PD-ABK-015
ISN 91923

SARP

REGIONAL

TELECOMMUNICATIONS

RESTRUCTURING PROGRAM

PP

(690-0278)

MAY 1994

PD-ABK-015

PROJECT DATA SHEET

A = Add, C = Change, D = Delete: A | Amendment Number: | CODE: 3

2. COUNTRY/ENTITY: Southern Africa Regional

3. PROJECT NUMBER: 690-0278

4. BUREAU/OFFICE: USAID/Zimbabwe | 06

5. PROJECT TITLE (maximum 40 characters): Regional Telecommunications Restructuring

6. PROJECT ASSISTANCE COMPLETION DATE (PACD): MM 04 DD YY 99

7. ESTIMATED DATE OF OBLIGATION (Under 'B.' below, enter 1, 2, 3, or 4)
A. Initial FY 94 B. Quarter 3 C. Final FY 98

8. COSTS ($000 OR EQUIVALENT $1 =)

A. FUNDING SOURCE	FIRST FY 94 B. FX	C. L/C	D. Total	LIFE OF PROJECT E. FX	F. L/C	G. Total
AID Appropriated Total	4,000		4,000			
(Grant)	( )	( )	( )	(15,000)	( )	(15,000)
(Loan)	( )	( )	( )	( )	( )	(
Other U.S. 1.						
Other U.S. 2.						
Host Country						
Other Donor(s)						
TOTALS	4,000		4,000	15,000		15,000

9. SCHEDULE OF AID FUNDING ($000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE 1. Grant	2. Loan	D. OBLIGATIONS TO DATE 1. Grant	2. Loan	E. AMOUNT APPROVED THIS ACTION 1. Grant	2. Loan	F. LIFE OF PROJECT 1. Grant	2. Loan
(1)									
(2)						4,000		15,000	
(3)									
(4)									
TOTALS						4,000		15,000	

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)

11. SECONDARY PURPOSE CO

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)
A. Code
B. Amount

13. PROJECT PURPOSE (maximum 480 characters)

Increased and broadened access within the SADC region to more effective systems for information transfer.

14. SCHEDULED EVALUATIONS
Interim MM 05 YY 97 MM YY Final MM 10 YY 98

15. SOURCE/ORIGIN OF GOODS AND SERVICES
☐ 000 ☐ 941 ☐ Local ☒ Other (Specify) 935

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a ____ page PP Amendment.)

The Controller for the Southern Africa Regional Program has reviewed and concurs with the proposed methods of implementation and financing under this project.

CONCURRENCE: Charles Brooks May 4, 1994
Charles Brooks, Controller

17. APPROVED BY
Signature:
Title: Stephen J. Spielman, Acting Director, Southern Africa Regional Program
Date Signed: MM 05 DD 10 YY 94

18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION
MM 05 DD 17 YY 94

AID 1330-4 (8-79)

ACTION MEMORANDUM FOR THE ACTING MISSION DIRECTOR

FROM: Melissa Stephens, PDIS

DATE: April 27, 1994

SUBJECT: Approval and Authorization of the Regional Telecommunications Restructuring Project (690-0278)

I. ACTION REQUESTED: It is recommended that you approve the project paper for the Regional Telecommunications Restructuring (RTR) Project (690-0278) and sign the authorization for the project.

II. BACKGROUND: The RTR program will address inadequate telecommunication services in the SADC region and its impact on expanded investment and long term sustainable economic growth. Access to dependable, efficient telecommunications services is increasingly recognized as a critical element and most often a binding constraint to attracting new investment in SADC countries currently engaged in comprehensive economic restructuring programs designed to encourage expanded investment and employment. Moreover, worldwide evidence suggests that all aspects of a business increase in productivity with improved telecommunications, but the greatest gains are shown in marketing, finance, and production control -- the areas most frequently identified as urgently needing improvement if businesses in the SADC region are to become competitive in external as well as intra-regional markets.

Telecommunications services in the SADC region are wholly inadequate to support increased investment and economic growth. Expanding current production or investing in new business operations is impossible until significant measures are taken to address the problem. As of 1991, the entire SADC region (this excludes South Africa) had only 511,000 phone lines, less than the county of Fairfax, Virginia. Officially, unmet registered demand is 330,000 lines in the region, but unregistered demand has been estimated at closer to one million lines.

An extensive analysis of the SADC region's telecommunications systems identified two key constraints to addressing the poor services problem: (a) inadequate and inappropriate investment in the sector, and (b) unsustainable management practices, within an ineffective policy and regulatory framework. Although many Post and Telephone Corporation (PTC) entities have been established as public corporations with a mandate to operate on commercial terms, the lack of flexibility to operate as a private sector firm and the lack of accountability to investors serve to undermine all incentives to produce dependable services at reasonable cost.

While poor management practices reduce the range and coverage of telecommunications services, inadequate investment in infrastructure has played the major role in inhibiting the expansion and improvement of services. Factors currently affecting sector investment include inadequate resources, insufficient knowledge of investment opportunities, and policies which restrict or impede private investment and competition.

III. DISCUSSION: The RTR program is planned to provide $75 million over the life of project, and consists of two components: the **Regional Core Project** and the **National Restructuring Programs**.

The **goal** which is shared by the Regional Core project and the National Restructuring Programs is **broad-based sustainable economic growth** in the countries of southern Africa. The overall program **purpose** is **increased and broadened access within the region to a more cost-effective system for information transfer**.

Over a five year period, the **Regional Core Project** is planned to provide $15 million in technical assistance and training to:

- **strengthen the capacity of southern Africans to develop and manage national and regional telecommunications networks** through the timely provision of information, analysis, and technical consultations;

- **assist in solving problems** being encountered by stakeholders in the regional telecommunications network, particularly those of a legal or regulatory nature, by providing timely, expert technical assistance;

- **lay the groundwork for well-defined, appropriately-sequenced, National Restructuring Programs** (see below) by supporting start-up staff and actions; and

- **link private U.S. telecommunications service and equipment suppliers into the regional network** in an effort to generate increased levels of investment and efficiency into regional and national telecommunications systems.

The **National Restructuring Programs** will work in a more intensive fashion with up to three national governments to help them make and implement policy, regulatory, and institutional changes that will:

- **allow private investment in telecommunications services;**

- **introduce competition**, initially in certain sub-sectors such as value added services;

- **restructure the state owned monopoly**, separating operating and regulatory functions, and introducing a bottom-line, customer-centered orientation.

In each of the three countries undertaking **National Restructuring Programs** up to $20 million in non project assistance is planned to be available to leverage the changes by compensating for short adjustment costs and/or correcting certain market failures that make unassisted private investment infeasible. These programs will be developed and authorized separately.

The principal counterpart agency for project implementation will be the Southern Africa Transportation and Communication Commission (SATCC), the arm of the Southern Africa

Development Community (SADC) charged with oversight and coordination of activities in the sector. In conjunction with SATCC, the project will also coordinate and liaise with the PTA, relevant Ministries of Communication or Information, telecommunications operating entities, and relevant private sector interests in the ten SADC member states and South Africa. Funds will be obligated through a bilateral agreement with the Government of Mozambique who will sign on behalf of SATCC.

Implementation

The project will be implemented through two primary vehicles: a grant to the International Telecommunications Union (ITU) to provide two advisors to SATCC for policy and data base development, and through an institutional contractor who will have personnel in three southern African countries as well as in the United States. The contractor will be supervised by a project-funded Program Manager who will be located in the Southern African Regional Mission. Prior to the initiation of the institutional contract the project will use buy-ins to central projects to begin key project activities. Project funds will also be used for evaluations and audits through the life of the project.

IV. ISSUES: The following key issues were identified in an ECPR held in Harare on February 2 and 3 1994 which was attended by representatives from four missions in addition to the RLA. The general conclusion of the ECPR was that the PP met the guidance of the review of the PID/PAIP. The full text of the reporting memorandum from the meeting is provided as Attachment I to this memorandum.

A. Management of project and program activities. The project will be managed by the Southern Africa Regional Mission, however in those countries where there will be a national restructuring program supported by Non Project Assistance (NPA) funds, the bilateral mission must assume an active role. To date, Tanzania has expressed its willingness to assume this role, while Zambia has indicated that it will not have USDH resources available for direct management. The Zambia management issue will be resolved as the preliminary issue to further program development for that country. The RTR Program Manager will be under a PASA arrangement with the United States Department of Commerce, and will be supervised by appropriate USDH personnel in the Southern Africa Regional Program. The current SARP Mission considers its management capacity sufficient for its role under this program.

