was far behind schedule in implementation and was subject to modifications and inadequacies at appraisal, was implemented within the earmarked budget. The prospects for sustainability of project impacts are good, as a result of the improved financial ratios. However, the competitiveness of the sector and its long-term viability depend on the determination of the Government and OPT to restructure the sector and integrate the private sector into these activities within a well defined statutory framework.

7.2 Lessons

The evaluation agrees with the lessons drawn in the PCR and considers that:

- i/ relevant objectives and appropriate timing contribute to the success of a project and mitigate the impact of project implementation inadequacies;
- ii/ the inadequacies in preparation, coordination and supervision have a negative effect on the quality of implementation performance and proper management of resources;
- iii/ the premature dissolution of the project management unit negatively affects the proper management of its implementation, resources and information system.

7.3 **Recommendations**

7.3.1 The evaluation of project performance agrees with the recommendations of the PCR which consist in:

For the Borrower and Executing Agency:

- i/ taking appropriate steps in future to fulfil loan effectiveness conditions rapidly (see paragraph 3.1.1);
- ii/ ensuring better coordination between the Autonomous Sinking Fund and the executing agencies for disbursements (see paragraph 1.3 and PCR 13.3 ii);
- iii/ complying with signed agreements and keeping to measures taken with the consent of the Bank for project management and in particular the establishment and maintenance of project management units throughout project implementation (see paragraphs 1.3, 3.1.1, 3.1.4, 6.1 and PCR 13.3.I);
- iv/ strictly applying contract clauses and conditions and, if need be, the contractual penalties (see paragraph 4.1 and PCR 13.3. iii);
- v/ carrying on with actions to reorganize OPT and, in particular, establishing a Directorate responsible for studies and planning which centralizes project management (see paragraph 5.1 and PCR 13.3.ii);

For the Bank:

- i/ cancelling the undisbursed balance of the loan (see paragraph 3.1.6 and PCR 13.3. vii),
- ii/ reinforcing provisions for the auditing of project accounts (see paragraph 3.1.4 and PCR 13.3.vi);
- iii/ reinforcing the launching and regular supervision of projects and seeing to the training of project managers in the various Bank rules of procedure (see paragraphs 3.1.1, 3.1.4 and PCR 13.3. ii, iii);
- iv/ making the procurement and disbursement rules of procedures more flexible for rehabilitation or maintenance programmes to allow for any modifications the project so as to ensure better compliance with its objectives and optimum use of available resources (see PCR paragraph 13.3 i);
- v/ ensuring the maintenance and smooth running of project management units (see paragraphs 3.1.1, 4.2 and 4.3).

7.3.2 To ensure sustainability of project impacts, it is recommended that the Borrower and OPT should (see paragraph 5.3):

- i/ undertake sectoral restructuring studies before any new investment operation and see to the definition and establishment of the autonomous regulatory organ for the sector as soon as possible;
- ii/ promote the commercial, accounting and financial services so as to balance and stabilize its financial ratios, and thereby ensure sustainability of PNAM impacts; and
- iii/ encourage the participation of the private sector in the sector and envisage the development of services with high value added.

7.4 **Follow-up Action**

The points which require follow-up action are indicated in the actions matrix in annex.

