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Report No. 8882

PROJECT COMPLETION REPORT

MALI

**SECOND TELECOMMUNICATIONS PROJECT
CREDIT 1200-MLI**

JUNE 29, 1990

**Industry and Energy Operations Division
Sahelian Department
Africa Regional Office**

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ABBREVIATIONS AND ACRONYMS USED

AfDB	:	African Development Bank (Abidjan, Cote d'Ivoire)
CCCE	:	Caisse Centrale de Cooperation Economique (Paris, France)
CIDA	:	Canadian International Development Agency
DEL	:	Direct exchange line (connected, telephone)
Expressed Demand		
Demand	:	Sum of working connections and waiting list
FAC	:	Fonds d'Aide et de Cooperation (Paris, France)
ITU	:	International Telecommunication Union
Km	:	Kilometer (1 kilometer = 0.62 miles)
LD	:	Long distance transmission, channel or circuit
Microwave	:	Radio system working at frequencies above 1,000 Megahertz (normally used as long distance transmission carrier for telephone and television circuits)
MIT	:	Ministère de l'Information et des Telecommunications, in charge of sector policy and supervision of OPT
OPT	:	Office des Postes et Telecommunications du Mali, the operating entity for domestic telecommunications in Mali
PE	:	Public Enterprise Sector Reform Program
SHF	:	Super High Frequencies
STD	:	Subscriber Trunk Dialling in automatic interurban/international services
Telex	:	Switched teleprinter service
TIM	:	Compagnie des Télécommunications Internationales du Mali
Trunk	:	Long distance, for interurban service
UAPT	:	Union Africaine des Postes et Télécommunications
UHF	:	Ultra High Frequencies
UNDP	:	United Nations Development Programme
VHF	:	Very High Frequencies

THE WORLD BANK
Washington, D.C. 20433
U.S.A

Office of Director-General
Operations Evaluation

June 29, 1990

MEMORANDUM TO THE EXECUTIVE DIRECTORS AND THE PRESIDENT

SUBJECT: Project Completion Report on Mali
Second Telecommunications Project (Credit 1200-MLI)

Attached, for information, is a copy of a report entitled "Project Completion Report on Mali - Second Telecommunications Project (Credit 1200-MLI)" prepared by the Asia Regional Office with Part II of the report contributed by the Borrower. No audit of this project has been made by the Operations Evaluation Department at this time.



Attachment

MALI
SECOND TELECOMMUNICATIONS PROJECT
CREDIT 1200-MLI
PROJECT COMPLETION REPORT

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MALI

SECOND TELECOMMUNICATIONS PROJECT

CREDIT 1200-MLI

PROJECT COMPLETION REPORT

PREFACE

1. This is the Project Completion Report (PCR) for the Second Telecommunications Project in Mali, for which Credit 1200-MLI in the amount of SDR 11.8 million to the Republic of Mali was signed on April 30, 1982, became effective on November 24, 1982 and was closed on June 30, 1988, the original closing date.
2. The PCR was jointly prepared by the Industry and Energy Operations Division of the Africa Regional Office (Preface, Evaluation Summary, Parts I and III) and the Borrower (Part II).
3. Preparation of this PCR was started during the Bank's final supervision mission in April 1988, and is based, inter alia, on the Staff Appraisal Report; the Credit, Guarantee, and Project Agreements; supervision reports; correspondence between the Bank and the Borrower; and internal Bank memoranda.

MALI

SECOND TELECOMMUNICATIONS PROJECT

(CREDIT 1200-MLI)

PROJECT COMPLETION REPORT

EVALUATION SUMMARY

Project Objectives

1. The main objectives of the project were to (i) improve OPTM's organization, management and operations; (ii) provide reliable telecommunications between the country's main economic centers, with rural areas and with neighboring countries; and (iii) modernize and expand local network facilities (paras. 3.02 and 4.01).
2. The project included: (i) the expansion and construction of local telephone facilities; (ii) expansion of the long distance transmission network; (iii) support facilities for operation, maintenance and construction of the networks; and (iv) technical assistance and training in management, accounting, development planning and operation (paras. 3.03 and 4.01).

Experience and Results

3. Implementation did not raise difficulties with regard to procurement, supply and construction. Completion was delayed by about two years due to late tendering and revision of network design at several locations. To cope with growing demand, the project component co-financed by CCCE was redesigned in 1985, increasing capacities and adding exchanges at new locations. The design of the network component financed by IDA as well as the credit allocation also had to be revised accordingly (paras. 5.01 to 5.03, and 6.01).
4. The estimated project cost was CFAF 6.35 billion (\$25.3 million), with a foreign exchange component of about 72%. The actual cost is CFAF 8.43 billion (\$23.0 million) also with 72% foreign exchange. The decrease in US dollar equivalent is due to dollar appreciation. A higher percentage of the local costs has been financed from IDA credit and the remaining 10% increase in OPTM's share of project costs was met by self-generated funds (paras. 5.04 to 5.06).
5. The physical part of the project went slightly beyond target, (4,500 additional telephone lines, compared with 4,000 at appraisal). At project completion, 84% of all 9,200 main working lines had access to nationwide subscriber dialing service and most of them also had access to international subscriber dialing. Overall demand and usage of service grew in line with appraisal estimates (para. 6.01).

6. In the financial area, the results were well below what was anticipated at the time of appraisal. The accounting system remained insufficient and unreliable. Billing was still slow and Government agencies accumulated further arrears. The target rate of return was not reached (paras 6.02, 6.03 and 11.02).

7. The implementation of the institutional component was also unsatisfactory at the beginning of the project, and to speed up progress in this area, a sector study was carried out in the context of the Public Enterprise (PE) Sector Reform Program (credit 1937 and 1938-MLI) in coordination with the technical assistance under the project. Based on the study's recommendations, Government is implementing a comprehensive sector reform, which began in 1988 (paras. 10.01, 11.03 and 11.04).

Findings and Lessons to be Learned

8. The main findings and lessons to be learned are that:

- (a) delay in procurement could have been avoided by financing preparation of bid documents through PPF (para. 5.02);
- (b) a more thorough evaluation of the impact of OPTM's outpayments to the company providing international carrier facilities should have been made during appraisal (para. 6.02(e));
- (c) IDA should have further insisted on borrower's compliance with:
(i) the settlement of Government arrears; (ii) the impact of the 1985 tariff study and the requirement to consult with IDA before implementing new tariffs (paras. 6.02, 9.01, 10.01 and 11.03);
and
- (d) one very positive step was taken when a sector reform program and action plan was undertaken in the context of the Mali PE project and in coordination with other donors/lenders (paras. 11.04 and 12.01).

Conclusion

9. The follow-up of two telecommunications projects has shown that institutional building and restructuring in Mali is a difficult, complex and slow process. Appropriate coordination and complementary outside assistance are required for a long period of time in addition to further investments in telecommunications, which are necessary to meet the country's future communications needs. This strongly advocates continued IDA involvement in Mali's Telecommunications sector, in close cooperation with other donors.

MALI

SECOND TELECOMMUNICATIONS PROJECT (CREDIT 1200-MLI)

PROJECT COMPLETION REPORT

PART I

1. Project Identity

Title : Second Telecommunications Project
Credit No.: Credit 1200-MLI
RVP Unit : Africa Region
Country : Mali
Sector : AF5IE - Industry Energy Sector
Subsector : Telecommunications

2. Background

2.01 Telecommunications in Mali are under the supervision of the Ministry of Information and Telecommunications. During the project implementation period, operation and development of domestic telecommunications services were the responsibility of the "Office des Postes et Télécommunications" (OPT), a public enterprise established in 1960, which also operated the postal services and provided various public financial services - money orders, postal checking accounts and savings accounts. A mixed company, "Télécommunications Internationales du Mali" (TIM), jointly owned by the Government (65%) and a French Company, "France Câble et Radio," (35%) operated common carrier facilities for international services.

