

# MODERNIZATION OF TELECOMMUNICATIONS

(MIF/TC-00-02068)

## EXECUTIVE SUMMARY

<b>BENEFICIARY:</b>	Office of the Prime Minister														
<b>EXECUTING AGENCY:</b>	Office of the Prime Minister														
<b>OBJECTIVES:</b>	The <b>general objective</b> of the project is to modernize the telecommunications sector of Guyana. The <b>specific objective</b> of the project is to promote competition in the telecommunications and information services sector.														
<b>DESCRIPTION:</b>	The proposed technical cooperation would be used to: develop a strategy for the modernization of the telecommunications sector; reform the legal/regulatory framework; develop a cost model of the network and audit GT&T; carry out outreach and training activities; and strengthen the regulatory agency.														
<b>ENVIRONMENTAL IMPACT:</b>	The Technical Review Group reviewed this Project Brief March 17, 2000 and concluded that no further action was required.														
<b>PROJECT COST AND FINANCING:</b>	<table><tr><td colspan="3">Window I Grant:</td></tr><tr><td>MIF</td><td></td><td>US\$1,100,000</td></tr><tr><td>Beneficiary</td><td></td><td>US\$ 500,000</td></tr><tr><td>Total</td><td></td><td>US\$1,600,000</td></tr></table>			Window I Grant:			MIF		US\$1,100,000	Beneficiary		US\$ 500,000	Total		US\$1,600,000
Window I Grant:															
MIF		US\$1,100,000													
Beneficiary		US\$ 500,000													
Total		US\$1,600,000													
<b>EXCEPTIONS TO BANK POLICIES:</b>	None.														
<b>SPECIAL CONTRACTUAL CONDITIONS:</b>	Before first disbursement, the Government of Guyana will provide evidence that sufficient counterpart budget resources will be made available (see paragraph 9.1).														

## **I. COUNTRY AND PROJECT ELEGIBILITY**

- 1.1 Guyana is eligible for all forms of MIF financing as declared by the MIF Donors Committee on November 2, 1995. The financing of this project is compatible with the MIF objective of fostering increased private sector participation in the economy and is eligible for grant funds from the Technical Cooperation Facility. The Project Brief was approved March 6, 2000.

## **II. BACKGROUND**

- 2.1 **Introduction.** Information technology (IT) has the potential for transforming a society. Applications such as E-commerce, telemedicine, distance education based on the Internet, the international provision of services such as accounting, programming, remote data processing, and online marketing can contribute to the economic development of Guyana. To benefit from IT and the services it supports, it is necessary to develop a modern telecommunications infrastructure, capable of offering the whole range of services of the highest quality possible. At present, the telecommunication sector needs to be developed to attain higher standards in several critical aspects, and the tariff structure has to be rationalized to attract investment. There has been insufficient investment in the latest technology, international long distance rates are relatively high, about 70,000 requests for the installation of new lines have not been fulfilled, and there is an even larger number of potential users who have not submitted requests for lines because they have no hope of obtaining one. Competition in the provision of telecommunications networks and services would promote economic development and growth in the information and telecommunications sectors.
- 2.2 **The Legal/Regulatory Framework.** The legal/regulatory framework for telecommunications is essentially based on:
- The Public Utilities Act of 1999.
  - The Telecommunications Act of 1990.
  - The Purchase Agreement between the Government and the buyer (Atlantic Tele-Networks or ATN) of 80% of the former state-owned telephone company, GT&T.
  - The GT&T license and the licenses to other providers of services.
- 2.3 The Telecommunications Act of 1990 and the GT&T license were prepared with great haste prior to the privatization in 1991. They were largely copied from the United Kingdom Telecommunications Act and from the license for BT (formerly British Telecom). The Purchase Agreement, on the other hand, was mostly drafted by the purchaser of the state-owned company, and the terminology and principles

follow more closely US regulation and legal/regulatory tradition. Because of the different origins of the main legal instruments, there is significant confusion about terminology, obligations, permissible services, and basic regulatory principles.