ABRIDGED PROJECT PERFORMANCE EVALUATION REPORT

Recommendations and Follow-up Action Matrix

Facts and Lessons	Recommendations	Follow-up Action	Responsibility
<p><u>Formulation</u></p> <p>1. The Bank did not ensure project preparation.</p> <p>2. Inadequacies at appraisal resulted in modifications to the project design and its financing, as well as significant delays in its implementation.</p> <p>3. The absence of some performance indicators made it impossible to assess some outputs.</p>	<p>1. Project preparation is compulsory; it must take the form of a report giving the location of the project and any preliminary data for its appraisal.</p> <p>2. Project appraisal must be based on detailed sketches and take into consideration any difficulty that could affect the implementation time, particularly the fulfilment of conditions precedent to loan effectiveness and rehabilitation project hazards.</p> <p>3. The Logical Framework must be systematically used in appraising projects to ensure better definition and quantification of performance indicators.</p>	<p>1. Reinforce application of operational guidelines of project preparation.</p> <p>2. Review project appraisal guidelines, and improve them with standards and modern appraisal tools, and reinforce application of the guidelines.</p> <p>3. Adapt and reinforce application of MPDE and define indicators by sector of economic activity.</p>	<p>1: OPVP OCOD</p> <p>2: OPVP OCOD OCDW OPEV</p> <p>3: OCOD OPVP OPEV</p>
<p><u>Implementation</u></p> <p>1. The Executing Agency (EA) was not familiar with Bank rules of procedure.</p> <p>2. Project implementation was impeded by the dissolution of its management unit.</p> <p>3. Project supervision was inadequate.</p>	<p>1. The training of EA employees in Bank rules of procedure is indispensable.</p> <p>2. Project management arrangements made with the consent of the Bank must be complied with.</p> <p>3. Project supervision must be systematic to ensure proper project implementation.</p>	<p>1. Ensure systematic training of EA experts.</p> <p>2. See to the fulfilment of the conditions and clauses of agreements.</p> <p>3. Reinforce application of the supervision system.</p>	<p>1. OPVP Borrower</p> <p>2. OPVP Borrower</p> <p>3. OPVP</p>
<p><u>Fulfilment of Loan Agreement conditions</u></p> <p>1. The Bank did not audit the project accounts, progress reports were irregular and the project management unit was dissolved without consulting the Bank.</p>	<p>1. The Borrower must strictly fulfil the loan agreement conditions, and fulfilment of the conditions must be verified and reinforced, especially during supervision missions.</p>	<p>1. Provide, at appraisal, for financial resources for the auditing of project accounts and reinforce monitoring of fulfilment of the loan conditions</p>	<p>1. OPVP OCOD Borrower</p>
<p><u>Sustainability</u></p> <p>1. Sustainability of project impacts may be jeopardized by financial or institutional imbalance.</p>	<p>1. OPT's financial situation should be improved and stabilized, and the sector should be restructured.</p>	<p>1. Restructure the sector, reorganize OPT and encourage more active participation of the private sector.</p>	<p>1. OPVP Borrower</p>

BENIN - NATIONAL TELECOMMUNICATIONS NETWORK MAINTENANCE IMPROVEMENT PLAN
ABRIDGED PROJECT PERFORMANCE EVALUATION REPORT

Retrospective Matrix

Narrative Description	Verifiable Indicators	Means of Verification	Assumptions and Risks																																																						
Sector objectives: 1. Make the national telecommunications network reliable and create conditions for its development	<table border="0"> <tr> <td></td> <td align="center"><u>1986</u></td> <td align="center"><u>1995</u></td> </tr> <tr> <td>Teledensity</td> <td align="center">0.3</td> <td align="center">1.26</td> </tr> <tr> <td>See service performance indicators (Table 3.2, page 4 of PPER)</td> <td></td> <td></td> </tr> </table>		<u>1986</u>	<u>1995</u>	Teledensity	0.3	1.26	See service performance indicators (Table 3.2, page 4 of PPER)			* National Statistics																																														
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ABRIDGED PROJECT PERFORMANCE EVALUATION REPORT