2.02 IDA has been associated with the telecommunications sector in Mali since 1972 through two credits. The first credit (Credit 321-MLI) of \$3.6 million, declared effective on April 4, 1973, was closed on June 30, 1979. It supported construction of a microwave link Bamako-Segou, supply of switching equipment in three main cities and cable work in Bamako. Implementation suffered considerable delays and cost overrun due to poor performance of the consultants and to institutional weakness of OPT. A Project Completion Report was issued on September 30, 1981 and a Project Performance Audit Report on June 6, 1983. The Credit 1200-MLI, of SDR 11.8 million for the second telecommunications project, for which this is the completion report, was signed on April 30, 1982 and closed on June 30, 1988. The Public Enterprise Institutional Development project (Cr. 1938 MLI), signed on June 24, 1988, includes a post and telecommunications component for restructuring the sector with the creation of two new entities--one responsible for postal services and the other for all public telecommunications services, including international ones. A decision has also been reached to create, out of OPT's financial services arm, an independent financial institution subject to banking regulations.

3. Project Objectives and Description

3.01 In March 1978, the Government of Mali requested IDA's assistance in financing the second telecommunications project, which was part of its

1981-85 telecommunications investment program. The project was prepared by OPT with the assistance of consultants financed through a PPF. The project was appraised in January/February 1981 and negotiations were held in November 1981. The credit of SDR 11.8 million was approved by IDA's Board on January 7, 1982 and the credit agreement with the Government of Mali was signed on April 30, 1982 (para. 2.02). A project agreement between IDA and OPT was also signed on the same date.

Project Objectives

- 3.02 The objectives of the project were to:
- (a) provide reliable telecommunications between all the main economic centers of the country;
 - (b) improve and expand local telephone services in Bamako, in provincial towns, important district centers, and rural and remote areas;
 - (c) improve international facilities and introduce subscriber trunk dialing (STD) and links to neighboring countries;
 - (d) improve and expand domestic and international telex service; and
 - (e) improve OPT's management and operations.

Project Description

- 3.03 The project components are:
- (a) construction of a new 200-line automatic telephone exchange in San and extension of trunk switching facilities in Segou;
 - (b) expansion of the local cable network in Bamako to a capacity of about 13,000 pairs, construction of new networks, with a total capacity of about 5,000 pairs, in eight provincial towns and the connection of about 4,000 additional DELs;
 - (c) construction of a microwave radio link on the route Segou-Sevare, and of a number of secondary and rural radio links;
 - (d) installation of a telex exchange, with 400 lines initial capacity in Bamako and the addition of 150 telex subscribers;
 - (e) provision of teaching aids, tools, instruments, equipment and vehicles for construction, maintenance, and operation; and
 - (f) consultancy services for strengthening OPT's administration, financial management, operations and maintenance, and training and fellowships.

4. Project Design and Organization

4.01 The project was designed to support sector objectives described in paragraph 3.02 and to complete the investments initially planned under the First IDA-financed Telecommunications Project. Implementation problems and cost overruns under the first project had resulted in substantial

delays and subsequent project revisions, including reduction of project scope. About one half of the second project is made up of components of the first project which had to be deferred, such as local networks in provincial towns and long distance transmission links. The other half included essential elements of the second phase of OPT's 1981-85 investment program - further extension of local cable networks, new telex facilities, secondary radio links, rural coverage and support facilities for construction and maintenance. The project was designed to enable OPT to meet growth of demand, improve domestic and international services and increase service penetration into rural areas. The project also aimed at institutional development and strengthening of OPT's management, in particular its telecommunications branch - planning and preparing, financial management, operation and maintenance, management information and statistics. Project design and project management organization remained unchanged throughout implementation in spite of some revisions (para. 5.05).

5. Project Implementation

5.01 Credit Effectiveness and Project Start-up: The Credit Agreement signed in April 1982 specified July 30, 1982 for credit effectiveness, but it was only declared on November 24, 1982. This postponement came from: (i) difficulties encountered in obtaining the subsidiary loan agreement between GOM and OPT and the legal opinion on the Credit and Project Agreements, duly ratified by all necessary authorities; and (ii) delays in fulfilling conditions of effectiveness of the parallel financing agreement with CCCE. Improvements could be achieved in this area by better informing the various parties involved in the document approval cycle. For instance, these documents and the ratifying procedure could be discussed and explained at negotiations.

5.02 Procurement: The first disbursement took place at the end of 1984, two years after effectiveness. This delay could have been avoided by financing preparation of bid documents through PPF. However, the procurement process went well with assistance of consultants. Performance of the suppliers and consultants was satisfactory.

5.03 Project Implementation Schedule: Physical project components originally scheduled to be completed in December 1986, were completed about two years behind schedule. Table 3.4 in part III gives details of the completion dates, estimated and actual, for the main project components. However, telephone and telex exchanges, microwave links, subscriber equipment and network construction equipment and tools were delivered as early as December 1987. Local networks construction was delayed because of design and procedural changes which also caused cost increases (para. 5.05). Final orders for cables had to be adjusted and cable laying was rescheduled accordingly. The closing date was not extended because funds had been fully committed by June 30, 1988 and final delivery and payments were completed by December 31, 1988. Only about 500 of the 4,000 new subscribers under the project were left to be connected during the first semester of 1989. In the financial area, audits were late but the delay was reduced to eight months for the last audit (1986 accounts), and audits

of the 1987 to 1989 accounts are underway as part of OPT's ongoing restructuring program under Cr. 1938-MLI.

Project Cost and Revision

5.04 The cost of the project was estimated at Malian F. 12.70 billion or, following reintegration of Mali into the West African Monetary Union in 1986, CFAF 6.35 billion (US\$25.30 million equivalent) with a foreign exchange component representing 72% of total cost. The final cost is about US\$23.05 million of which 72% is foreign exchange. Appraisal estimate and final costs in CFAF were 6.35 and 8.43 billion CFAF respectively. A 33% increase in the total project cost expressed in CFAF compares with an 8% decrease in US dollars, due to dollar appreciation. Consequently, foreign financing was sufficient, but OPT's share which represented about 10% of total cost did increase and was barely met by self generated funds. A comparison of the project costs, as estimated at appraisal and actual as of December 31, 1988, is shown in Table 3.5.A. of Part III. Project financing is detailed in Table 3.5.B. Table 3.5.C. indicates the country exchange rate variations during the project period. 1/

5.05 The cost difference between appraisal and implementation stems from three main factors:

- (a) the revision of the project component financed by CCCE, which increased line capacities and added a number of exchanges within OPT's program, increasing the project cost by about 35% (Table 3.5.b.) and the overall program cost by over 200%;
- (b) the use of contractors for civil works and installation of large local networks contributed to nearly half the increase of 34% in local costs; and
- (c) a major portion of civil works had to be done twice because of an unexpected change in highway construction.

The additional cost incurred under (b) was more than compensated by the incremental revenue generated by the faster connection rate of new subscribers. Concerning item (c), better coordination between OPT and the Ministry of Transport responsible for road construction could have avoided a cost overrun of 131%, i.e., 700 MCFAF.

5.06 Allocation of Credit Proceeds: The original and revised allocation of proceeds and final disbursement for the credit in SDR, is given in Part III, Table 3.3.A. The revised allocation was agreed in July 1986 to reflect project revision, which was based on actual costs. It also reflected the dollar depreciation for the late orders for cables and

1/ The exchange rate for the Mali Franc at appraisal was US\$1 = MF500 = equivalent CFAF 250. The annual exchange rate variations were taken into account in determining the actual cost in US\$. This results in an average rate of US\$ = CFAF 366 during the project period.

outside plant. Cumulative estimated and actual disbursements, in US\$ million for each Bank fiscal year, are shown in Table 3.3.B. of Part III.