B. Level of Funding. The first draft of the Project Paper proposed a level of funding of approximately $23 million. Based on the ECPR decision, the final project paper requires $15 million.

C. Conformance with Policy Determination 20. During the ECPR the RLA led a discussion regarding the tests required for projects to comply with PD-20 to ensure that financed activities would not lead to the loss or transfer of U.S. jobs. An analysis has been added to the paper on PD-20 which has been reviewed and edited by the RLA. In addition, activities which support Objective Four - **Linking private U.S. telecommunications service and equipment**

providers to the regional network, have been reduced to eliminate activities which could potentially violate PD-20.

V. CONGRESSIONAL NOTIFICATION: This new project was not included in previous Congressional Presentations. A Congressional Notification was sent forward on April 12, 1994 and has expired without objection on April 27, 1994. Authorization and obligation of funds may now occur.

VI. AUTHORITY: STATE (94) 47330 delegated the authority to approve and authorize the Project Paper for the Regional Telecommunications Restructuring Project (690-0278) to the SARP Director. Delegation of Authority Number 551, revised, states that the Mission Director may authorize projects with a life of project funding of up to $20 million. The proposed $15.0 million level of funding for this project is within your delegated authority.

VII. RECOMMENDATION: That you approve the project paper for the Regional Telecommunications Restructuring Project (690-0278) and sign the Project Authorization and Facesheet for the project.

Approved: _____

Stephen J. Spielman,
Acting Director
Southern African Regional Program

Disapproved: _____

Stephen J. Spielman,
Acting Director
Southern African Regional Program

Date: 5-10-94

Attachments:
Reporting Memorandum from ECPR
Project Authorization
Project Paper

5

Clearance:
DRAFT:MSTEPHENS 4/27/94
DGreenbergdraft_date4/28
CBrooks_____date 5/4/94
MEllis_____date 5/4/94

6

Regional Telecommunications Restructuring
Reporting Memorandum
from ECPR Held February 2 and 3 1994
(690-0278)

Reporting Memorandum from the Review of the Regional Telecommunications Restructuring Project.

The purpose of this memorandum is to summarize decisions from the ECPR held to review the Regional Telecommunications Restructuring Project Paper (690-0278) on February 2 and 3, 1994 in Harare, Zimbabwe.

Decisions on issues are noted below. This document refers to and makes use of the Issues Paper prepared for the meeting.

1. **AID/W Guidance Cable** - The ECPR Reviewed guidance from the draft cable from AID/W on the PID/PAIP reviewed in AID/W in June 1993. The following decisions and/or actions result from these discussions:

a. The ECPR concurred that the telecommunications sector is consonant with the Agency's economic growth emphasis.

b. The ECPR reviewed draft guidance relating to U.S. involvement and buy American concerns. Disbursement mechanisms for NPA activities funded separately will adhere to final guidance. *Guidance from the PID/PAIP ECPR indicated that PAADS must propose means to maximize U.S. involvement in the sector. It should be noted that the project will address this area through specific activities to inform U.S. investors of the opportunities in the region which are detailed in Section VI. B. and will complement NPA country specific programs that will focus on procurement of U.S. commodities. It should be further note that Policy Determination 20 (PD-20), issued on January 3, 1994, will restrict the scope of activities with U.S. investors. The Project Paper describes activities which have been modified to conform with PD-20.*

c. Ensuring People Level Impact is a major concern for the project. The ECPR determined that the People Level Impact of the project should rely on the simple formulation of increasing people's access to telecom facilities rather than the notion of "knowledgeable people". *The Project will measure People Level Impact through the following indicators which are incorporated into the Project Information System: 1) Number of clinics (urban and rural) with phones in selected countries; 2) Number of schools with phones in selected countries; 3) Number of villages over 100 people with phones in three countries; 4) Faults/line/year, fault clearance speed. In addition the impact on commercial and non commercial activities will be measured through the following indicators: 1) Efficiency and effectiveness of telecommunications in transport, tourism, industrial, and financial sectors; 2) Efficiency and effectiveness of telecommunications*

in non-business social sector use (hospital, schools, etc.)

d. It was determined that the analysis on Other Donors should be broadened to look at aspects of commercial suppliers and their current and potential relationships with participating countries.

e. The draft cable from the PID/PAIP review indicates that the technical assistance provided under the project should provide assistance in the development of specifications and standards for interconnect services and equipment to ensure that U.S. manufacturers are able to compete on an equal basis with suppliers from other countries. The ECPR decided that the PP should be modified to clearly indicate that U.S. manufacturers have the capacity to respond to any specifications that exist and that no special capacity will be required to compete.

2. **SATCC as obligating partner** - The ECPR discusses other options for obligation of funds under the project and determined that SATCC continues to be the most appropriate partner. *SATCC has no objection to South African participation in project activities.*

3. **Bilateral Mission participation** - Representatives from the USAID missions in Tanzania, Zambia indicated that they would be willing to assume the required roles envisioned for their missions in the project design. The representative from USAID Maputo indicated that as Mozambique is not currently under consideration for NPA funding they have not made a determination on management role. However, there is a question/consideration regarding the proposed role, if any, for the Mozambique mission in coordinating and liaising with SATCC. *Since the ECPR, USAID Zambia has indicated additional reservations regarding its capacity to undertake the management functions required for a National Restructuring Program. The ability of USAID Zambia to manage the program will be resolved as a condition prior to full scale development of the NPA program for Zambia.*

4. **Project Management** - The ECPR discussed options for project management at length. Much of the discussion revolved around the new agency policy with regard to PSCs. Mission representatives from USAID Tanzania and USAID Zambia indicated that they could carry out the requisite project management and oversight responsibilities without a PSC project manger. USAID Zimbabwe stated that it could not meet its responsibilities at current staffing levels, and the ECPR directed the project design team to continue to explore options such as USDH, PASA or RSSA, or a "super-scale" PSC. *A PASA arrangement has been approved by the Acting Director of the Southern African Regional Mission. With the addition of this PASA position, USAID SARP will have adequate management capacity to implement the program.*

5. **Project Budget** - the project design team was directed to review the project budget and to reduce activities and funding so that the final budget figures conform to the planned $15.0 million life-of-project level of funding.

6. **Contracting Actions** - Concurrent with the final drafting of the Project Paper, the

design team will ensure that the statements of work for the buy-in to the Privatization an Development Project and for the institutional contract are drafted for contracting in F 1994.

7. **USAID and TDA** - The ECPR discussed guidance in the draft cable arising fron discussion and identification of issues subsequent to the PID/PAIP review in AID/W i June 199 related to the respective roles of USAID and TDA. It was determined that th Project Paper will be modified to clearly state the mandate of both USAID and TDA wit respect to economic development and the promotion of U.S. commercial interests.

8. **Role of Other USG Agencies** - An additional issue was raised regarding implementation of the project, agreement with operations under the Helsinki accords, and the possibility of U.S. manufacturers or suppliers benefitting from grant resources provided through the project and applying for assistance in financing trade transactions through EXIM bank. It was agreed that it is unlikely that U.S. manufacturers or suppliers would receive a direct benefit from both project funded activities and qualify for EXIM financing. If this situation occurs it would be beyond the manageable interests of the project and mission, as EXIM financing is completely separate from project activities.

9. **Project Objectives** - A question arose regarding the specific intended outcome of the project and program. It was noted that the project was not completely clear and that many potential outcomes could be suggested from the current draft, ranging from restructured parastatal entities, to increased private sector investment, to the establishment of regulatory frameworks, etc. It was agreed that the project paper would be modified to clarify that privatization of telecoms corporations was not the only or primary objective of the project, and that the project description would be modified if necessary to clarify the objective of the end game of effective private sector control.

   Following on this discussion of the ultimate objective of the project, the ECPR discussed several related issues including the need to clarify the approach and resources that may be devoted to privatization efforts, the role the project would play in promoting U.S. businesses, the degree of flexibility that will be required on the part of the contractor to implement this project, the role of the Investment Feasibility Fund, etc. It was determined that the overall project and contract would be designed to incorporate maximum flexibility using a proactive demand driven approach, and the Project Paper and RFP would establish the framework and the objectives for the project. The contractor will be required to use a flexible approach to achieve the wide range of outputs and processes required. The contractor will also develop and submit an annual workplan with USAID must review and approve prior to execution.