- 2.4 Regulation is also hindered by overlap in regulatory functions. The Telecommunications Act created the post of Director of Telecommunications, with a mandate to regulate access rates and interconnection rates (essentially “wholesale” rates). The Public Utilities Commission (PUC), which has the overall regulatory responsibility over the telecommunications sector, is charged with regulating rates to final users, but may also regulate “wholesale” rates. Primarily due to this overlap, a Director of Telecommunications has never been named, thus leaving all regulatory actions to the PUC under a legally unclear mandate. In addition to this, spectrum management, normally considered a regulatory function, rests with the National Frequency Management Unit, which was established as a public corporation under the Public Corporations Act. These overlaps have prevented any development of a sound regulatory framework in Guyana. It is absolutely essential to simplify the institutional framework for regulation of telecommunications.
- 2.5 **The Guyana Telephone and Telegraph Company (GT&T).** When ATN acquired its interest in GT&T, there were about 13,000 telephones in service in Guyana. The Agreement called for the installation of 20,000 lines per year for the first three years of the Agreement, but that commitment was not fulfilled. There are now about 70,000 lines installed and requests for 70,000 additional lines have been made. The failure by GT&T to comply with the expansion plan in the time specified could potentially be grounds for the cancellation of the license, and has been a large point of contention between the operator and the PUC. GT&T alleges that it has not complied with the expansion plan because service rates are too low and the guaranteed return on investment cannot be met. Under current circumstances, there is insufficient cost data available to the PUC to determine the actual costs of providing services to final consumers and interconnection to other carriers.
- 2.6 **Priority of Reform.** Reforming the telecommunications sector of Guyana is of high priority because of its potential beneficial effects on economic development. It is also very urgent because GT&T will lose a significant proportion of its revenue beginning January 1<sup>st</sup> 2002, partially as a result of the US Federal Communications Commission’s policy of reducing accounting and settlement rates. In addition, Internet telephony, call back services, and other technological innovations will have additional negative effects on the revenue stream of GT&T. The effect of the reduction in settlement rates can be explained best by presenting some numbers on the revenue sources for GT&T. Based on the company’s projections for 1998, these are shown in the table immediately below:

REVENUE CATEGORIES	US\$Million
Audio-text	41
Net settlements	28
Outgoing long distances	27
Local calls	7
National long distance	1
Other	3
TOTAL	107

- 2.7 The US FCC's decision to force a reduction in settlement rates from US\$0.85 to US\$0.23 by January 1<sup>st</sup> 2002 means that the \$28 million in net settlement payments will be reduced significantly. Additionally, the incentive for using Guyana for audiotext services will decline and may even disappear, and this could represent a revenue loss of US\$ 41 million. A decline in settlement rates will put downward pressure on incoming international call rates and this could put downward pressure on outgoing international call rates. With these declines, GT&T will face a negative cash flow by January 1<sup>st</sup> 2002. Based on these facts, it is probable that GT&T would be ready to agree to a reduction in the period of exclusivity in exchange for a more transparent legal/regulatory framework.
- 2.8 At the same time, the Government is well aware of the negative effects which may ensue from its monopoly service provider facing a financial crisis. Although the relationship between the Government and GT&T has been contentious to date, both sides understand that they have a window of opportunity to realize a mutually beneficial reform of the sector.
- 2.9 The medium term development of the sector will require the formulation and establishment of a pro-competition regulatory environment. In order to achieve this, it would be necessary to reach an agreement with GT&T on the modification of the License and Purchase Agreement. As GT&T's profits have been based almost exclusively on the termination of incoming long distance calls and on audiotext business, the impending reduction in those revenues offers a strong incentive for negotiations. A scenario where GT&T agrees to reduce the length of the exclusivity period in exchange for a more stable and transparent regulatory framework is very plausible. This outcome would be similar to the one reached in Jamaica and the one that is likely in Trinidad and Tobago, where Government negotiators have been supported by a MIF Project.
- 2.10 **Recent Developments.** In January 2000, the Prime Minister drafted a paper, *Renegotiation and Reform of the Telecommunications Sector*, where a number of proposals designed to modernize the telecommunications sector of Guyana were made. These proposals included the formation of a Subcommittee of Cabinet, composed of five Ministers that would formulate a strategy for the telecommunications sector. The subcommittee has been named and is headed by

the Presidential Advisor for Science and Technology. A Working Group, under the policy guidance of the Subcommittee, has been charged with developing and implementing a strategy for the modernization of the sector.