Retrospective Matrix

<p>Outputs:</p> <ol style="list-style-type: none"> 1. Renovation and extension of local networks 2. Solarization, earthing, protection of 10 HF stations and closure of 12 sites 3. Establishment of direct multiplex links 4. Installation of 4 generators 5. Development of 2 maintenance centres 6. Maintenance logistics: procurement of spare parts, measuring instruments, equipment, tools and about 50 vehicles 7. Training of 54 employees/ technicians 	<ol style="list-style-type: none"> 1. Renovation and extension of Abomey and Bohicon networks with outlet of 1400 and 4700 pairs of conveyance and distribution cables. 2. Solarization of HF 8 stations and earthing and protection of 12 other HF stations 3. Establishment of 3 multiplex links 4. Procurement of 6 generators 5. Only one principal maintenance centre established 6.1. Procurement of various spare parts, measuring instruments, sundry tools and 24 vehicles. 6.2. Procurement of an automatic telex switching device 6.3 Extension of the automatic electronic switching device (international transit centre) for 33280 to 37120 lines 7. Not specified, included in the supply contracts 	<p>* OPT quarterly progress reports</p> <p>* ADB back-to-office and completion reports</p>	<p>* The project was 6 years behind schedule.</p>																																																																																												
<p>Activities:</p> <ol style="list-style-type: none"> 1. Studies, terms of reference and preparation of bidding documents 2. Procurement of goods and services 3. Installation works 4. Inspection and supervision of works 5. Training 	<ol style="list-style-type: none"> 1. Costs: (in UA thousand) <table border="1" data-bbox="615 841 1444 1198"> <thead> <tr> <th></th> <th>Estimated</th> <th>Actual</th> <th>Difference (%)</th> </tr> </thead> <tbody> <tr> <td>Local networks</td> <td>2,994</td> <td>3,195</td> <td>+ 6.7</td> </tr> <tr> <td>Power</td> <td>1,482</td> <td>1,603</td> <td>+ 8.1</td> </tr> <tr> <td>Switching</td> <td>625</td> <td>1,104</td> <td>+76.6</td> </tr> <tr> <td>Transmission</td> <td>1,408</td> <td>1,863</td> <td>+32.3</td> </tr> <tr> <td>Logistics</td> <td>2,025</td> <td>1,982</td> <td>- 2.1</td> </tr> <tr> <td>Training</td> <td>118</td> <td>10</td> <td>- 91.5</td> </tr> <tr> <td>Project Unit</td> <td>230</td> <td>343</td> <td>+49.1</td> </tr> <tr> <td>Technical Assistance</td> <td>478</td> <td>507</td> <td>+ 6.1</td> </tr> <tr> <td>Equipment services</td> <td>847</td> <td>1,635</td> <td>+93.0</td> </tr> <tr> <td>Contingencies</td> <td>1,884</td> <td>784</td> <td>- 58.4</td> </tr> <tr> <td>Grand Total</td> <td>12,095</td> <td>13,026</td> <td>+ 7.8</td> </tr> </tbody> </table> 2. Financing Plan: (in UA million) <table border="1" data-bbox="615 1230 1444 1373"> <thead> <tr> <th rowspan="2"></th> <th colspan="4"><----- Estimates -----></th> <th colspan="4"><----- Actual -----></th> </tr> <tr> <th>F.E.</th> <th>L.C.</th> <th>Total</th> <th>%</th> <th>F.E.</th> <th>L.C.</th> <th>Total</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>ADF</td> <td>10.72</td> <td>--10.72</td> <td>88.7</td> <td>10.43</td> <td>--</td> <td>10.43</td> <td>80.0</td> <td></td> </tr> <tr> <td>Gov't</td> <td>--</td> <td>1.37</td> <td>1.37</td> <td>11.3</td> <td>--</td> <td>2.60</td> <td>2.60</td> <td>20.0</td> </tr> <tr> <td>Total</td> <td>10.72</td> <td>1.37</td> <td>12.09</td> <td>100.0</td> <td>10.43</td> <td>2.60</td> <td>13.03</td> <td>100.0</td> </tr> </tbody> </table> 		Estimated	Actual	Difference (%)	Local networks	2,994	3,195	+ 6.7	Power	1,482	1,603	+ 8.1	Switching	625	1,104	+76.6	Transmission	1,408	1,863	+32.3	Logistics	2,025	1,982	- 2.1	Training	118	10	- 91.5	Project Unit	230	343	+49.1	Technical Assistance	478	507	+ 6.1	Equipment services	847	1,635	+93.0	Contingencies	1,884	784	- 58.4	Grand Total	12,095	13,026	+ 7.8		<----- Estimates ----->				<----- Actual ----->				F.E.	L.C.	Total	%	F.E.	L.C.	Total	%	ADF	10.72	--10.72	88.7	10.43	--	10.43	80.0		Gov't	--	1.37	1.37	11.3	--	2.60	2.60	20.0	Total	10.72	1.37	12.09	100.0	10.43	2.60	13.03	100.0	<p>* OPT quarterly progress reports</p> <p>* ADB back-to-office reports (inspection, supervision, completion)</p> <p>* Bank disbursement statements</p>	<p>* Contributions by the Borrower and ADB were provided.</p> <p>* Suppliers of goods and services as well as works enterprises are efficient.</p>
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BENIN - NATIONAL TELECOMMUNICATIONS NETWORK