10. **Master Plans** - The ECPR discussed the need, rationale and status of Master Plans for SADC countries. It was noted that in privatization efforts potential investors often ask for the Master Plan to determine current and future levels of demand and equipment capacity. The ECPR noted that while all SADC countries have Master Plans they are of varying quality; however, it was determined that the project would not make the upgrading of Master Plans as one of its objectives.

11. **Financing for Investment** - The project paper states that increased investment in the telecoms sector is an essential element to increasing household access to reliable telecoms services. However, the project will not provide direct financing for these type of activities. It was decided that the project will not provide direct financing for increasing investment in the telecoms sector, but through the institutional contractor will provide information regarding access to increased financial resources and financing mechanisms.

12. **Regionality of Project** - The Project Paper makes the case that regional telecommunications will be directly enhanced through improvement of the national and local networks. However, it was decided that the ties to regionality could be improved, and the PP will be modified to include an expanded discussion on the links between the national and regional networks.

13. **Institutional Contractor Capability** - The ECPR discussed the need for an institutional contractor who had the capability to handle core functions in house, but also to contract out for specialty services such as engineering capability. In addition, the ECPR recommends that the RFP be structured to encourage inclusion of regional partners in the successful bid.

14. **DFA** - The RLA led a discussion on the apparent fit with DFA of the proposed project, and the use of DFA funds to support U.S. commercial interests through the outreach program to potential investors in the U.S., and conformance with Policy Determination Number 20. It was determined that the project is consonant with the intent of the DFA, and that the anticipated use of funds and potential investment in the Southern African region would not conflict with U.S. concerns about transferring U.S. jobs overseas.

15. **Political Analysis** - The Project Paper will be modified to include a more detailed political analysis that deals with the potential constraints to program implementation which have been identified. *Included as Annex H.*

16. **Other Analytical Work** - Substantial analytical was done as in conjunction with the development of the PID/PAIP. The ECPR recommended that this analysis be included in the Project Paper by reference or an annexes to the document. *Included as Annexes J.1 - J.3.*

17. **Evaluation Plan** - The Mission Evaluation Officer will review and modify the evaluation plan as necessary.

18. **Implementation Plan** - The proposed implementation plan will be reviewed and modified to include activities beyond the procurement/contracting process.

19. **Logframe** - The Logframe reflects quantifiable indicators and levels of anticipated achievement as requested by the ECPR.

ACTION: AID-1
INFO: AMB-1 ECON-1

DISTRIBUTION: AID
CHARGE: AID

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MAY - 4 1994

DUE DATE
ACTION TAKEN
INITIALS, DATE

AIDAC

E.O. 12356: N/A
TAGS:
SUBJECT: SOUTHERN AFRICA REGIONAL TELECOMMUNICATIONS RESTRUCTURING (690-0278)

REF: STATE 098479

PAM
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THE CONGRESSIONAL NOTIFICATION FOR ABOVE PROJECT FOR U.S. DOLS 4,000,000 EXPIRED ON APRIL 27, 1994 WITHOUT OBJECTION. OBLIGATION MAY NOW BE INCURRED.
TALBOTT
BT
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Acronyms

AFDB	-	African Development Bank
AFR	-	Africa Bureau of AID/W
AFRALTI	-	African Advanced Level Telecommunications Institute (Nairobi)
AFR/ONI	-	Office of New Initiatives (Africa Bureau)
ANC	-	African National Congress
ARTC	-	Africa Regional Telecommunications Conference
AT&T	-	American Telephone and Telegraph Company
ATN	-	Atlantic Telephone Network
CAAA	-	Comprehensive Anti Apartheid Act
CCR	-	Call Completion Rate
CDC	-	Commonwealth Development Corporation (UK)
CIDA	-	Canadian International Development Agency
CIP	-	Communications and Information Policy (State Dept)
CIP	-	Commodity Import Program
CPE	-	Customer Premise Equipment
CTA	-	Cellular Telephone Association (U.S.)
CY	-	Calendar Year
DAC	-	Development Assistance Committee (OECD)
DEL	-	Direct Exchange Line
DFA	-	Development Fund for Africa
EC	-	European Community
ECA	-	Economic Commission for Africa (UN)
ECPR	-	Executive Committee for Project Review
EEC	-	European Economic Community
EIU	-	Economic Intelligence Unit
ESA	-	East and Southern Africa
ESOP	-	Employee Stock Ownership Program
EU	-	European Union
FLAG	-	Fiber Link Across the Globe
GC	-	General Counsel
GDP	-	Gross Domestic Product
GSM	-	Global System for Mobile Communication
GTT	-	Guyana Telephone and Telegraph
IBRD	-	International Bank for Reconstruction & Development
IC	-	Institutional Contractor
IFC	-	International Finance Corporation
IMF	-	International Monetary Fund
INMARSAT	-	International Marine Satellite Consortium (U.K.)
ISA	-	Initiative for Southern Africa
ITU	-	International Telecommunications Union
LAN	-	Local Area Network

LEOS	-	Low Earth Orbit Satellite
M&E	-	Monitoring & Evaluation
MCTC	-	Multi-Country Training Centre (Blantryre)
MDB	-	Multilateral Development Bank
NPA	-	Non Project Assistance
NPV	-	Net Present Value
NTCA	-	National Telephone Co-operative Association (U.S.)
NTIA	-	National Telecommunications and Information Administration (USDOC)
OAU	-	Organization for African Unity
ODA	-	Official Development Assistance
ODA	-	Overseas Development Agency (UK)
OECD	-	Organization for Economic Cooperation and Development
OPIC	-	Overseas Private Investment Corporation
PAAD	-	Program Assistance Approval Document
PAIP	-	Program Assistance Initial Proposal
PANAFTEL	-	Pan African Telecommunications Network
PASA	-	Participanting Agency Service Agreement
PATU	-	Pan African Telecommunications Union (Brazzaville)
PD	-	Policy Determination
PID	-	Project Identification Document
PP	-	Project Paper
PRE	-	Private Enterprise Bureau/Office of AID/W
PTA	-	Preferential Trade Area
PTA-TTU	-	Telecommunications & Transport Unit
PTC	-	Posts and Telecommunications Corporation[1]
PTT	-	Posts, Telephone and Telegraph entity[1]
RASCOM	-	Regional African Satellite Communication Consortium
RBOC	-	Regional Bell Operating Companies
RTR	-	Regional Telecommunication Restructuring
SADC	-	Southern Africa Development Community (1992 and on)
SADCC	-	Southern African Development Co-ordinating Conference (before 1992)
SKA	-	Sender Keeps All
SATA	-	Southern African Telecommunications Administration
SATCC	-	Southern Africa Transport and Communications Commission (Maputo)
SIDA	-	Swedish International Development Agency
TDA	-	Trade Development Agency
TIA	-	Telecommunications Industry Association (US)
UNDP	-	United Nations Development Program
UNIDO	-	United Nations Industrial Development Organization
USAID	-	United States Agency for International Development
USDOC	-	United States Department of Commerce
USPSC	-	U.S. Personal Service Contractor

[1]Used generically to refer to state monopoly provider of telecommunications services. The terms PTC and PTT are used synonymously in this paper.

VSAT - Very Small Aperture Satellite

PROJECT AUTHORIZATION

NAME OF GRANTEE: Southern Africa Regional, represented by the Government of th Republic of Mozambique

NAME OF PROJECT: Regional Telecommunications Restructuring Program

PROJECT NUMBER: 690-0278

1. Pursuant to the Foreign Assistance Act of 1961, as amended, the Foreign Operations Export Financing and Related Activities Appropriations Act of 1992 and Africa Bureau Delegation of Authority (DOA) 551, I hereby authorize the Regional Telecommunications Restructuring Program for the Southern Africa Region involving planned obligations not to exceed Fifteen Million United States Dollars (US$15,000,000) in grant funds from the Development Fund for Africa (DFA) account, over a period of five years from the date of authorization, subject to the availability of funds in accordance with the A.I.D. OYB allotment process, to help in financing the foreign exchange and local currency costs of the project. The planned life of the project is five years from the date of initial obligation.

2. The Regional Telecommunications Restructuring (RTR) Program seeks to improve telecommunications service delivery by promoting an increased role for the private participation in the telecommunications sector in southern Africa. This project assistance portion of the program will be complemented by policy-based non project assistance activities in up to three southern African nations over the next five years.