6. Project Results

6.01 Physical and Operational Results. The physical targets of the project as planned and achieved are shown in Tables 3.4.A. and 3.6.A of Part III. Growth of DEL's as forecasted at appraisal was revised and increased, by about 12.5% from 4,000 to 4,500, DEL's to be connected under the project. It was also anticipated that construction of local networks in Bamako and the provinces would require about two more years than initially planned, and full development and usage of the new facilities would only occur by December 1989. OPT's main operational results and performance on major indicators is given in Annex 1, on a yearly basis as estimated during appraisal and actual from 1983 to 1987. During the project period, actual yearly growth of new telephone connections averaged about 9%, compared to appraisal estimates of 12%. At the end of 1987, the total expressed demand of 3,800 applicants and 8,300 DEL's reached 12,100 lines, which was slightly above the demand of 12,000 lines forecasted at appraisal. At project completion, 84% of all working DELs had access to nationwide STD service and most of them had also access to international subscriber dialing (ISD).

6.02 Financial Performance: OPT's financial performance has been well below what was anticipated at the time of appraisal.

- (a) Accounts were audited from 1980 to 1986, with a time lag, which was progressively reduced, since the 1986 audited accounts were available in December 1987;
- (b) The status of the accounting system, as described in the last auditors' report on the 1986 accounts (February 1988), reads like a calamity list: (i) all entries are manually made, which causes delays; (ii) receivables cannot be properly monitored because there is no updated register of individual subscribers, which is one explanation for arrears; (iii) there is no register of fixed assets (although one was established under the first IDA project), the amounts of annual construction expenditure cannot thus be correctly assessed and there is no possibility of revaluation; (iv) there is no physical inventory of stocks; (v) there is no cash management; (vi) outstanding amounts, due to TIM which is the largest supplier of services, are not checked with it. In summary, the accounting system is wholly unreliable.
- (c) Billing was still slow (six to seven weeks), collection improved in 1987 for private consumers due to enforcement of strict procedures, but there was no trace of it in the 1986 audited accounts. And Government agencies have not paid for their consumption during the whole period of the project;

there was compensation in 1984, but bills were never formally paid. Arrears are a very thorny question. They are caused by insufficient monitoring of accounts, though it has improved over the years, unwillingness to cut off delinquent customers and opposition of Government to discuss ways of settling its agencies' accounts, which tend to consume freely above their budgets.

- (d) The tariff study was completed with delay, its conclusions were not applied and the purpose of achieving the required rate of return was not taken into account.
- (e) The objective rate of return of 12% on revalued net assets was overstated as outpayments to TIM were omitted in the appraisal report from 1980 onwards. The rate reached 7% in 1985 and 1986 on book values, when sharing with TIM was more favorable to OPT, and after being negative from 1980 to 1982 and low in 1983 and 1984. Apart from the overvaluation of the comparator, the rate of return did not go higher because of slow increase in revenues due to the relatively slow commissioning of DEL's. There often is a noticeable difference in the degree of success between implementing the physical components and implementing the institutional ones, as there is generally in the country a greater purpose and more available competence to achieve physical investment. The problem is how to motivate management improvements as all aspects of it, quality of accounting, tariffs, receivables, rate of return, cost analysis, are constrained by the country's environment and then equally poor. In spite of adequate supervision and insistence on the weak aspects of project implementation, the Bank is not, in fact, in a position to enforce institutional covenants, which are often difficult to meet by lack of competent or motivated people, not perceived as essential by the borrower, and not crucial enough to justify a credit suspension.

6.03 Rate of Return. The internal economic rate of return of the project is estimated, on the basis of the last available documents - the 1986 audited accounts and 1988 supervision report - at 16%. This falls short of the 25% calculated at appraisal, which was overvalued (para. 6.02-e). The main reason is the relative slowness with which new DEL's have been initially connected to the network, whereas the funds for the construction program has been disbursed closer to schedule. Anyway, the economic rate of return is high and this underlines the importance of the development of the telecommunications sector for the country's economy.

7. Project Sustainability

7.01 Project Benefit: The project has had short term benefits that are significant although lower than expected. They include:

- (a) an increase both in the quality and the coverage of telephone services; and

- (b) the turning of OPT into a profit generating entity with a positive net contribution to government resources.

7.02 Institutional Impact: Sustaining and improving those benefits in the long term will hinge on two factors:

- (a) the establishment of adequate sector institution, in view of the present fragile situation (para. 6.02); and
- (b) the improvement of the strained OPT cash position. The impact has been limited during the project, but the institutional set up/rehabilitation will be strengthened in the framework of the public enterprise sector reform: Item (a) is being addressed under a plan to reform the sector institutions, the implementation of which started in 1986 and will culminate with the Institutional Development project; item (b) is related to the reduction of Government receivables (para. 6.02).

8. Bank's Performance

8.01 Bank's performance has been satisfactory on the supervision of the implementation of the physical component but, despite valuable efforts and insistence, the end result has been mixed on the institutional side. Supervision was conducted in a timely and adequate manner, but institutional improvements have been difficult to accomplish on the borrower's side (para. 6.02) and thus more time and outside assistance than initially anticipated should have been provided. Table 3.8 in part III gives details of the supervision missions which were timely and took place at the pace of about two visits each year.

9. Borrower's Performance

9.01 Covenants: Government was the Borrower and OPT was the implementing agency. The status of compliance with the conditions of the Credit and Project Agreements is indicated in Table 3.7. The main non-compliance of Government was its de facto non-payment of telecommunications consumption due to critical public finance position, though some compensation of accrued debts was made in 1984. Concerning OPT's compliance, impact of tariff study was limited, assets revaluation was not applied, there were considerable delays in submitting the audited financial statements, and the rate of return covenant was not met (para. 6.02).

10. Project Relationship

10.01 IDA relationship with Government and OPT on the project has been good. Lack of adequate and timely information on OPT's financial status and management constituted a handicap in dealing with the managerial and institutional problems. Nevertheless, good will prevailed and to the

extent possible under the circumstances of project delays and financial covenant non-compliance, cooperation was obtained and advice considered. In particular as a result of the ongoing dialogue and consensus building with IDA supervision missions on institutional issues, in 1986, Government agreed on a more comprehensive sector restructuring program to be implemented under the PE project. Also, adequate liaison and communication were established and maintained under the project with the other donors (France, Canada, AfDB, UNDP, etc.), largely on IDA's initiative.

11. Consulting Services

11.01 Technical: The project provided for technical consultancy services to assist OPT in project preparation, detailed planning, project management, and supervision of execution of most of the works. About 40 manmonths of technical expert services were to be financed from the proceeds of the credit including about 13 manmonths for engineering studies under PPF. Technical assistance was also provided in parallel under projects financed from other donors or contributors (France, Canada, Switzerland, AfDB, UNDP, etc.). Specific assistance for the IDA financed components was slightly delayed at project start-up pending credit effectiveness. Due to project revision, additional expertise for about 20 manmonths was required, which was financed in part by IDA (five manmonths) and the complement by other contributors. In 1987, when the local networks component was almost completed, albeit lately due to project program revision and changes (para. 5.05), about 1,000 additional DELs were connected. This practically doubled the previous record of new DEL connections by OPT in any past year. As a whole the technical assistance services provided to OPT were satisfactory.

11.02 Financial Management and Audit: The project also provided for consultancy services to assist and advise OPT on financial management and other managerial and administrative matters. About 20 manmonths of services were to be financed from the proceeds of the credit, principally for assets revaluation, audit and advice on overall financial management. Parallel assistance was also provided from other contributors, in particular from France. Some additional assistance in these fields was also required due to the extension of the project period and the slow attention given by OPT to the reorganization and the compliance with financial covenants. The quality of the audit services was generally satisfactory. However, the technical assistance under the project for OPT's financial management improvement was discontinued by common agreement between the Government and IDA, since OPT's institutional development as appraised was substituted, in late 1986, by a more comprehensive scheme that became part of the Mali Public Enterprise Reform Program (PE), under IDA's stewardship.