Annex 3

MAINTENANCE IMPROVEMENT PLAN**ABRIDGED PROJECT PERFORMANCE EVALUATION REPORT****Some Basic Data****A - The Borrower**

Country : Benin
Project : National Telecommunications Network Maintenance Improvement Plan (PNAM)
Loan Number : F/BN/TL/88/18
Borrower : Government of Benin
Executing Agency : Office des Postes et Télécommunications (OPT)

B - The Bank Loan

	<u>Estimates</u>	<u>Actual</u>
Amount (UA thousand) :	10,721.04	10,430.18
Approval date :	10/87	26/10/87
Dates of		
a/ signature :	-	26/02/88
b/ effectiveness :	25/8/88	25/5/89
c/ first disbursement :	31/12/89	22/01/90
d/ last disbursement :	31/12/90	20/12/96

C - The Project

	<u>Estimates</u>	<u>Actual</u>
Total cost (UA million) :	12.09	13.03
Source of finance		
ADB :	10.72	10.43
Gov't :	1.37	2.60
Implementation period :	36 months (3 years)	98 months(>8 years)
Date and reference of PCR :	ADF/BD/IF/97/179 of 6/10/97	

D - Performance indicators

Cost overrun : UA 1.13 million overrun on project cost (7.8%)
Undisbursed balance of UA 84,650.8 not cancelled.

Time behind schedule : 6 years after estimated works completion date

Performance

a/ overall project : Satisfactory

b/ implementation : Unsatisfactory

c/ Bank : Unsatisfactory

ABRIDGED PROJECT PERFORMANCE EVALUATION REPORT

Implementation Performance

Indicators	Score	Remarks
1. Adherence to implementation schedule	1	Project implementation, supposed to cover 3 years, was about 6 years behind schedule.
2. Adherence to cost schedule	2	The project was implemented with a cost overrun of 7.8%, but with more significant difference in the components. These various differences stem from the modifications to the project and to the devaluation of the CFA franc in 1994.
3. Compliance with loan agreement conditions	2	The conditions precedent to loan effectiveness were fulfilled 15 months after signature of the loan agreement; the establishment of the principal maintenance centre in Parakou, which was one of the conditions, was not fulfilled and was deemed untimely. The project unit was dissolved well before project completion.
4. Adequacy of monitoring and evaluation and quarterly progress reports	1	The quarterly progress reports were irregular, especially after dissolution of the project unit.
5. Satisfactory operation	3	The operation of the installations is satisfactory
Overall assessment of implementation performance	1.8	Performance unsatisfactory due to delays in implementation, modifications to the project which led to significant cost differences in the components, and the dissolution of the project unit.

ABRIDGED PROJECT PERFORMANCE EVALUATION REPORT

Bank Performance

Indicators	Score	Remarks
1. At identification	N.A.	The Bank did not identify the project
2. At project preparation	2	The Bank did not undertake a preparation mission; it considered the studies conducted jointly by the Borrower and ITU sufficient to proceed to appraisal.
3. At appraisal	2	The modifications during project implementation are indicative of the unsatisfactory quality of appraisal.
4. At supervision	1	The frequency (3 missions in 8 years), composition and duration (6 staff-weeks) of supervision missions were inadequate.
Overall assessment of Bank performance	1.66	Bank performance is unsatisfactory due to inadequacies at project appraisal and inadequate monitoring of its implementation.

BENIN - NATIONAL TELECOMMUNICATIONS NETWORK
MAINTENANCE IMPROVEMENT PLAN

Annex 4
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ABRIDGED PROJECT PERFORMANCE EVALUATION REPORT