- 2.11 In March 2000, the IDB financed a seminar to discuss issues related to the modernization of the telecommunications sector. More than 160 representatives of civil society attended the seminar and it elicited numerous articles in the local press. The Government reiterated to the Bank its interest in implementing this proposed project in an open and transparent manner, and that they are ready to support similar consultations with civil society in the future.

### **III. PROJECT OBJECTIVES, BASIC COMPONENTS AND ENVIRONMENTAL IMPACT**

#### **A. Project Objective**

- 3.1 Information technology (IT) activities can contribute importantly to the development of the economy, but carrying out these activities would require a more developed telecommunications sector. The **general objective** of the project is to modernize the telecommunications sector of Guyana. The **specific objective** of the project is to promote competition in the telecommunications and information services sector.

#### **B. Basic Components**

- 3.2 The project consists of five components which are: 1) formulation of a strategy for the modernization of telecommunications; 2) reform of the legal/regulatory framework; 3) development of a network cost model and audit of GT&T; 4) carrying out outreach/training activities; and 5) support of the regulatory agency. The scope of these components are described below.

##### **1. Strategy for the Modernization of the Telecommunications Sector** (MIF: US\$200,000; Counterpart: US\$50,000)

- 3.3 The Government lacks a strategy for the modernization of the telecommunications sector. The proposed MIF operation will support the Subcommittee of Cabinet and Working Group in the formulation of a vision and strategy for the sector. The MIF will provide resources to hire international consultants with expertise in telecommunications reform to help formulate the strategy. After the strategy is completed, the consultants will assist the Government in its implementation.

##### **2. Legal/regulatory Framework Reform** (MIF: US\$270,000; Counterpart: US\$180,000)

- 3.4 The legal/regulatory framework is internally inconsistent and not conducive to competition. The MIF will provide funding for hiring lawyers and telecommunications specialists to carry out the following activities:

- ❑ Legal determination of the scope of the Purchase Agreement and the GT&T license to determine which areas of the telecommunications sector could be opened to competition immediately.
- ❑ Preparation of licenses including model licenses for systems and services for which existing licenses are not adequate.
- ❑ Preparation of model licenses for new systems and services that are likely to be established within the foreseeable future.
- ❑ Review of present interconnection arrangements and the preparation of proposals for the issue of necessary regulations

3.5 The legal/regulatory environment that will be developed will include, as appropriate, environmental concerns. Secondary legislation (regulations) will be developed in areas such as licensing, universal service fund, interconnection and leasing of unbundled elements, and spectrum management.

3.6 The MIF/GOG resources will be used to finance services from international and Guyanese attorneys and telecommunications specialists that would support the Prime Ministers Office and the Subcommittee of Cabinet in the drafting of a new regulatory framework and in the negotiations of a new license with GT&T.

**3. Network Modeling and Audit (MIF: US\$310,000; Counterpart: US\$90,000)**

3.7 There is very limited data on the financial situation of the GT&T. It is therefore impossible to determine the cost basis for rates to final users and for interconnection charges to other carriers. An audit of the GT&T operations would indicate actual costs incurred by the company that would serve as the basis of cost-oriented rates for all participants in the sector. Network modeling would provide indication of the costs that could be expected if the network were managed efficiently. The MIF resources will be used to engage a firm with experience in modeling telecommunications networks and in estimating costs of different types of services.

**4. Outreach/Training (MIF: US\$60,000; Counterpart: US\$90,000)**

3.8 In addition to technically competent regulators, a successfully competitive telecom market requires a wider public familiar with the characteristics of and the expectations that can be made of such a market. An outreach program of seminars will be financed to inform civil society of the benefits that can be expected from the reforms. Additionally, training programs for regulators, for lawyers, and for judges will be financed.