11.03 Studies: The Project Agreement provided for a tariff structure study to be completed by December 31, 1982, and for OPT to furnish IDA for its comments a program for tariffs adjustments on the basis of the study. Table 3.6.D., Part III, gives details of the purpose of the study and its partial completion and results. In fact, several tariff adjustments were made by OPT during the project period based on both the partial tariff study completed only in 1985 and recommendations from financial consultants

under the project. In particular, tariffs were adjusted in 1982 and 1985 to be in line with tariff changes made in neighboring countries to follow inflation. Also, in 1986, the distribution of revenues from international services between OPT and TIM was adjusted from 50-50% to 70-30%, which resulted in about doubling OPT's rate of return up to 7% from 3.5% in 1985. All these measures, however, proved inadequate to enable OPT to meet the 12% rate of return requirement set forth in the Project Agreement (see also para. 6.02-e). Furthermore, OPT and Government did not consult with IDA before implementing new tariffs, as required in the Project Agreement.

11.04 In early 1984, when project status was downgraded for major managerial and financial problems, and because the institutional and financial problems of the sector were judged sufficiently acute, it was recommended during supervision that a comprehensive program of studies, technical assistance and training for accounting and financial management, be undertaken. This program included: (i) splitting telecommunications and postal/financial services into two separate entities; (ii) much closer coordination of the efforts of all lenders/donors, mainly the Bank, CCCE and Canada; and (iii) incorporating the OPT reform program, and the supplemental financial requirement, into the PE reform. The program started in 1985. Table 3.6.D. summarizes the purpose of the studies, their implementation and impact. Relevant comments in this respect are made in paras 7.02 and 8.02 above. After considerable amount of discussion involving the Bank, the Government and other lenders/donors, towards the end of 1986, the Government decided to implement a major restructuring of OPT/TIM as a component of Mali PE reform. (Cr. 1937 and 1938 MLI). It started in 1989, on the basis of the studies recommendations and as a follow-up to the efforts made under the first and second telecommunications projects to improve the sector. There are still delicate issues of lender coordination, and search for consensus is necessary on such matters as to whether to set up the financial services arm of OPT as a separate entity.

12. Project Documentation and Reporting

12.01 The Development Credit and Project Agreements in the case of Credit 1200-MLI were not geared to achieve project objectives in the key areas of sector development and managerial/organizational improvement. The appraisal report for the project provided a useful framework for review of project implementation by both IDA and OPT. Para 6.01, in particular, indicates that development requirement forecast was realistic and could have been feasible. OPT submitted the necessary information during project supervision and through quarterly reports for presentation and updating of the execution of the works. The reporting and exchange of information was, however, less thorough and timely with regard to institution building and improvement of financial management and overall administration of OPT, as, before 1986, the scope of the institutional component was very modest. This is often the case when combined complex public utility sectors such as post (including financial services) and telecommunications are operated and managed with little or no financial autonomy from government treasury. However, this issue is now being tackled under the PE reform and Institutional Development projects (Credits 1937 and 1938-MLI) and will be part of specific actions on the future institutional structures for OPT/TIM and CCP/CNE.

12.02 OPT and Government have been asked to prepare a draft project completion report to reflect the Borrower's perspective on the project, its implementation, and its results and impact for the future. The report has not been received yet.

13. Conclusion and Recommended Actions

13.01 The first and second telecommunications projects in Mali have shown that the process of institutional building and restructuring is complex and slow, involving political, cultural and human resource factors which require long time for appropriate evolution. Following the basic decision taken late in 1986 to restructure the post and telecommunications sector, splitting them into two separate autonomous operating entities, the Government expressed its wish for continued IDA assistance in the process, and for the development and further improvement of both services, as a reflection of its satisfaction for the timeliness and value of Bank's advice on institutional development. This should enable the Government to achieve the basic sectoral objectives, in particular with regard to the management and operation of the services. Several lenders/donors have indicated their interest in participating in these efforts. Appropriate coordination and complementary assistance could be exercised by IDA at a crucial time when restructuring, building up of new organizational set-ups and action plans for management improvement would have to be defined and implemented together with an appropriate investment program for the rehabilitation, balancing and further expansion of the networks. This would, no doubt, constitute a strong rationale for continued IDA involvement in the sector.

MALI

SECOND TELECOMMUNICATIONS PROJECT (CREDIT 1200-MLI)

PROJECT COMPLETION REPORT

PART II - COMMENTS FROM THE BORROWER ON PARTS I AND III

(As made on June 8, 1990 on Parts I and III of the report, and sent to IDA under the signature of the Chairman of the Board of the Mali Telecommunications Company, SOTELMA)

Introduction

In general, the World Bank report reflects our views regarding project results. However, points that should be reformulated and additional aspects that would lead to a better understanding of the evaluation are the subject of the following comments and observations.

Project Objectives

3.02 Point c. The Second Telecommunications Project was designed essentially to improve the national telecommunications network through the construction, modernization and expansion of works (local networks, transmission trunk lines and switching stations).

Although these activities had a positive impact on the quality of international service, there was no direct intervention to improve international facilities, as mentioned in the report.

Project Description

3.03 Point d. The initial capacity of the telex exchange in accordance with the specifications was 666 lines and not 400.

Point e. Should read "the provision of tools, measuring devices... telephone sets and telex and other equipment...).

Project Implementation Schedule

The delay in construction was due not only to changes in design (following an increase in requirements), but also the procurement procedure for network supplies (cables in particular).

Because the contract provided for delivery in three groups, the delivery dates of which were beyond our control, the resulting materials shortages considerably impacted the implementation schedule.

Project cost and revision

Point c. The construction works for the roads network did indeed delay execution, but in no way were responsible for civil works having to be done twice.

For these works, there was in fact coordination between OPT and Public Works, as reflected in the conclusion of a negotiated contract between the two entities that was carried out in full.

Additional costs were due to:

For civil works:

- an increase in the real needs determined in the field;
- additional works not envisaged (+ 10 - [illegible 70%] (increment for works on particularly hard terrain, raised room construction, etc.);
- increase in surfacing materials (+ 125%).

For the network:

- increase in real needs;
- the revision of unit costs for the third group (+ 29%).

Project results

The project was carried out to the satisfaction of OPT, as it made it possible to automate much of its network, expand the telephone system and improve the quality of service.

In addition to the expansion of the telephone system, the project helped make a significant improvement to the quality of service. For example, the rate of line trouble signals in Bamako fell from 1.67 to 1.16.

Nevertheless, the results for maintenance are much more modest. The targets regarding line repair turnaround had to be revised downward.

Project financing

Point b. As regards collections, the firm contracted for the opening balance sheet recommended that a provision be established for bad claims in the amount of 4,116 billion at December 31, 1988, out of a total of 7,361 billion to be collected.

In addition, the software for billing private clients (FACT 300) can be used to monitor client accounts, as introduced on January 1, 1989, since which time the data have been entered. The information dating to before that time will be processed manually until this section of the record is completely updated and then be loaded into the computer.

The auditors do not show any fixed assets reserve as part of the audit for fiscal 1988.

Moreover, an accounting of TIM is no longer necessary following its liquidation. A buyout agreement was concluded with the partner, the financial cost being borne by the State.

Point c. At present (end of May 1990), the billing lag is 22 days after the end of the 2-month calendar period and 7 more days for bill distribution. This is after one year.

With the commissioning of the new B10 telephone exchange scheduled for July 1990, that 22-day billing lag will be reduced to a maximum of 15 days, owing to the automatic transfer of meter readings.

Following the compensatory subsidy in 1984, at December 31, 1989 the State had paid CFAF 3,631 billion for its telephone and telex consumption.

As part of the restructuring of the post and telecommunications sector, the State will have to considerably cut its telephone and telex arrears, which at December 31, 1989 totalled nearly CFAF 4,721 billion. In addition, its 1990 budget includes an appropriation of CFAF 1,846 billion for telephone and telex services. There has thus been a positive change in the behavior of the State.