Project Outcome

N°	Indicators	Score	Remarks
1	Relevance and achievement of objectives	2.8	Project objectives are relevant and were achieved satisfactorily.
i)	Macro-economic policy	3	Project implementation took place in the 90s during which there were reforms and economic recovery; OPT's status and management evolved toward private and more autonomous management.
ii)	Sector policy	3	The project falls within the specific strategic framework for the sustainability of the Panafrican Telecommunications Network and maintenance programme established by ITU and adopted by 26 countries by the time of project appraisal.
iii)	Physical outputs	3	The installations complied with professional standards and the operational performance is very satisfactory.
iv)	Financial results	3	The operating and financial structure ratios improved significantly thanks to the methods, operating and maintenance resources, and to additional connection capacities provided by the project. However, it is necessary to stabilize the outcomes.
v)	Poverty reduction, social aspects and women in development	NA	By its nature, the project has no specific impacts on poverty or women.
vi)	Environment	NA	The project has no specific impacts (positive or negative) on the environment.
vii)	Private sector development	2	The project did not have any impact on the private sector, but for the participation of enterprises in project implementation.
viii)	Others	NA	NA
2	Institutional development	2.25	Evolution of the institutional framework is satisfactory.
i)	Institutional framework including restructuring	2	The project management unit was dissolved, thereby jeopardizing its implementation, but OPT's structure evolved favourably to integrate the need to reinforce the commercial service; maintenance was decentralized.
ii)	Financial and management information system including audit system	3	The accounting and financial management complies with the OCAM accounting system; internal audit was reinforced and the accounting agency upgraded to a Financial Department. The information system is satisfactory.
iii)	Transfer of technology	1	There was no transfer of technology and the training proposed by the project was not conducted.
iv)	Staffing by qualified persons (incl. turnover), training and counterpart staff.	3	The staff structure is satisfactory and the productivity gains significant, but the ageing of the population is a short-term dysfunctioning risk. The training resources are adequate.

ABRIDGED PROJECT PERFORMANCE EVALUATION REPORT

3	Sustainability	2.57	The probability of sustainability of project impacts is satisfactory and strengthened by the improved financial situation.
i)	Continued Borrower commitment	2	It should be reinforced with concrete measures for restructuring and participation of the private sector in the sector.
ii)	Political environment	3	The implementation of structural reforms aimed at promoting the private sector and reorganizing the public sector is continuing with the adoption and establishment of a State divestiture strategy from parastatals in the industrial, insurance services sectors.
iii)	Institutional framework	2	It evolved favourably but it still requires radical reforms (organization, management) to make the investments on the network profitable.
iv)	Technical viability and further training of staff	3	OPT's experience is well established; its training capacities are adequate. The second project, "Development of Telecommunications", has been consolidating the physical outputs of the network since 1990.
v)	Financial viability (including cost recovery)	2	The financial rate of return on the project is satisfactory but the trend of the return on the investments is erratic; the debts of the enterprise should be brought down to more acceptable levels.
vi)	Economic viability	3	The outputs had a direct positive impact on traffic fluidity, saturation and especially sustainability of equipment.
Vii)	Environmental viability	NA	It is not affected by the project
Viii)	Operation and maintenance facilitation	3	They are satisfactory.
4	Economic internal rate of return	3	It stands at 32%, which is very satisfactory
5	Overall assessment of outcomes	2.66	It is satisfactory but requires efforts to rationalize and sustain financial stability

BENIN - NATIONAL TELECOMMUNICATIONS NETWORK MAINTENANCE IMPROVEMENT PLAN
ABRIDGED PROJECT PERFORMANCE EVALUATION REPORT

Annex 5

OPT Income Statement

	1993	1994	1995	1996	1997	1998	Annual Growth 90/98
INCOME	12,222	16,080	19,324	20,746	24,300	24,718	13.95%
DIRECT COSTS	4,804	5,827	6,359	7,379	9,102	12,113	14.39%
CONSUMABLES	2,119	2,644	2,879	3,153	3,618	3,736	9.50%
STAFF	2,559	2,971	3,179	3,816	4,032	4,388	9.05%
OTHERS	126	212	301	410	1,453	3,988	53.12%
FINANCIAL CHARGES	798	1,020	1,605	2,497	3,241	3,471	53.78%
DEPRECIATION & PROVISIONS	6,928	2,639	2,292	2,578	2,804	4,696	7.28%
OPERATING EXPENSES	12,531	9,486	10,256	12,454	15,148	20,280	14.39%
OPERATING INCOME	-309	6,594	9,068	9,112	12,058	12,415	27.54%
NET INCOME	-1,636	2,246	2,084	4,317	7,850	10,763	25.67%
<u>Operating ratios</u>							
Net income/Turnover	-13.38	13.97	10.78	20.81	32.30	43.54	
Cash flow	5,292	4,885	4,376	6,895	10,654	15,459	
Added value	9,977	13,224	16,144	17,183	19,229	16,994	