3. The Project Grant Agreement, which may be negotiated and executed by the officers to whom such authority is delegated in accordance with A.I.D. regulations and delegations of authority, shall be subject to the following essential terms, covenants and conditions, together with such other terms and conditions as A.I.D. may deem appropriate.

a. Source and Origin of Commodities, Nationality of Suppliers

Commodities financed by A.I.D. under the project shall have their source and origin, and the suppliers or commodities or services, except for ocean shipping, shall have their nationality in countries included in A.I.D. Geographic Code 935, except as A.I.D. may otherwise agree in writing. Ocean shipping financed by A.I.D. under the project shall, except as A.I.D. may otherwise agree in writing, be financed only on flag vessels of the Grantee and the United States.

b. Conditions Precedent to Disbursement

First Disbursement. Prior to the first disbursement of funds under the Grant, or to the issuance by A.I.D. of documentation pursuant to which such disbursement may be made, the Grantee shall, except as A.I.D. may otherwise agree in writing, furnish to A.I.D., in form and substance satisfactory to A.I.D. a statement of the name of the person holding or acting in the office of the Grantee's representative specified in the Grant Agreement and the names of any additional representatives, together with a specimen signature for each such person.

c. Covenants

Taxation.

(a) This Agreement and the Grant will be free from any taxation, duties, or fees imposed under laws in effect in the territory of the Grantee,

(b) To the extent that (1) any contractor, including any consulting firms, any personnel of such contractor financed under the Grant, and any property or transaction relating to such contracts and (2) any commodity procurement transaction financed under the Grant, are not exempt from identifiable taxes, tariffs, duties or other levies under laws in effect in the territory of the Grantee, the Grantee will, as and to the extent provided in and pursuant to Project Implementation Letters, pay or reimburse the same with funds other than those provided under the Grant.

Prohibited Uses of Grant. The Grantee agrees that funds made available under the Grant may not be used for the following:

(a) assistance to military, police, paramilitary or other security forces, or for retired personnel of such forces

(b) performance of research concerning or inducement to abortion as a method of family planning;

(c) procurement of luxury goods or gambling equipment;

(d) repayment of interest or principal of public or private debts.

Other Limitations.

(a) No funds or other support provided hereunder may be used in a project or activity reasonably likely to involve the relocation or expansion outside of the United States of an enterprise located in the United States if non-U.S. production in such relocation or expansion replaces some or all of the production of, and reduces the number of employees at, said enterprise in the United States.

(b) No funds or other support provided hereunder may be used in a project or activity the purpose of which is the establishment or development in a foreign country of any export processing zone or designated area where the labor, environmental, tax, tariff, and safety laws of the country would not apply, without prior written approval of USAID.

(c) No funds or other support provided hereunder may be used in an activity which contributes to the violation of internationally recognized rights of workers in the recipient country, including in any designated zone or area in that country.

Project Evaluation. The Parties agree to establish a monitoring and evaluation program as part of the Project. Except as the Parties may otherwise agree in writing, there will be an evaluation at the midpoint of the project and a final evaluation during the fifth year of the Project. The first evaluation will assess progress toward planned objectives, identify problems (including possible adverse environmental impact) and recommend modifications in the Project, if necessary to resolve any problems. The final evaluation will assess progress toward planned objectives, identify lessons learned and determine the desirability of follow-on efforts.

Signed: _____
Stephen J. Spielman
Acting Director
Southern Africa Regional Program

Dated: May 10 1994

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Accelerating Economic Growth in Southern Africa: The Regional Telecommunications Restructuring (RTR) Program

I. Introduction

A. Summary

This document describes a regional development assistance activity which will contribute to the goal of accelerating economic growth in the southern Africa region by providing USAID support for the restructuring of national telecommunications systems in southern Africa.

A good start has been made on economic reforms in nearly all countries of southern Africa.[1] Barriers to trade have been reduced, steps are being taken to stimulate exports, privatization and efforts to encourage new private investments are underway, and some opportunities for expanded economic participation have been developed. However, there are still a number of constraints to achieving the kind of economic growth rates desired and to the creation of jobs and incomes for the more than 100 million people living in the region. Adequate telecommunications services are among those identified by potential investors.

> *The indigenous owner of one of the largest electrical contracting firms in Zimbabwe purchased an industrial plot to establish a factory for equipment manufacture, projected to employ 190 people. Due to congestion on the telephone network, the Post and Telecommunications Company (PTC) has not been able to provide a telephone connection to the site. The owner reports that because profitable operations are dependent on telephone communications to suppliers and customers, the site has been idle for two years, tying up the company's capital and foregoing the creation of the 190 jobs.*
>
> Source: Interview, USAID/Zimbabwe, 1992

New telecommunications technology and new ways of delivering telecommunications services to producers and exporters will help to reduce their communication and information problems and enable them to contribute to economic growth.

---

[1] Angola, Botswana, Lesotho, Namibia, South Africa, Swaziland, Malawi, Mozambique, Tanzania, Zambia, and Zimbabwe are the eleven countries in the region. All but South Africa are members of SADC, the Southern Africa Development Community.

Through a multicountry phased program in southern Africa USAID proposes to support the people and organizations who can restructure the national telecommunications systems in ways that will meet users' information needs by providing:

- regional **project** assistance to provide specific problem solving services and to ensure that there are more knowledgeable people with the tools to manage and guide the future development of telecommunications services in all countries of the region; and

- sector (or **nonproject**) assistance to countries which are opening their economies to market forces and private investment and are ready to begin restructuring their telecommunications systems now.

- information on opportunities in southern Africa to potential U.S. suppliers and investors.

The Program Goal is **broad-based sustainable economic growth in the countries of southern Africa**. Growing employment and per capita incomes are expected to be the key indicators of successful attainment of this goal.

Achieving this Goal will require **increased investment for expanding business operations**. This is defined as the Program Sub-goal.

The Program Purpose is **increased and broadened access within the region to a more cost-effective system for information transfer**.

The outputs required to achieve this purpose will be:

1. An **expanded, applicable knowledge base** widely shared by both public and private individuals and organizations concerned with economic growth in general and telecommunications in particular;

2. A **reframed policy and regulatory environment** in several countries in the region;

3. Restructured national **telecommunications systems better meeting the needs of users**; and

4. Greater **private investment**, leading to effective private sector control of the telecommunications sector.

The overall program will be carried out over a period of up to eight years. Project assistance of $15 million will be provided over a period of five years beginning in FY 94. Additional non project resources of up to $60 million will be available for three Southern African countries. Each non project assistance activity will be implemented at the country level and it is anticipated

that programs will have a duration of five years. The total of up to $75 million projected to be provided by USAID represents about five percent of the resources that the countries in the region should be spending *each year* in the 1990s so that, in the year 2000, they would be in a position to meet their unmet demand for telecommunications services.[2]

To focus the use of USAID's resources it is proposed that the nonproject assistance will be extended to only three countries in the region. Two countries (Tanzania and Zambia) have already demonstrated a commitment to market-oriented economic reforms as well as to restructure their telecommunications systems. With some additional effort in policy formulation and analysis, they should be ready, within the next year or two, to pursue these efforts with vigor. Detailed planning for these National Restructuring Programs will be carried out over the next 18 months and will be presented separately for USAID/W approval. It is anticipated that the demonstration effect of successful reforms undertaken within the region will be more powerful than those pursued elsewhere (e.g., Guyana, Jamaica). There is every confidence that it will be possible to identify a third country in the southern Africa region ready to participate in the sector assistance program by the third year of the Project's implementation.