Point e. The restructuring of the telecommunications sector has stressed the aspects that would help improve management:

- a credit for 36 man-months of consultancy services and financial management, with a view to establishing the management-finance function;
- establishment of a finance and accounting department on the new organizational chart for SOTELMA (the telecommunications administration);
- establishment of new central offices (staff) for functions such as monitoring/management and auditing.

SOTELMA will increasingly have personnel trained in management techniques. It plans to use outside expertise, while at the same time promoting training in management.

Training

This aspect, which was not covered in the report, clearly had a favorable impact on project results.

The training of 63 agents (42 linemen and 21 foremen) was very beneficial because it apparently enabled the agents to start on the B10 cable work and especially to improve their line construction technique.

Financial performance

Point d. To the best of our knowledge, although the project terms of reference included a tariff study, this was not done.

However, a tariff study was conducted as part of the 1990-2010 Master Plan. The document has not yet been finalized.

Institutional impact

- (a) The second [? line] should read "in the light of the poor fit of the current structure" (para. 6.02 [sic: ?7.02]).

Credit covenants

The report mentions that fixed assets were not revalued. It is our understanding that they were indeed revalued in 1984 by the TELESUISSE consulting firm as part of the project. A supplementary study was prepared by the same consultant in 1985. One of the reasons that the studies were not used was the lack of a tariff study.

Conclusion

We concur with the analysis regarding the improvements that could result from consultations among the donors for the management of future projects.

Improved management would require:

- Institutional restructuring associated with the legal environment and legislation relating to the articles of association of the companies and enterprises and their staff regulations. In this regard, the legal texts governing SOTELMA are available.

The financial restructuring that remains to be done is at present the only major outside constraint to the success of the restructuring program.

SOTELMA has a Master Plan for developing communications over a 20-year period, to be adopted in the near future. Implementation of the Plan first requires the financial rehabilitation mentioned earlier.

In addition to the assistance that IDA can provide to SOTELMA in the financing of its investment programs (e.g. continuation of the expansion of the Bamako network, works at the Segou exchange, Mopti Tombouctou-Gao link, rural service, etc.), it should also provide financial assistance to help the enterprise achieve a healthier balance sheet.

Bamako, June 7, 1990

MALI

SECOND TELECOMMUNICATIONS PROJECT (CREDIT 1200-MLI)

PROJECT COMPLETION REPORT

PART III - RELATED BANK LOANS AND/OR CREDITS

TABLE 3.1

Credit Title	Purpose	Year of Approval	Status
Credit 321-MLI First Telecom Project	To help rehabilitate and expand local and long distance telecommunications systems in Mali & to improve institutional and operating aspects of OPT	June 6, 1972	Completed in 12/79

TABLE 3.2: PROJECT TIMETABLE

Item	Date Planned	Date Revised	Date Actual
Identification and preparation <u>1/</u>			05/78 - 02 & 11/79
Government Application			3/78
Appraisal Mission			01/16-02/06/81
Credit Negotiations			11/09 - 12/81
Board Approval			01/07/82
Credit Signature			03/30/82
Credit Effectiveness	07/30/82		11/24/82 <u>2/</u>
Credit Closing	06/30/88		06/30/88
Credit Completion	06/30/88		12/31/88

1/ These were identification and preparation missions combined with supervision of the first project.

2/ Two extensions of the date of effectiveness were required due to delays in obtaining legal opinion on all documents and in fulfilling conditions of effectiveness of the parallel financing agreement with CCCE under the project.

TABLE 3.3: CREDIT ALLOCATION AND DISBURSEMENTS

**TABLE 3.3.A: ALLOCATION OF CREDIT PROCEEDS
(SDR)**

Category	Original	Revised ^{1/}	Final Disbursement
1. Equipment, materials and supplies			
(a) cables, auxiliaries; subscriber equipment	2,700,000	3,300,000	3,217,590
(b) radio links	2,000,000	2,000,000	1,957,778
(c) telex, teleprinters voice frequency equipment	1,390,000	1,390,000	1,717,408
2. Cable laying and connecting; and construction of ducts	2,090,000	3,100,000	3,343,553
3. Vehicles	350,000	562,820	562,813
4. Tools, instruments, and training equipment	270,000	170,000	164,276
5. Fellowships, training and consultants' services	960,000	600,000	631,356
6. Advance for project preparation	270,000	205,230	205,227
7. Unallocated	1,770,000	161,950	
Total	11,800,000	11,800,000	11,800,000

^{1/} Revision was made on July 23, 1986, on the basis of the revised project and contractual costs of most items.

**TABLE 3.3.B: CUMULATIVE ESTIMATED AND ACTUAL DISBURSEMENTS
(US\$ Millions)**

Bank Fiscal Year ended June 30	Appraisal Estimate	-----Disbursements-----	
		Actual	Actual % of Estimate
1982	0.35	-	0.0
1983	2.00	0.20	10.0
1984	4.90	0.35	6.8
1985	8.00	2.55	31.9
1986	10.60	8.40	79.2
1987	12.40	11.29	91.0
1988	13.50	13.08	96.9
1989 ^{1/}	13.50	13.50	100.0

^{1/} Credit closing date was June 30, 1988. IDA honored qualified withdrawal applications received up to December 31, 1988. The whole Credit amount was then disbursed.

TABLE 3.4: PROJECT IMPLEMENTATION

TABLE 3.4.A: ADDITIONAL FACILITIES, ESTIMATED AND ACTUAL

Indicators	Appraisal Estimate Installations	Actual Installations (or PCR Estimate)
1. <u>Local Telephone</u>		
- External plant capacity		
. (Connected pairs) in Bamako (new and expanded) <u>1/</u>	3,000	3,000
. Eight provincial cities	<u>5,000</u>	<u>5,000</u>
Total	8,000	8,000
- Exchange capacity (lines)		
. New (San and Segou)	300	400
. Expanded (Bamako) <u>1/</u>	<u>2,000</u>	<u>2,000</u>
Total	2,300	2,400
- Telephone sets	6,000	6,000
2. <u>Long-Distance System</u><u>1/</u>		
- No of LD main links	1	1
- No. of LD branch links	3	3
3. <u>Rural Telephone</u>		
- Secondary and rural links	7	7
4. <u>Telex</u>		
- Exchange capacity	400	400
- Teleprinters	150	150
5. <u>Miscellaneous</u>		
- Construction, maintenance and training and tool sets	1,1,1	1,1,1
- Vehicles	40	40
6. <u>Technical Assistance</u>		
- Expert manmonths (IDA, other <u>2/</u>)	60,90	75,125 <u>3/</u>

1/ Financed in part by CCCE.

2/ Financed by CCCE, FAC, CIDA, AfDB, UAPT, and UNDP.

3/ Includes expert services under PPF and for project implementation through the end of 1988.

TABLE 3.4.B: COMPLETION DATES, ESTIMATED AND ACTUAL

Component	-----Completion Dates <u>1</u> /----- Appraisal Estimate	Actual
1. <u>Local Networks</u>		
- External plant	09/86	12/88
- Switching	09/85	12/86
- Telephone sets	09/84	09/85
2. <u>Long Distance Network</u>		
- Microwave links (main and branches)	12/85	12/86
3. <u>Rural Links</u>	09/86	09/87
4. <u>Telex</u>		
- Exchange	06/85	12/86
- Teleprinters	09/84	03/86
5. <u>Miscellaneous</u>		
- Tool sets	06/84	06/86
- Vehicles	06/84	06/86
6. <u>Technical Assistance</u>	09/86	12/88

<u>Completion Project</u>	<u>Initial Estimate</u>	<u>Actual</u>
Closing date	06/30/88	06/30/88
Physical completion	12/31/86	12/31/88 <u>2</u> /

1/ As a whole, completion was delayed by about 18 months due to late tendering for the sophisticated installations (telephone exchange, microwave links and telex exchange) and deliveries of terminal equipment (telephone, teleprinter) and tools, and by about two years for construction of local networks. No extension of the closing date was required due to sufficient time having been allocated for final acceptance of the systems.