**5. Strengthening Regulatory Capability (MIF: US\$190,000; Counterpart US\$60,000)**

3.9 The PUC is in charge of regulating all utilities but is unable to fulfill its mandate. The position of Director of Telecommunications has never been filled and its

regulatory functions have not been addressed. A long-term advisor to the regulatory agency will provide critically important support and will be funded by the project. Before this advisor is engaged, the Government must provide evidence that a sufficient number of local staff will be available to work with the advisor.

**C. Environmental Impact**

- 3.10 The main Project inputs are technical assistance and training, and these are not expected to have any negative impact on the environment. The terms of reference for the law firm that will provide advise on the legislative framework will require that any laws and regulations that are drafted include adequate provisions for the protection of the environment.

**IV. EXECUTING AGENCY AND MECHANISM, PROJECT READINESS AND DIRECT BENEFICIARIES**

**A. Executing Agency and Mechanism**

- 4.1 The Office of the Prime Minister will be the executing agency for the Project. A working Group of highly qualified lawyers and telecommunications specialists has been formed and will support the Prime Minister's Office. The Office of the Prime Minister will contract the consultancies necessary to carry out the activities under each component, in accordance with Bank procurement guidelines and on the basis of the terms of reference agreed to with the Bank. The detailed terms of reference and procurement plan are in Project Technical Files.
- 4.2 **Responsibilities of the Executing Agency.** The Office of the Prime Minister will be responsible for: (a) maintaining adequate financial, accounting and internal control systems; (b) organizing an accounting system that allows the identification of the sources and uses of project funds, provides the necessary documents to verify transactions, and the timely preparation of financial statements and reports; (c) submitting disbursement requests to the Bank and the corresponding justification of expenditures; (d) maintaining an adequate disbursements support documentation filing system; (e) preparing and submitting to the Bank the annual financial statements regarding project's expenses, and the semi-annual Revolving Fund Status Reports.
- 4.3 **Project Accounts and Revolving Fund.** The Office of the Prime Minister will open separate accounts on a commercial Bank to deposit the proceeds from the Bank's grant and from the local counterpart funds. A revolving fund, up to 5 % of the contribution, will be established with resources from the MIF's grant to pay for projected expenses. The executing agency will prepare and submit to the Bank, within a period of sixty (60) days after the closing of each semester, a semi-annual report showing the use of the yearly loan's funds from June 30<sup>th</sup> to December 31<sup>st</sup>.

- 4.4 **Financial Statements and Auditing.** Within ninety (90) days after the final disbursement of the project, the Office of the Prime Minister will prepare and submit to the Bank a statement of expenses regarding the use of the contribution and the counterpart's funds. Independent auditors acceptable to the Bank will be responsible for the audit of the financial statements.

**B. Project Readiness**

- 4.5 The inadequacy of telecommunications sector presents an important constraint to economic growth and private sector investment. It is also a serious political issue. The GOG has taken a number of actions that offer a clear indication that the project would have support. First, using its own resources, the GOG engaged an international law firm to give a preliminary opinion on the possibilities for introducing competition under the present legal framework. Second, a subcommittee of Cabinet was named to develop a strategy for the modernization of the sector. Third, the GOG has already identified counterpart resources.
- 4.6 As part of project preparation, the Bank prepared an options paper for the Government and funded a seminar where the different issues were discussed with civil society. Consequently, possible strategies for the modernization of the sector are being debated openly. The Project Team has prepared terms of reference for all project components.

**C. Direct Beneficiaries**

- 4.7 The direct beneficiaries of the project will be the staff of the Office of the Prime Minister, of the PUC and of the judiciary. The judiciary has been included in the training, since they are frequently called upon to make the final decision in the litigation between the service provider and the regulator, despite their lack of technical expertise and experience in regulatory matters. The inexperience of the judiciary in regulatory matters is an important aspect of the general weakness of the regulatory framework in Guyana. Indirect beneficiaries will be those individuals and businesses who will have a greater range of telephone services and better internal access.

**D. Project Period**

- 4.8 The execution period has been estimated to be 30 months and the disbursement period 36 months.