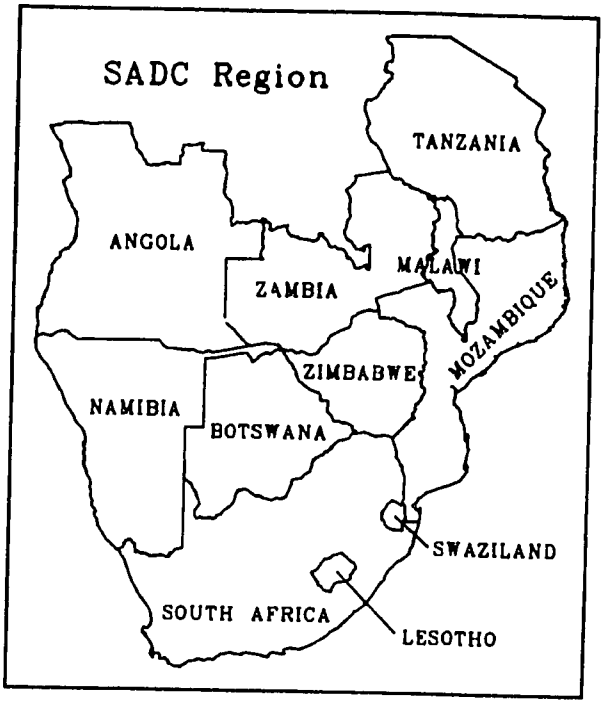
The Project assistance, plans for which are detailed in Sections VI through IX, will provide critical support to the development of these National Restructuring Programs. But it will also ensure that regional issues and opportunities for effective regional cross-fertilization are not overlooked. In collaboration with the telecommunications staff of the Southern Africa Transport and Communications Commission (SATCC), Project staff will work to strengthen the capacity of people and organizations concerned with effective telecommunications service delivery in southern Africa. The Project staff will also provide hands-on problem-solving services as requested and ensure that U.S. expertise and interests are informed about regional opportunities and are linked into the regional network.

B. Recommendation

The Project Development Committee recommends authorization of $15.0 million in DFA grant funds for the Regional Telecommunications Restructuring Project, of which $4.0 million will be obligated in FY 1994. This obligation will support technical assistance to three Southern African countries in restructuring their telecommunications operating entity and will provide financing for a policy advisory unit within the Southern African Transport and Communications Committee (SATCC). The Project Committee has determined that the proposed activities are technically, administratively, economically and financially sound. The specific analyses carried out during the intensive review indicated that all identified obstacles can be effectively addressed through the combined project/program approach. The project is in conformity with Agency policy regarding sustainable economic growth, Policy Determination 20, and with proposed areas

[2] Teleconsult Telecommunications Sector Scoping Study for Southern Africa. Phase I-Final report for USAID. April, 1993. p. I-6.

of emphasis for regional programs in southern Africa.



II. Economic Overview: The Southern Africa Region

A. The Setting

The Southern Africa region includes both the most advanced and the most backward economies in Africa. South Africa has the most well-developed and export-oriented manufacturing and mining sectors. These have long provided jobs for hundreds of thousands of migrant laborers from other countries in the region. Its highly productive commercial agricultural operations not only assure domestic food supplies in most years but contribute substantially to export earnings. South Africa's Gross Domestic Product (GDP) is more than four times the combined GDP of the other ten countries in the region and its average per capita income is more than 30 times that of the poorest country in the region, Mozambique.

The economic potential of the southern Africa region is not, however, confined to South Africa. Mineral resources are widely distributed in Angola, Namibia, Zambia, Zimbabwe, and probably Mozambique. Agricultural productivity in Zimbabwe and in Malawi is high. Zimbabwe's industrial and manufacturing capacity is relatively sophisticated and has the potential to play a greater role in regional as well as international trade. With the advent of peace and political stability in the region, it can be expected that tourism opportunities will increase enormously everywhere.

With the exception of Angola, which remains mired in civil conflict, each of the countries in the region has undertaken important political and/or economic reforms which will significantly affect their abilities to realize their economic potential. The economic reforms have generally opened up the economies to market forces and to greater private sector investment. The political reforms have laid the groundwork for broader participation in the political systems which will ultimately determine the range of economic choices open to individuals and firms. And the combination of reforms -- so far implemented only in Zambia -- will lead to almost-revolutionary simultaneous changes in both the economy and society as a whole.

B. Economic Performance

The standard macroeconomic statistics do not yet reflect a sustainable pattern of positive results stemming from these reforms (Table 1). All the countries in the southern Africa region suffered a major setback as the worst drought of the century affected the region in 1992/93. By comparison with the performance of other countries in Africa, however, that of countries in Southern Africa is not bad.

Table 1.
Macroeconomic Performance in Southern Africa

Country	Total GDP 1991 - 1993 ($ U.S. billions)			Current Account Balance (1991) Before Official Transfers	% Annual Growth in agriculture 1980-1991	% Annual Growth in industry, 1980-1991	Debt Service 1991 (as % of exports)
	1991	1992	1993				
Botswana	3.3	3.5	3.7	- 251	3.0	10.7	3.4
Lesotho	1.1	1.1	1.1	n/a	n/a	n/a	n/a
Malawi	2.0	1.8	1.9	- 244	2.4	3.3	25.0
Mozambique	1.2	1.1	1.0	- 783	1.6	-3.6	10.6
Namibia	2.1	2.1	2.2	- 257	n/a	n/a	n/a
South Africa	91.2	n/a	n/a	2,696	2.6	0.0	n/a
Swaziland	0.9	0.9	1.0	n/a	n/a	n/a	n/a
Tanzania	2.4	2.5	2.6	- 832	4.4	-2.4	24.6
Zambia	3.4	3.2	3.0	- 487	3.3	0.9	50.3
Zimbabwe	6.3	5.1	5.0	- 693	2.2	2.1	27.2
All Sub-Saharan Africa					1.8	2.0	20.8

Source: Standard Chartered estimates for GDP except for South Africa. This is from the World Bank Development Report 1993 which also provided estimates for all other statistics.

Analysts with Standard Chartered Bank, for example, predict a picture of declining incomes in Africa in 1994. But they project flat levels of output for South Africa, Zimbabwe, and Zambia so -- by comparison -- that's good. These are the biggest economies in the region. Further, they find enough positive production increases in the rest of the Southern Africa region as a whole to forecast an increase in 1994 output which should "give the region its first gain in real incomes since the end of the 1980s." [3]

[3] Standard Chartered Africa Quarterly Review, Sept. 1993. pp. 1 and 2.

C. The Medium-Term Outlook

While the IMF's most recent World Economic Outlook "is forecasting a marked acceleration in the pace of African economic expansion from 2.8 percent over the past 20 years to 1992 to 3.3 percent a year in 1993/94 and 4.4 percent a year during the 1995-98 period," Standard Chartered analysts note that "it is already clear that growth over the 1993/4 period will fall short of the projected 3.3 percent average, while the faster growth forecast for the post-1995 period will depend on a much improved investment and productivity performance than in the recent past."[4] Noting that the IMF itself finds African forecasts more subject to uncertainty than those for other regions, the Standard Chartered analysts conclude that an annual GDP growth rate of 4 percent is not an unreasonable target for growth, though "in southern Africa, it will depend on the success of political and economic transition in South Africa itself. It is difficult to see the subcontinent prospering without political stability and economic expansion in South Africa. A weak South African economy will become a major constraint on the region as a whole deterring new investment and constraining trade expansion." [5]

It is, of course, too early to tell how this issue will play out. The negotiations between the Government of South Africa and the African National Congress (ANC) have been going well and the election process is on track. But there are still important factions of the population which are not pleased with the political changes, so the ultimate smoothness of the transition -- and thus the economic recovery of South Africa -- is still unknown. Further, on the economic side, there are still some policy questions to which the answers are not yet clear. Although the ANC has largely rejected the African socialist approach to economic growth, the final details of economic policy are still not clear. The other former African socialists (Tanzania, Mozambique, Zimbabwe, and Zambia) have gradually changed their perspectives and adopted a more market-oriented stance. There is some feeling that a fear of constraints which might be placed on market forces in South Africa is one of the factors may have driven a substantial growth in foreign investment by South African companies. Between 1990 and 1993, South Africa's outward investments grew by about a billion dollars, from $7.6 to $8.5 billion.[6] The fact that some of these investments have been in other countries in the region, however, should contribute to the outlook for a more politically integrated and stable regional economy in the medium term

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[4] Standard Chartered Africa Quarterly Review, Sept. 1993. This analysis quotes from the IMF World Economic Outlook for 1993 and then comments on it from the perspective of Standard Chartered, an experienced private bank with a long history in all the countries of southern Africa.

[5] Standard Chartered, ibid. p.2

[6] Inward foreign investment to South Africa virtually dried up after 1986. Between 1986 and 1991, estimates are that it was only $37 million. (Standard Chartered, ibid., p. 3.) The total stock of foreign investment in South Africa in 1990, therefore, was $11 billion (compared to the total stock of outward investment in that year of $7.6 billion).

if the situation in South Africa does remain on an even keel.