2/ Following physical completion of the local networks by December 1988, it was expected that the about 1,000 additional DELs from the project, still to be connected, would be in service by the end of 1989.

TABLE 3.5: PROJECT COST AND FINANCING

TABLE 3.5.A: PROJECT COST (\$'000)

Item	--Appraisal Estimate g/--			-----Actual-----		
	Local	Foreign	Total	Local	Foreign	Total
- Local telephone network	6,384	5,216	11,600	2,194	2,138	4,327
- Interurban network	472	8,116	8,588	190	5,608	5,698
- Telex	64	1,696	1,760	199	2,098	2,297
- Tools, instruments, vehicles		1,192	1,192	-	848	848
- Technical assistance and training	84	1,768	1,852	-	2,020	2,020
Total	7,004	17,968	24,992	6,412	16,346	22,761
PPF	-	308	308	-	287	287
	<u>7,004</u>	<u>18,296</u>	<u>25,300</u>	<u>6,412</u>	<u>16,636</u>	<u>23,048</u>

TABLE 3.5.B: PROJECT FINANCING
(In billions of CFA Francs)

	-Appraisal Estimate a/-			-----Actual-----			% Actual to			
	Local	Foreign	Total	Local	Foreign	Total	--Appraisal Estimates--	Local	Foreign	Total
Component A Financed by CCCE										
Switching	46	170	216	-	765	765	-	450.0		354.2
Segon-Sevaré link	48	1,441	1,489	-	1,247	1,247	-	86.5		83.7
Tools, etc.	-	80	80	-	-	-	-	-		-
Technical assistance, training	7	133	140	-	578	578	-	433.0		411.4
Total Component A	101	1,824	1,925	=	2,588	2,588	=	141.9		134.4
Component B Financed by IDA, OPT										
Cables, etc.	1,550	1,134	2,684	2,194	1,368	3,562	141.5	120.6		132.7
Secondary, rural links	70	588	658	75	808	883	107.1	137.4		134.2
Telex	16	424	440	70	708	778	437.5	167.0		176.8
Tools, vehicles, etc.	-	218	218	-	307	307	-	140.8		140.8
Technical assistance, training	14	309	323	-	216	216	-	69.9		66.9
Total Component B	1,650	2,673	4,323	2,339	3,407	5,746	141.8	127.5		132.9
Total Project Cost (excluding PPF)	1,751	4,497	6,248	2,339	5,995	8,334	133.6	133.3		133.4
PPF	-	77	77	-	94	94	-	122.1		122.1
Total Project Cost (including PPF)	1,751	4,574	6,325	2,339	6,089	8,428	133.6	133.1		133.2
Project cost (in US\$'000) ^{b/}	7,004	18,298	25,300	6,412	18,636	23,048	91.5	90.9		91.9

a/ This includes contingencies.

b/ The exchange rate for the CFAF (equivalent Mali Franc) at appraisal was US\$ = 1 CFAF 250; the annual exchange rate variations have been taken into account in determining the actual cost in US dollars. This results in a proforma rate of US\$ = CFAF 368 during the project period.

TABLE 3.5.C: COUNTRY EXCHANGE RATES

Year	Exchange Rate (CFAF per \$1) Annual Average
1980	250.00
1981	271.73
1982	328.61
1983	381.06
1984	436.96
1985	449.26
1986	346.30
1987	300.54
1988	288.97
Appraisal year average	250.00
Intervening year average	366.00
Completion year average	288.93

TABLE 3.6: PROJECT RESULTS

TABLE 3.6.A: DIRECT BENEFITS

Indicators	Appraisal Estimate (Revised ^{1/})	Estimated at Year End of Closing Date <u>2/</u> (12/31/88)	Estimated at Full Development (by Dec. 1989)
1. Local Telephone Service			
- Additional telephone connections	4,500	3,900	4,500
- Total number of connected main lines	9,200	8,600	9,200
2. Telex Service			
- Additional telex connections	150	140	150
- Total number of connected telex lines	310	300	310
3. Financial			
- Collection during year (percent of billings)	75	93 for private consumers 0 for gov't agencies	
- Operating ratio	60	87	
- Rate of return (%)	15	7	
(on revalued assets) (on book value)			

1/ Appraisal estimates were updated/revised in December 1985 at completion of the outstanding works under OPT's program which were under way at project inception (vide letter of December 2, 1985 and para. 6.01).

2/ Details on the growth of telephone and telex lines yearwise and operational performance as estimated during appraisal and actual are given at Annex 1.

TABLE 3.6.B: ECONOMIC RATE OF RETURN

	<u>Appraisal Estimate</u>	<u>Actual</u>
<u>Internal Economic Rate of Return:</u>	25%	16%

Underlying Assumptions

1. Incremental revenues assigned to the program are based on the traffic increase brought about by the program, from 1983 to 1989 (forecasts for the last three years), until 2002.
2. Incremental costs excluding depreciation and interest are based on the additional assets, traffic and staff requirements brought about by the program.
3. Costs have been deflated to bring them to the 1981 price level and make them comparable with the capital expenditures.
4. Revenues have been calculated by estimating a portion of the consumer surplus, with prices expressed in real terms until the whole program is commissioned (1989), to show that existing and new subscribers are willing to buy services at tariffs increasing with inflation (US producers' price index, multiplied by rate of exchange index).
5. Labor has not been shadow priced, as OPT mostly employs skilled staff of which there is no surplus in Mali.
6. A sensitivity analysis on the above rate of return shows that with 10% higher capital and operating costs and 10% lower revenues, the rate of return would be 11%.
7. A summary of the program incremental cost and benefit streams, at 1981 price level for cost and at current price level (until end of the implementation period) for revenues, is as follows:

Year	Capital Expenditure	Operating		Net Benefits
		Costs	Revenues	
-in CFAF million--				
1982	748.4	-	-	-748.4
1983	7,713.1	150.8	345.6	-7,518.3
1984	865.8	242.4	579.9	-528.3
1985	911.1	338.7	759.9	-489.9
1986	815.7	441.1	1,088.8	-168.1
1987	-	652.5	1,669.7	1,017.2
1988	-	855.4	2,254.7	1,399.4
1989-2002	-	973.6	2,605.8	1,632.2

TABLE 3.6.C: FINANCIAL AND FISCAL IMPACT

	<u>Appraisal Estimate</u>	<u>Actual</u>
<u>Internal Financial Rate of Return:</u>	15%	9%

Underlying Assumptions

They are the same as for the internal economic rate of return, except that incremental revenues have been deflated to bring them to the 1981 price level.

Fiscal Impact

The income taxes due by OPT and assigned over the 20-year life of the program would be CFAF 1,161 million compared to revenues of CFAF 43,179 million both expressed in 1981 price levels. The huge discrepancy between the two amounts (the ratio is 37, and should be well below 10) is the result of OPT's failure to reach the rate of return objective.

TABLE 3.6.D: STUDIES

	Purpose as Defined at Appraisal	Status	Impact of Study
<hr/>			
<u>Studies</u>			
1. Telecommunications Tariff Study _{1/}	Develop principles and a basis to formulate appropriate structure & recommend levels for OPT's tariffs.	Completed in 09/1985	Limited _{1/}
2. Sector restructuring Study and action plan for management improvement _{2/}	Advise on sector structure, organization financial management and other managerial and administrative matters.	Completed in 04/1986	Restructuring agreed by Government for implementation in 1989.