## V. COSTS AND FINANCING

- 5.1 Total project costs have been estimated at US\$1,600,000. These costs include funding for the activities described above plus funding for an audit of the project and for contingencies. The table below summarizes project costs and financing (in US\$000). The detailed budget is in the Project Technical Files.

PROJECT COMPONENT	GOG	MIF	Total	Percent of total
Strategy Formulation & Implementation	50,000	200,000	250,000	16%
Legal/Regulatory Framework Reform	180,000	270,000	450,000	28%
Audit of GT&T and Modeling Network	90,000	310,000	400,000	25%
Training/outreach	90,000	60,000	150,000	9%
PUC Advisor	60,000	190,000	250,000	16%
Project audit	0	30,000	30,000	2%
Contingencies	30,000	40,000	70,000	4%
<b>TOTAL</b>	<b>500,000</b>	<b>1,100,000</b>	<b>1,600,000</b>	<b>100%</b>
Percent of total	31%	69%	100%	

## VI. PROJECT JUSTIFICATION AND RISKS

### A. Project Justification

- 6.1 Guyana can benefit from a fuller participation in the information technology revolution, but it is unable to do so because the telecommunications sector needs to be modernized. The project is expected to modernize the telecommunications sector of Guyana. Progress in achieving the goal would be measured by:
- ☐ Increase in teledensity (# of subscribers per 100 inhabitants).
  - ☐ Decline in costs of long distance calls (US\$/minute).
  - ☐ Rebalancing tariffs based on costs of providing services.
  - ☐ Decline in cost of Internet services (US\$/month).
  - ☐ Installation and operation of new networks capable of delivering state-of-art services
  - ☐ New information-intensive businesses established and their total revenues
  - ☐ (# and \$).
  - ☐ Incremental employment in information-intensive businesses (# of employees).
- 6.2 Numerous studies conclude that countries that have promoted competition in their telecommunications sector have been able to modernize that sector rapidly and derive secondary benefits in the information service sector. Tariff rates have declined rapidly, particularly long-distance and international rates. The **purpose**

of the project is to promote competition in the telecommunications sector and thus contribute to the modernization of the sector. Indicators of performance in achieving the purpose would be:

- ☐ Increase in the number of companies offering telecommunications and information services.
- ☐ Increase in the number of wireless companies.
- ☐ Increase in the number of competitive local exchange carriers (CLECs).
- ☐ Increase in the number of Internet service providers.

## **B. Risks**

- 6.3 There are two main risks in this project. First, there is the risk that the necessary legislative changes will not be enacted. While the legal/regulatory environment can be improved by the issuance of regulations (secondary legislation that does not have to be approved by Parliament), major improvements will require new legislation. The support already demonstrated by the Prime Minister and by members of Cabinet for this project minimizes this risk, particularly since, in a parliamentary system, once the Cabinet has approved a bill, enactment is nearly ensured.
- 6.4 A greater project risk would be the failure to reach an agreement with GT&T on the terms of a new license. This risk is attenuated because the impending decrease in long distance revenues that GT&T will face may make the company more willing to negotiate. The Project Team met with the General Manager of GT&T and members of her senior staff, and explained the scope of the proposed Project. The General Manager agreed that the proposed Project could contribute to the development of an improved climate for negotiations.

## **VII. PROJECT PERFORMANCE CRITERIA**

- 7.1 The table below summarizes the key benchmarks associated with Project **outputs**.

<b>ACTIVITY</b>	<b>TIMING</b>
Strategy approved by Cabinet	4 months after project approval
New license approved	14 months after project approval
New telecommunications law approved by Cabinet	14 months after project approval
Telecommunications regulator strengthened	30 months after project approval

## **VIII. EXCEPTIONS TO POLICIES AND PROCEDURES**

- 8.1 There are no exceptions to the Bank policies.

## **IX. SPECIAL CONTRACTUAL CONDITIONS**

- 9.1 Before first disbursement, the Government of Guyana will provide evidence that sufficient counterpart budget resources for the first year of operation are available in an account under the control of the Prime Minister's Office. Before the long-term advisor to strengthen regulatory capability is engaged, the Government must provide evidence that an adequate number of local personnel will be available to work with the advisor.