Other elements of the outlook for future economic growth in the region indicate that there is still a lot of room for economic reforms:

- Continuing improvements in **monetary management** are necessary to avoid recurrences of the high and unstable levels of inflation and/or the over-valued exchange rates which made exports uncompetitive on world markets. Zambia has experienced skyrocketing inflation over the last few years. Tanzania has only just unified its multiple exchange rate system and broadened access to foreign exchange. It took Zimbabwe 14 years after independence to effectively liberalize access to foreign exchange and to permit a market-based re-valuation of currency which will make exports more competitive.

- General economic management, in which **tax and expenditure policies** better reflect the objective of economic growth, will also need continuous attention in all countries. Company tax rates in Zambia, for example, still exceed 50 percent, encouraging evasion and discouraging investment. Withholding taxes on remittances and dividends in Botswana and Zambia vary from 10 to 30 percent and may act as a disincentive to investors.[7]

- **Financial systems** in several countries still function inadequately, making it difficult to secure financing for both capital investments and operations. Banking services are often confined to urban areas. The financial position of state-owned banks is often perilous as they have accumulated, at government behest, liabilities which greatly exceed assets. The practice of financing recurrent government deficits out of domestic bank credit (Zambia, Mozambique, Lesotho, Tanzania, Malawi, and Swaziland) both increased the domestic debt service burden and crowded out potential private investors.

- Unstable **world commodity prices** for both minerals and key regional agricultural exports (such as tobacco) raise the level of investment risk in these less than optimally diversified economies.

- Excessive **government regulations** and **restrictive business practices** (often associated with government ownership of commercial enterprises) present high barriers to entry. Zimbabwe and Malawi remain highly-controlled and -regulated "market" economies.

- The recent history of falling per capita incomes has further limited already **small**

Chipeta, Chinyamata and Robert Davies Regional Relations and Cooperation Post-Apartheid: A Macro Framework Study Report. Prepared for SADC. 1993. p. 10

domestic markets.

- There is a shortage of **skilled human resources** in virtually all sectors. Moreover, the inability of the public sector to pay competitive wages has led to a brain drain of professionals from several countries (Zimbabwe, Zambia) to South Africa, Botswana, or abroad.

- **And infrastructure** remains a major problem. Roads in Mozambique and Tanzania do not begin to provide the levels of access required for a dynamic, integrated market economy. Ports and railroads outside of Namibia and South Africa are poorly-managed and transportation costs are commensurately high. The density of telecommunications services is the lowest in the world and meets less than half of the expressed demand in the SADC countries.

There will clearly be no "quick fixes" to boost economic growth in southern Africa! However, the many economic reform programs being undertaken by governments in the region provide evidence, now, that there may be a growing willingness to relax the reins of state control and allow greater room for private initiative. The vigorous dismantling of the Zambian parastatal sector is one such example. The successful liberalization of Tanzania's internal grain trade is another. And still another is Malawi's progress toward opening up production and export opportunities to small agricultural producers and to permitting private seed and fertilizer companies to begin to operate.

Governments have been slow, however, to recognize that one area in which private investors could play an expanded role is that of infrastructure, particularly that of telecommunications. Governments are now contracting with private sector firms for road construction and maintenance[8] and most of the state-owned trucking companies now face competition, but with regard to telecommunications services, most governments have attempted to retain their monopoly positions.[9] In the analysis which follows, we conclude that the outlook for economic growth in the southern Africa region over the next decade could be substantially enhanced if telecommunications infrastructure were not only expanded but if the private sector were allowed to participate in this expansion.

III. Telecommunications, Economic Growth, and Social Impacts

Studies of the relationship between telecommunications and economic growth reach the following

[8] USAID support in Tanzania has been an important contributor to progress there.

[9] Annex N illustrates a recent effort by the Ministry of Information, Posts and Telecommunications in Zimbabwe to reassert its view that a public monopoly is the right way to do the job.

major conclusions[10]:

- The relationship between GDP and investments in telecommunications is highly positive. Correlation coefficients are in the range of 0.9 to 1.

- In low-income countries, the relationship is two-way. There is statistical evidence to show that telecommunications investments (as measured by increases in the number of direct exchange lines, or DELs) causes growth in GDP and, at the same time, that growth in GDP leads to increases in telecommunications investments.

- For businesses, the lack of adequate telecommunication services causes real and measurable losses and decreases overall profitability of enterprises who need to be in touch with markets and/or arrange for transportation. A recent survey in Zimbabwe shows that smaller enterprises with private telephone services have rates of employment growth three times greater than those without.[11]

This impact is not restricted to the big cities and urban areas. A community phone within a reasonable walk can dramatically improve the economic prospects of village and farm life. Up to date information makes markets work more efficiently; ensuring that the highest prices for produce are received, and the lowest prices for inputs are paid. In fact, better access to buyers through telecommunications means that high value but highly perishable crops can be grown where previously unfeasible.

Less scarce working capital needs to be tied up in supplies, when a farmer or small shop holder can be assured of placing an order in real time and not on a monthly or weekly cycle. Potentially devastating animal and plant disease outbreaks can be diagnosed and treated more effectively and in a more timely fashion.

Beyond economics, a telephone can make a dramatic impact on the quality of life. Health care and education are good examples. In rural areas, where a few doctors must cover large geographic areas, telecommunications can provide first line paramedics or nurses with back-up diagnostic and therapeutic information that can mean the difference between life and death. And if better information isn't enough, a phone call can bring in the ambulance to carry the patient to where more sophisticated facilities are available.

As the line between technologies for broadcasting and telecommunications becomes blurred,

[10] Teleconsult. Telecommunications Sector Scoping Study for Southern Africa. Phase I - Final report for USAID. April, 1993. See all of Section II. Specific references are not repeated here.

[11] GEMINI Survey of Enterprises in Zimbabwe, 1993. Draft report of data.

cheaper transmission means that it is much more practical to do distance learning. In southern Africa, with a dearth of qualified teachers, broadcasts by master teachers will greatly strengthen quality of teachers and schools.

Better telecommunications also makes highly positive impacts on the strength and resilience of democratic institutions and processes. Elections can be undertaken with a greater assurance of freedom and fairness, when observers can communicate in real time with election supervisory bodies. Access to communications allows better interaction between constituency in rural areas, and elected officials in the capital cities.

Historically, telecommunications were perceived to be a "natural monopoly" in which one company, working under firm government control to minimize monopoly "rents" and to ensure equitable service delivery, had to be responsible for all investment and services. Most southern African countries still espouse this view officially. Developments in the technology and the explosion of competitive telecommunications businesses following the break-up of AT & T in the United States in 1984 have reversed history. It is now apparent that users can get better, cheaper service when there is active competition in certain sub-sectors of telecommunications equipment and services.

It is no surprise, therefore, that times and priorities are changing in southern Africa as well as the rest of the world. Through the efforts of the Southern Africa Transport and Communications Commission (SATCC) of the Southern Africa Development Community (SADC), as well as other regional and international groups, notably the Southern African Telecommunications Administration (SATA), the secretariat of the Preferential Trade Area (PTA), and the International Telecommunications Union (ITU) and, not to be too modest, USAID, there is increasing awareness of the degree to which the level of telecommunications services and the way that they are being delivered in southern Africa is inhibiting private investment and increasing the costs of doing business among those firms which have unsatisfactory access to telecommunications services. There is also increasing understanding of the technical options available.

At the national level, the conditions for a new look at the telecommunications sector are in place:

- New telecommunications services, available on the global market, are already being **demanded** by local enterprises.

- Sufficient progress has been made on the economic policy side with regard to providing an appropriate macroeconomic environment for private sector investment and to opening the economy to international markets, but there is now concern that the **expected private sector supply response** is not coming as fast as anticipated. Inadequate telecommunications services are inhibiting that supply response.

- There is, on the parts of most governments in the region, a generally greater willingness to undertake measures which will contribute to an increasingly important social as well as economic objective -- **expanding jobs** in the private sector.

But are the conditions in place for actually restructuring the current state-owned telecommunications -- and thus accelerating economic growth and social development in the region? Section IV summarizes the problems in the telecommunications sector. Section V describes a USAID Program to assist in solving several of the key problems and Section VI lays out the plans for a $15 million Project activity to get things going.

IV. The Telecommunications Problem in Southern Africa

There is not just one telecommunications problem in the region. There are layers of problems having to do with current and potential telecommunications services, each being articulated by a different group of actors.