Comments:

- 1/ The study was made with delay under CIDA (Canada) Technical Assistance Program. It was, however, partial and its impact limited as proposals only covered first stage of interim changes and not a comprehensive plan for tariff structure or measures for progressive application and term adjustments. Tariffs structure and distribution with regard to international services were considered separately by OPT as recommended by IDA during supervision and the financial consultants under the project. In particular, the 50/50% distribution of international revenues between OPT and TIM was changed to 70/30% in 1986 resulting in substantial improvement of OPT's rate of return.
- 2/ The study was recommended during project supervision and made in the context of the Public Enterprise (PE) Sector Reform Program and in coordination with the technical assistance to OPT's operation and management under the project. Such assistance was enlarged to OPT's overall operation, including postal and financial services. Based on recommendations from the study, Government has agreed to implement a comprehensive sector restructuring program beginning in 1989. This would involve the splitting of OPT's operations into separate entities for posts (including financial services) and for telecommunications (including a merger with TIM, the mixed company for international telecommunications). Continued studies and assistance in the reform process is being sought by Government under PE program or a possible 3rd telecommunications project.

TABLE 3.7: STATUS OF COVENANTS

Section of Agreement	Description of Covenant	Compliance with Covenants
Ca 3.02	Government to take all action necessary to enable OPT to establish and maintain current accounts in commercial banks with all funds resulting from its telecommunications operations for the payment of its capital and operating expenses and its debt service. Government shall not permit any disbursement from such accounts for other purposes except to the extent that such funds are clearly surplus, as certified by the Minister responsible for telecommunications.	Complied
CA 3.03	(a) Government shall pay and cause its agencies to pay, promptly upon receipt of the corresponding bill, all telecommunications services rendered by OPT.	No. Improved budgeting and payment procedures put into effect, but critical public finance position and poor consumption control resulted in continued noncompliance.
CA 3.03	(b) Government shall take, and cause its agencies to take, all actions necessary to enable OPT to put into effect and enforce the procedures for the collection of telecommunications charges.	Complied for private accounts.
CA 3.03	(c) Government shall refrain, and cause its agencies to refrain, from taking any action which could interfere or in any way affect in an adverse manner the putting into effect and enforcement of such procedures.	Complied for private accounts.
CA 3.04	Government shall make available to OPT promptly as needed any funds required to cover any deficits of its postal and financial operations.	Partial. Up to FY84 settled as part of Government/OPT compensation.

Section of Agreement	Description of Covenant	Compliance with Covenants
PA 2.02	OPT shall employ engineering consultants to assist it in the preparation of plans and specifications and bidding documents for the project and in the execution of the project.	Complied.
PA 3.03	OPT shall maintain accounts in commercial banks for the deposit of all receipts from its telecommunications operations. Payments out of such accounts shall be made exclusively to meet OPT's operating and investment expenditures and debt service, and OPT shall not transfer funds deposited in such accounts for any other purpose unless the funds thereafter remaining on deposit would be sufficient to meet OPT's operational and investment requirements and debt service for the immediately following three-month period.	Complied.
PA 3.04	OPT shall: (a) by March 31, 1983, furnish to IDA for its comments a plan for the collection of charges for its telecommunications services such plan to provide, inter alia, for the suspension of telephone services to users which have bills for such services overdue for a period of more than 30 days; and (b) by June 30, 1983, put into effect and thereafter enforce such procedures as shall be appropriate, as shown in such plan.	Yes in respect of private subscriber accounts though with delay in start-up. Not enforced for Government.
PA 3.05	OPT shall: (1) by December 31, 1982 complete a study of the structure and levels of its tariffs for telecommunications; and (2) by June 30, 1983, furnish to IDA for its comments a program of tariffs for its telecommunications based on the conclusions of such study and providing for adjustments of tariffs to take into account the rate of return requirements set forth in	Yes with delay. Study, however, was only partial as proposal only covered first stage of interim changes. Does not take into consideration the rate of return requirement.

Section of Agreement	Description of Covenant	Compliance with Covenants
	Section 4.03 of the project agreement, as well as general changes in prices in Mali.	
PA 4.02	OPT shall furnish: (1) unaudited financial statements as soon as available but in any case not later than four months after the end of the fiscal year, and (2) audited financial statements not later than nine months after the 1981 fiscal year and six months after the 1982 fiscal year and thereafter.	Yes, but with considerable delay.
PA 4.03	(a) OPT shall take all action as shall be necessary to get an annual return at a rate of at least 12% on the average net current value of its fixed telecommunications assets in operation.	Not complied with. The rate in FY86 is 7% on <u>non-revalued</u> net assets
PA 4.03	(b) (iv) OPT shall: (1) by June 30, 1982, furnish to IDA a proposal for a method for the revaluation of its telecommunications fixed assets, and (2) revalue each year beginning in respect of 1982 its telecommunications fixed assets in accordance with the method so approved by IDA.	Yes, but with delay. Proposal submitted 12/84 and finalized 02/86. Revaluation was not applied in FY86 accounts.

Table 3.8: MISSIONS DATA

Stage of Project Cycle	Month/Year	No. of Persons	SW in Field	Specialization Represented	Performance Rating Status ^{4/}	Types of Problems or Remarks
<u>Through Appraisal</u>						
Identification ^{1/}	5/78	1	1	Eng.	-	-
Preparation ^{1/}	02/79	2	2	Eng., Fin. A.	-	Start Up of PPF
Preappraisal ^{1/}	11/79	2	3	Eng., Fin. A.	-	Progress under PPF
Appraisal	01/81	2	3	Eng. Fin. A.	-	
Follow up to Appraisal ^{1/}	08/81	1	1	Fin. A.		Recond. of negos. (Fin).
Follow up to Appraisal ^{2/}	09/81	1	1	Eng.		Recond. of negos (Eng).
<u>Supervision</u>						
Supervision 1 ^{2/}	01/82	3	3	Eng./Fin. A. Econ.	2	Fin. Acctg. org. & progress in procurement
Supervision 2	09/82	2	3	Eng., Fin. A.	2	Cond. of effectiveness not met. Financial management
Supervision 3	03/83	1	1	Fin. A.	1	Billing and accounting
Supervision 4	09/83	1	1	Eng.	2	Delay in project start up OPT's financial situation
Supervision 5	03/84	2	2	Eng., Fin. A.	2	Slippage in project progress
Supervision 6	10/84	1	1	Fin. A.	3	Financial management and relation with Government
Supervision 7	01/85	2	3	Eng., Fin. A.	3	Overall and financial management - delayed implementation. Thorough sector study recommended
Supervision 8	07/85	1	1	Fin. A.	2/3	Settlement of Government arrears. Compliance with financial and managerial covenants
Supervision 9	03/86	2	2	Fin. A., Econ	2	Financial situation progress in procurement and project implementation
Supervision 10	03/87	1	1	Fin. A	2	Government arrears and OPT's finances
Supervision 11	09/87	2	2	Eng., Fin. A.	2	Compliance with financial covenants
Supervision 12 ^{3/}	04/88	2	2	Eng., Fin. A.	2	Restructuring study agreed Project completed. Progress expected in sector restructuring

- 1/ These were combined missions for supervision of the 1st and preparation of the 2nd project.**
- 2/ This was initial supervision on project detailed planning, procurement start up and recruitment of consultants in financial management.**
- 3/ This mission also identified a possible third project as requested by Government. No subsequent project completion review mission could be scheduled.**
- 4/ Key to performance rating: 1 - problem free or minor problem; 2 - moderate problems; 3 - major problem.**

MISSIONS.PCR:MS\MY

MALI
SECOND TELECOMMUNICATIONS PROJECT
GROWTH OF FACILITIES AND OPERATIONAL PERFORMANCE
(1983-1987, SAR Estimates and Actual Indicators)