## LOGICAL FRAMEWORK

### GUYANA: MODERNIZATION OF TELECOMMUNICATIONS

	OBJECTIVES	INDICATORS		MEANS OF VERIFICATION	ASSUMPTIONS
<b>AL</b>	Modernize the telecommunications sector of Guyana	<ul style="list-style-type: none"> <li>Teledensity (# of subscribers per 100 inhabitants)</li> <li>Costs of long distance calls (US\$/minute)</li> <li>Cost of internet services (US\$/month)</li> <li>Number of new information-intensive businesses established and their total revenues (#)</li> <li>Employment in new information-intensive businesses (# of employees)</li> </ul>		<ul style="list-style-type: none"> <li>International Telecommunications Union</li> <li>Company records</li> <li>Business associations</li> <li>Public Utility Commission records</li> </ul>	<ul style="list-style-type: none"> <li>Adequate macroeconomic framework</li> <li>Government policies promote private sector</li> <li>Competitive market forces drive development</li> <li>Adequate competition policy being implemented</li> <li>No collusion between providers</li> </ul>
<b>RPOSE</b>	Increase competition in telecommunications	<ul style="list-style-type: none"> <li>Number of companies offering long distance services</li> <li>Number of wireless companies</li> <li>Number of wire companies</li> <li>Number of internet service providers</li> </ul>		<ul style="list-style-type: none"> <li>Public Utility Commission records</li> </ul>	<ul style="list-style-type: none"> <li>Regulatory framework provides incentives for new companies</li> <li>Transparent and equitable interconnection implemented</li> <li>Number portability and dialing parity</li> </ul>
<b>TPUTS</b>	<ul style="list-style-type: none"> <li>Strategy and policy framework approved</li> <li>Seminars</li> <li>Study of existing legal framework</li> <li>New telecom law</li> <li>Network model and audit of GT&amp;T completed</li> <li>New GT&amp;T license issued</li> <li>Regulatory agency established</li> </ul>	<ul style="list-style-type: none"> <li>Strategy document</li> <li>Seminar reports</li> <li>Report on legal framework</li> <li>Draft telecommunications law</li> <li>Audit report</li> <li>New license for GT&amp;T</li> <li>New agreement with AT&amp;N</li> </ul>		<ul style="list-style-type: none"> <li>Inspection by COF</li> <li>Auditor's reports</li> </ul>	<ul style="list-style-type: none"> <li>Negotiations to introduce competition successfully</li> <li>Laws enacted</li> <li>Regulatory body created and staff hired</li> <li>Strategy developed and approved by government</li> </ul>
<b>TIVITIES/PUTS</b>	<ul style="list-style-type: none"> <li>Honoraria</li> <li>Trips to Guyana</li> <li>Per diem</li> <li>Communications</li> </ul>		US\$ '000	Accounting records of the Prime Minister's Office	<ul style="list-style-type: none"> <li>Counterpart resources assigned in a timely manner</li> <li>Contracts executed on time</li> </ul>
		MIF	1,100		
		GOG	500		
		TOTAL	1,600		

PROPOSED RESOLUTION

GUYANA. NONREIMBURSABLE TECHNICAL COOPERATION FOR THE  
MODERNIZATION OF TELECOMMUNICATIONS

The Donors Committee of the Multilateral Investment Fund

RESOLVES:

1. That the President of the Inter-American Development Bank or such representative as he shall designate is authorized, in the name and on behalf of the Multilateral Investment Fund, to enter into such agreements as may be necessary with the Co-Operative Republic of Guyana, and to take such additional measures as may be pertinent, for the execution of the project proposal contained in Document MIF/AT-\_\_\_\_ with respect to a technical cooperation for the Modernization of Telecommunications.
2. That up to the amount of US\$1,100,000, or its equivalent in other convertible currencies, shall be authorized for the purpose of this resolution, chargeable to resources of the Technical Cooperation Facility of the Multilateral Investment Fund.
3. That the above-mentioned sum is to be provided on a nonreimbursable basis.