A. ...From the User's Perspective

Telecommunications services in most of southern Africa are described by most consumers (or would-be consumers) as inadequate, unreliable, and costly. Only the PTCs in Namibia, Botswana, and South Africa seem to be responding somewhat satisfactorily to their users' needs. The region-wide analysis commissioned by USAID/Zimbabwe from Teleconsult documents the deficiencies.[12]

- **An inadequate number of phone lines**

  As of 1991, the 10 nations of the SADC region (with a combined population of about 70 million people) had 511,000 phone lines, fewer than the county of Fairfax, Virginia. South Africa, with about half the population (33.5 million) had 3.3 million phone connections. The SADC region has 0.62 phone lines for every 100 inhabitants, slightly below the Africa average of 0.7 per 100 inhabitants, and far below the 50-80 per 100 in developed countries. As might be expected from the figures cited above, South Africa, with 5 percent of Africa's population, has 40 percent of its phones, and a penetration of 10 phone lines for every 100 inhabitants.

  In general, rural residents are more highly disadvantaged in terms of telecommunications services. Of the estimated 151,000 villages in Africa, more

[12] Teleconsult Telecommunications Sector Scoping Study for Southern Africa. Phase I. Final Report. April, 1993.

than 121,000 have no phone. In Tanzania, rural dwellers can be over 100 miles from the nearest phone, a walk of 10-12 days. In Zimbabwe, even wealthy commercial farmers are without a phone; these farmers habitually drive several hours to an international hotel in the capital and check into a room for the day to make and receive calls.

- **Long waits for phone installation**

And the situation is not improving very rapidly. In Zimbabwe, for example, phone density has actually dropped from 3.1 per 100 in 1980 to about 1.3 per 100 inhabitants today. Potential telephone subscribers must now wait an estimated 5.3 years to have telephones installed. The wait in Tanzania is even longer: up to ten years for a residential phone and five years for a business phone.

The official waiting list for phone installation -- the "expressed demand" -- exceeds 350,000 in the ten countries of the SADC region. Given the futility of placing one's name on a waiting list in most countries, it is estimated that unregistered demand, or "unexpressed demand," is more than twice as high as expressed demand. With only 511,000 lines in operation in the SADC region, this means that the current demand for telephones is over twice the existing supply. Many subscribers, even in urban areas, have to settle for party lines with up to 16 different households or businesses on the line. Anecdotal evidence indicates that the prospect of being without a phone for the extended waiting periods cited has created unsanctioned alternatives, with large unofficial payments of up to US$ 20,000 as the key to quick installment.[13]

- **Waiting for a dial tone, unreliable service**

Even those with phones often find that their lines may be effectively out of order for up to 50 percent of the time due to equipment malfunction. In Zimbabwe, each phone line has on average 3.0 faults per year, each of which could take up to a week to fix. In addition, congestion at the local, national, or international exchanges makes it difficult to complete or receive a call.

Call completion ratios for long distance calls in the region are estimated to average about 30 percent[14], but dip far lower at peak calling periods. This contrasts with a 70 percent ratio for the United States. The use of outdated

[13] Statement by Mr. E. Cross at the Southern African Foundation for Economic Research Privatization Conference July 1992.

[14] SATCC Agenda Item No. 4, SATCC Telecommunication Development Programme, Maputo, June 1992. Annex 6.

manual or semi-automatic equipment at these exchanges is one factor contributing to the congestion.

- **Trying to hear, another mark of unreliability**

  Those with a working phone still face significant problems. Static, crossed lines, and crossed numbers are a frequent occurrence, although difficult to measure quantitatively. In many areas, the infrastructure is so degraded that telex messages are the only reliable means of telecommunication. The enhanced services that many businesses take for granted in other countries, such as reliable medium- and high-speed data communications, are not possible over much of the antiquated regional and local networks.

- **Too Costly ...**

  International calls are very expensive. Rates from each country to South Africa, however, demonstrate the international rate differential. Zambian calls cost US$8.40 per minute and those from Malawi and Mozambique to South Africa run around $5.00 per minute. As might be expected, such high rates lead to high rates of fraud as international calls are billed to lines which are out of service when the call is made or on lines not connected to the billing system at all.

- **... or Too Cheap**

  Local rates range from 1 U.S. cent per call within a 100 km radius (Zambia), with 4 to 5 cents being the mode, to 30 cents per call in Swaziland. Local calls, therefore, are too cheap, creating artificially high demand and congesting the network, while depriving the PTC of the funds to extend and maintain the network.[15]

B. ...Communications within the southern African region

Regional telecommunications are expensive, often not available on demand, and when available, of poor quality. Unfortunately, quantitative indicators such as call completion rates are not collected. Nonetheless, most observers would agree it is usually more difficult to make a phone call between two countries in the region than to make a much longer call from one country to Europe or the United States. This is true despite the fact that the major telecommunications links between the countries in the region are mostly adequate, thanks to satellite technology and the PANAFTEL microwave link program.

[15]BMI-TechKnowledge Telecommunications in Southern Africa. 1990. p. 30

This apparent paradox is easily explained through an analogy. Imagine if the interstate highway system in United States was excellent, but the local streets were mostly unpassable. A trip from Washington, DC Baltimore would be very difficult, even if the Baltimore-Washington Parkway was in perfect condition.

In the SADC region, a telephone call often must pass through **two** degraded local networks -- and one adequate intra-regional trunk system -- before it is completed. A call from Harare to London must pass through only one degraded local system. And once a call is on a digital transmission system there is virtually no degradation in quality no matter how far the distance.

Thus, given the state of the network, to achieve good intra-regional telecommunications, changes must be made at the national level. The regional chain is only as strong as all of its national links. These linkages mean that project and policy efforts must include a sharp focus on changes at the national level. To adapt a phrase from environmental activists, we must "think regionally, but act nationally".[16]

C. ...From the Point of View of Businesses

A study by BMI-TechKnowledge of the telecommunications industry in Southern Africa[17] provides a more focussed look at the group of users of telecommunications services which should be playing a major role in job and income creation: businesses in the region. As might be expected, large corporations surveyed reported much greater than average rates of phone connections, ranging from 14 phones per 100 employees in Zambia to 69 phones per 100 employees in Namibia. Nevertheless, the survey also found substantial unmet demand, not only for phone services but also for the additional data and voice transmission services which are important to businesses -- leased lines, switched data services, local area networks (LANs), videotex services, E-Mail, and paging services.

The survey then asked businesses to rate their overall satisfaction with current telecommunications services and found that, on scale of 1 (bad) to 7 (excellent), only two countries were meeting expectations. Namibia's PTC scored highest (with a rating of 6.2) and Botswana's was next with a rating of 4.5.

All businesses interviewed underscored four issues of concern to them:

- Communications have to be **reliable and functional** all of the time.

[16]See Annex M, "Intra-regional Trade and Telecommunications in Southern Africa", for a more comprehensive treatment of regional telecommunications issues.

[17] BMI-TechKnowledge. Ibid., 1990.

- **Communications must be available**, without long delays or lead times for connection.

- **The PTCs have to be responsive to customer needs**, and to complaints.

- The **quality** of services, voice or data, must be good.[18]

So why aren't the southern African business people themselves investing in installing or upgrading the services they want and need? The answer is pretty easy: private investment in the sector is usually proscribed by Act of Parliament. There are a few exceptions to the monopoly: other strategic entities such as the railways and power parastatals are allowed to operate their own private telecommunication networks, and in most countries in the region, private entities can install and operate their own PABXs inside their premises.

But there are other regulatory and operational reasons preventing private business investors in southern Africa from entering the field as well -- even when an opening is made to private sector provision of the non-basic or "value added" services:

- **Technical standards** and fees for interconnection are not defined, published, and verified so that interfacing services between different service-providing companies is not possible.

- **Tariff setting** often lags far behind cost increases, reflects political priorities, and offers no opportunity for review or appeal. Given the history of unduly low tariffs in the region (especially for domestic traffic), this does not bode well for private sector profitability.

- **Information.** Information on the telecommunications sector, because it has been the domain of the state, is a limited good in the private sector. However, this is changing -- and changing fast -- as users are finding out about cellular, e-mail, and other services and putting pressure on the systems to get access.

- **Frequency allocation.** To be able to provide wireless telecommunications services, for example, one has to have a frequency allocation. To date, most countries do not allow private sector firms use of spectrum for new services such as mobile cellular telephony, or to monitor unauthorized transmissions.