	1983		1984		1985		1986		1987		1988
	SAR Est.	Actual	# N.A.								
1. No. of main telephone lines (DELS)	6140	6485	7060	7071	7600	7243	8450	7346	9200	8339	N.A.
2. Additional DELS connected within the project during year:											
(a) Bamako	450	502	530	239	-	164	-	(48)d/	-	528	N.A.
(b) in capitals of region	170	94	300	208	-	7	-	113	-	261	N.A.
(c) in rest of country	40	25	70	189	-	11	-	89	-	186	N.A.
3. No. of telex subscribers	-	160	-	192	-	192	-	187	-	258	N.A.
4. Additional telex lines connected	30	-	50	-	-	-	25	-	25	71	N.A.
5. No. of OPT Staff for telecom (Telecom Dept. plus 50% of common services) per 1,000 DELS	165	169	150	160	167	167	149	162	138	154	N.A.
6. Faults per DEL per year (average for all regions) in automatic exchange areas	1.7	1.7	1.5	1.5	1.0	1.3	1.0	1.2	1.0	1.1	N.A.
7. Duration of faults announced by subscribers in automatic exchange areas: ^{a/}											
(a) less than 48 hours (X)	60	42	65	15	20c/	11	30c/	13	40c/	18	N.A.
(b) 48 hours or more (X)	40	58	35	85	80	89	70	87	60	82	N.A.
8. Vehicles in garage for services or repair (average vehicle calendar days per year for total vehicle fleet)	30	NA	30	9b/	30	7.3b/	30	NA	30	N.A.	N.A.
9. Delays in the preparation and distribution of telephone & telex bills (weeks from last day of billing period)	4	11	4	9	4	9	3	7	3	7	N.A.
10. Amount of collection during year as a % of amt. of telecom billings during year	70	60	75	59	70	55	60	57	90	58	N.A.
11. Operating ratio - Telecom Department	63	92	60	65	98	84	83	87	78	N.A.	N.A.
12. Rate of return on revalued net assets in use by telecoms	15	3	15	5	12	5	12	7	12	N.A.	N.A.

^{a/} Revised vide letter of December 3, 1985; the ^{a/} N.A. 1988 data on basis for PCR estimate not available.

^{b/} Actuals reflect 24 hour delays.

^{c/} Figures have been queried.

^{d/} Revised targets for 24-hours delays.

^{e/} In net terms, suspensions exceeded new connections.

PROJECT COMPLETION REPORT
REPUBLIC OF MALI
OFFICE DES POSTES ET TELECOMMUNICATIONS (OPT)
TELECOMMUNICATIONS DEPARTMENT
INCOME STATEMENTS
(In CFAF million)

31 December	Appraisal	Actual	Appr.	Actual	Actual								
	1980	1980	1981	1981	1982	1982	1983	1983	1984	1984	1985	1985	1986
Operating revenues													
Telephone	1979.5	1495.0	1539.9	1417.0	1975.9	1935.0	2295.0	2506.0	2762.1	3502.0	3386.2	4391.0	4694.0
Telex/telegraph	249.0	492.0	262.8	429.0	277.5	493.0	293.8	532.0	311.8	650.0	331.7	688.0	634.0
Miscellaneous	58.0	90.0	58.0	190.0	59.0	219.0	58.0	210.0	59.0	245.0	59.0	372.0	277.0
Total operat. rev.	1886.5	2087.0	1860.5	2036.0	2311.4	2647.0	2646.7	3247.0	3131.9	4397.0	3776.9	5451.0	5596.0
Operating expenses													
Personnel	324.5	322.0	356.5	397.0	392.5	410.0	432.0	427.0	475.0	429.0	622.5	511.0	552.0
International		1169.0		1080.0		1040.0		1145.0		1234.0		2004.0	1590.0
Joint services (a)		112.0		136.0		133.0		169.0		190.0		178.0	227.0
Depreciation	171.5	450.0	280.5	440.0	253.0	480.0	279.0	577.0	390.5	564.0	536.0	578.0	687.0
Bad debt provision								83.0		414.0		250.0	450.0
Miscellaneous	489.0	371.0	500.5	593.0	556.5	613.0	567.2	707.0	709.5	899.0	963.9	1080.0	1248.0
Total operat. exp.	954.0	2470.0	1087.5	2566.0	1202.0	2676.0	1278.2	3128.0	1674.0	3719.0	2022.4	4599.0	4854.0
Net operat. income	722.5	-413.0	773.0	-531.0	1109.4	-29.0	1368.5	119.0	1558.0	678.0	1754.5	852.0	741.0
Less: Interest	32.5	89.0	23.8	138.0	72.4	174.0	122.1	59.0	235.1	119.0	351.7	459.0	446.0
Net income	690.0	-512.0	749.2	-669.0	1037.0	-203.0	1246.5	60.0	1322.9	560.0	1402.8	393.0	295.0
Operating ratio	57.2%	120.1%	59.6%	126.1%	52.0%	101.1%	48.3%	96.3%	60.3%	84.6%	53.6%	84.4%	86.6%
Rate of return on book value	26.2%		27.0%		36.7%		35.1%	1.4%	27.3%	5.6%	21.0%	7.2%	6.6%

(a) Breakdown telecom/postal services: 60/40 up to 1985, 65/35 thereafter

MALI:Annex 2, par. 2, Annex 2B:107

PROJECT COMPLETION REPORT
REPUBLIC OF MALI
OFFICE DES POSTES ET TELECOMMUNICATIONS (OPT)
TELECOMMUNICATIONS DEPARTMENT
CONSOLIDATED BALANCE SHEETS
(in CFAF million)

31 December	Appraisal 1980	Appr. Actual 1981	Actual 1982	Appr. Actual 1983	Actual 1984	Appr. Actual 1985	Actual 1986
Assets							
Gross fixed assets			6877.0	7170.0	15895.0	16702.0	17763.0
less accumul. depreciation			1966.0	2498.0	3197.0	4449.0	5894.0
Net fixed assets in operat.	8049.0	3195.6	4411.0	3373.3	4672.0	4953.0	12498.0
Works in progress	1261.0	1047.0	123.0	4970.5	0.0	6594.0	1384.0
Current Assets							
Inventory (a)			771.0	910.0	360.0	314.0	314.0
Receivables - Telecomm (b)			2529.0	3375.0	3366.0	2622.0	4594.0
- Postal			2061.0	2667.0	3740.0	3264.0	3095.0
Treasury	6523.5	6423.5	8514.0	6523.5	2480.0	6523.5	2612.0
Others	8630.0	9509.3	2741.0	10774.1	4399.0	11610.1	3106.0
Total	15153.4	15992.3	16616.0	17297.6	13442.0	18133.6	18002.0
Total Assets	19463.5	20175.4	21150.0	25641.3	18114.0	29680.6	26884.0
Liabilities							
Equity							
Share capit. & reserves			2218.0	1669.0	1255.0	1413.0	2000.0
Subsidies (c)			760.0	531.0	9099.0	8203.0	7634.0
Year's profit			-669.0	-299.0	-70.0	437.0	246.0
Total	8840.5	4621.8	2309.0	6624.3	1901.0	10226.5	10284.0
Long Term Debt	915.2	919.8	1204.0	1861.4	1188.0	4064.6	1492.0
Current Liabilities							
CCP	8488.0	8488.0	9978.0	8488.0	3973.0	8488.0	3311.0
Postal debt			4912.0	4022.0	3367.0	2366.0	2366.0
TIM/DTRE (d)			2121.0	2228.0	2974.0	3180.0	3180.0
IMF				3999.0	4179.0		
Others	6219.9	6145.8	626.0	6667.6	803.0	6902.5	1277.0
Total	14707.9	14633.8	17637.0	15165.6	15025.0	15390.5	15108.0
Total Liabilities	19463.5	20175.4	21150.0	25641.3	18114.0	29680.6	26884.0
Debt/(Debt + Equity)	19.2%	16.6%	34.3%	17.8%	38.5%	28.4%	12.7%
Current Ratio		1.1	0.9	1.1	0.9	1.2	0.9
Subscr. accts receiv. (mths)			14.9		15.3		12.4

- (a) Substantial stock write-downs in 1983 and 1984.
(b) Public sector netted out in 1984 as part of Government-OPT compensation. Total telecom receivables at end 1984 were CFAF 5.8 billion.
(c) Reflects from 1984 depreciation of assets financed out of the Canadian subvention.
(d) From OPT due to pay arrears direct to France through DTRE (in 1986, CFAF 2.54 billion).