BENIN - NATIONAL TELECOMMUNICATIONS NETWORK MAINTENANCE IMPROVEMENT PLAN
ABRIDGED PROJECT PERFORMANCE EVALUATION REPORT

Annex 6

Income from Telecommunications

	1993	1994	1995	1996	1997	93/97 Rates
PRODUCTION	10,501	14,683	17,503	19,474	23,774	22.66%
CONSUMPTION	1,884	2,320	2,539	3,142	3,300	15.05%
STAFF	1,743	1,960	1,989	2,364	2,537	9.84%
OPERATING INCOME	-736	6,547	9,447	9,365	12,026	
NET INCOME	-2,510	1,525	2,592	4,946	10,023	
ASSET INVESTMENTS	15,246	19,464	26,891	31,653	36,813	24.66%
ONGOING INVESTMENTS	4,520	7,259	5,467	6,180	839	-34.36%
TOTAL INVEST. TELECOM	19,766	26,723	32,358	37,832	37,653	17.48%
RELATIVE PRODUCTION	85.92	91.31	90.58	93.87	97.83	
RELATIVE PERSONNEL EXPENDITURE	68.11	65.96	62.58	61.94	62.92	
RELATIVE NET INCOME		67.91	124.37	114.57	127.69	
RELATIVE GROSS INVESTMENTS	70.41	72.58	74.43	75.08	62.89	
RETURN ON INVESTMENTS	-12.70	5.71	8.01	13.07	26.62	

BENIN - NATIONAL TELECOMMUNICATIONS NETWORK MAINTENANCE IMPROVEMENT PLAN
ABRIDGED PROJECT PERFORMANCE EVALUATION REPORT

Annex 7

Evolution of OPT Balance Sheets

	1993	1994	1995	1996	1997	1998	93/98 Rates
<u>TOTAL ASSETS</u>	46,265	71,110	98,555	103,931	112,599	131,109	23.16%
GROSS TANGIBLE FIXED ASSETS	28,074	36,819	43,472	50,387	59,869	75,393	21.84%
DEPRECIATION	8,131	10,449	11,780	14,357	17,162	21,344	21.29%
NET TANGIBLE FIXED ASSETS	19,943	26,369	31,693	36,030	42,707	54,049	22.07%
OTHER NET FIXED ASSETS	2,124	1,693	3,795	3,161	2,735	2,351	2.05%
Total net fixed assets	22,067	28,062	35,488	39,191	45,442	56,400	20.64%
OPERATING ASSETS	185	214	446	984	1,224	3,141	76.22%
REALIZABLE AND LIQUID ASSETS	24,013	42,834	62,621	63,756	65,933	71,568	24.41%
FLOATING ASSETS	24,198	43,048	63,067	64,740	67,156	74,709	25.29%
<u>TOTAL LIABILITY</u>	46,164	71,110	98,554	103,931	112,599	131,109	23.22%
CAPITAL	7,650	7,650	7,650	7,650	7,650	7,650	
REVALUATION DIFFERENTIAL	-2,147	-2,147	-2,147	-2,147	-2,147		
RESERVES	827	827	1,019	1,279	1,926	2,295	22.64%
BALANCE CARRIED FORWARD	6,556	5,020	5,897	6,987	8,822	10,299	9.46%
NET INCOME	-1,636	1,281	2,086	4,317	7,850	10,763	
OTHER EQUITY CAPITAL	1,467	1,181	728	520	560	303	-27.06%
EQUITY CAPITAL	12,717	13,812	15,233	18,606	24,661	31,310	19.75%
MLT DEBTS	14,641	33,452	37,935	40,660	41,961	45,042	25.20%
PROVISIONS	3,423	6,850	10,436	179	1,380	850	-24.32%
PERMANENT CAPITAL	30,781	54,113	63,604	59,445	68,002	77,202	20.19%
ST DEBTS	15,383	16,997	34,950	44,486	44,597	53,907	28.51%
<u>FINANCIAL RATIOS</u>							
DEBTS (%)	47.57	61.82	59.64	68.40	61.71	58.34	
LIQUIDITY	1.57	2.53	1.80	1.46	1.51	1.39	
RETURN ON NET FIXED ASSETS	-7.41	4.57	5.88	11.02	17.27	19.08	