D. ...At the National Level

Data from the Teleconsult study helps to explain both individuals' and the corporations' complaints and to assess the prospects for improvements in the services businesses can expect

[18]BMI-TechKnowledge. Ibid. p.44

from the PTCs in the future. The Teleconsult study reviews the plans of national PTCs and compares their projected performance in the year 2000 to the likely demand. The Teleconsult analysis suggests that *most PTCs in the region are not going to improve their performance significantly in the short- to medium-term.*

Although the PTCs in all countries have plans for system upgrading and expansion on their books, Teleconsult's projections show that, in all countries except Botswana, it is likely that demand for services will continue to exceed supply. Further, Teleconsult analysts conclude, the situation will actually worsen significantly in relative terms (i.e., the percentage of unmet demand compared to supply will increase) in Malawi, Mozambique, Namibia, Tanzania, and Zimbabwe.

Teleconsult analysts found that PTCs as a group were projecting estimated gross investment expenditures of about $700 million per year in the decade of the 1990s.[19] To meet *estimated* levels of demand in the year 2000 (based on conservative projections using only the "expressed" demand of 1990), Teleconsult calculated that the PTCs as a group would have to **double** their projected investments -- to $1.4 billion each year. Such an increase should be feasible (using the benchmark of one percent of GDP) for Namibia and South Africa, but for all the rest, the burden on the public sector budget would be excessive.[20]

It is obvious that governments in the region -- with the possible exceptions of Botswana, Namibia, and South Africa, are going to have to be more creative or aggressive in coming up with solutions than they have been so far.

In general, our assessment of the telecommunications situation in southern Africa is that there will be insufficient growth in the telecommunications sector if the current pace of investment and restructuring is pursued. Further, this insufficient growth will measurably constrain the process of business investment (both local and foreign), job creation, and economic growth overall.

This assessment is based upon the following:

- Even with projected expansions of PTC services (the addition of 2.5 million DELs), there will be **more than 2.2 million customers waiting for basic service** in the year 2000. If even half of these unserved customers are businesses (or

[19] These projected estimates are usually over-optimistic. Details are found in Annex J.1. This does not include Angola, whose investment plans have obviously been derailed.

[20] "Excessive" is the conclusion when the amount needed from public sector budget is estimated to exceed more than 1 percent of projected GDP. The "one percent" figure is a rule of thumb applied internationally.

potential investors)[21], then the "loss" in terms of economic activity and employment growth is obvious although difficult to quantify.

- In the countries most vigorously undertaking economic reforms (Zambia, Tanzania, Malawi, and Mozambique), the gap between what is planned to be spent on telecommunications systems improvements and what should be spent to meet consumer demands is greatest. Further, the projected density of service in these countries (except Zambia) will continue to be the lowest in the region. If one accepts that **telecommunications services are a necessary complement to other economic enabling reforms**, then telecommunications is likely in these countries to emerge as a more serious constraint in 2000 than it was in 1990.

- These same four countries are also the lowest income countries in the region, with average per capita incomes in 1990 of approximately $270, $160, $170, and $105 compared to a region-wide average of $336 (not including South Africa). According to an ITU study[22], the incremental contribution of a telephone to GDP is higher at the lower end of the development spectrum. The projected unmet demand of consumers in these four low-income countries alone in the year 2000 will be at least 980,000 individuals or businesses. Using Teleconsult's estimate of $7,800 in GDP contributions generated by an additional telephone in these four countries[23], this implies a **"loss" of potential GDP of almost $8 billion to these countries**, more than 50 percent of their actually projected annual GDP.

- Without greater levels of investment than those planned by the PTCs, it is **unlikely that the quality of service in the region will improve markedly**. While low quality of service has been shown to affect individual businesses' productivity[24], in the larger context being considered here, continued poor

[21] Data on the breakdown between business and residential service is not available for all countries in the region. For Zambia, Zimbabwe, and Lesotho, 44 percent of the Direct Exchange Lines active were business connections. Even much of residential phone usage is business related: customers calling stores; home-based businesses; reaching employees at home,etc. (Teleconsult, ibid., Section I).

[22] ITU, 1988. At the GDP per capita of $100 per year, an additional telephone was estimated to contribute statistically $12,000 to GDP. Cited in Teleconsult, p. II-8.

[23] This comes from a Teleconsult estimate discussed in Annex G, the Economic Analysis.

[24] The Teleconsult report cites a micro-analysis done with nine Kenyan firms that showed a loss of potential profits (2.8 percent) and gross revenues (0.2 - 0.5 percent), higher sales prices for products, higher costs of inputs, excessive inventories, higher costs for vehicle use, increased

quality of domestic service for international connections will have a negative foreign exchange impact on the country and, thus, an effect on macroeconomic balances.

E. ...Interest from Outside of the Region

And what about the interest of the international private sector in helping to bring both expertise and additional investment capital into the region?

There is already a certain amount of foreign private sector involvement in southern Africa, although, to date, it has principally been as the supplier of equipment (see the Institutional Analysis (Annex I) for a more complete discussion). Foreign service providers, however, have been able to exploit a few niches because of U.S. domestic and international deregulation. One interesting service offered in most countries in the region by U.S. based resellers of international long distance service is the "call back" service, which exploits the large disparity between the costs of an outgoing call from the region to the U.S. or Europe versus the cost of an incoming call. Savings of 20 - 200 percent are possible for calls to the United States, depending on the country. In South Africa, two British firms and a group of local private firms are making major (over US$ 300 million) investments in a digital cellular telephone network. Unfortunately, because of state and local sanctions in effect when the tender was announced, no U.S. firm is participating in any significant fashion. Zambia and Tanzania will follow shortly with major private sector investment in cellular and possibly data communications services. Portuguese private firms have joint ventures in data and paging services in Mozambique.

The U.S. private sector is a world leader in telecommunications equipment and services, and given the opening up of the market in South Africa and a few other countries in the region, it might appear that there would be a substantial interest in further expansions in the southern Africa market. After the AT&T divestiture, the Regional Bell Operating Companies (RBOCs) -- who until very recently provided local and regional long distance service and little else -- faced a mature market and shrinking margins on their home territory. The limited domestic opportunities, and the very attractive overseas opportunities, spurred overseas investment; the RBOCs have invested over US $3 billion in newly privatized telephone companies in Mexico, Venezuela, and New Zealand.[25]

Africa in general has not presented as appealing an environment for investors as Europe, Asia and Latin America. Part of this is due to the fragmented markets, the difficulty of doing

idle time for machinery due to delayed access to repair personnel and spare parts, diminished capacity to deliver goods to remote consumers, additional labor costs for messengers, drivers, etc., and loss of management time (1 to 1.5 hours per day). Teleconsult, ibid., pp. II-4,5.

[25]Recent regulatory and industry developments, however, that are opening up more domestic markets for the RBOCs are changing this equation.

business in the region because of sector policy and general business climate issues. In a recent survey conducted for the design of this Project, Bell Atlantic reports frustration with efforts to pursue business opportunities in the SADC region and in Nigeria; this has led to a current decision to suspend efforts in the continent. GTE Spacenet noted its major strategic commitments elsewhere as their reason for not pursuing in southern Africa at this time. Sprint International is echoing GTE, citing its decision to limit involvement in sub-Saharan Africa in favor of investments in other world regions. And other respondents, including AT & T and Motorola, cited "political instability or unrest" as major disincentives to regional investment.[26]

Nonetheless, telecommunications is a highly lucrative sector and the above disadvantages would not discourage investment if it were allowed by the regional governments. Firms providing telecommunications services are capable of earning large profits in environments where most other investments would not be viable. The success of the cellular telephone operation in Zaire, and the overall privatization in Guyana, are good examples of how telecommunications can make money in very difficult business environments.

While acknowledging these formidable barriers to attracting U.S. telecommunications investors with their capital and know-how, Africa does have certain advantages:

- Less competition. A cellular bid for Bangkok is likely to attract far more competitors than a similar one for Dar Es Salaam. Therefore, an aggressive smaller firm may be able to establish itself more easily in Africa.

- The availability of equity and venture capital funds -- largely mobilized through donor programs, but money nevertheless -- that are actively seeking attractive opportunities and the chance to invest along with a U.S. strategic partner.

A major factor that could continue to constrain or slow investment in telecommunications in the region, however, is sheer ignorance of risks and opportunities in the region on the part of all but the largest companies.

The SADC region is not well known to most potential investors. Information on the region specifically relevant to the telecommunications sector is spotty, of very poor quality, and is usually out of date. This type of information is expensive and difficult to collect, particularly for a small, U.S. based-based firm. Such a lack of information means that the private investor cannot accurately assess the risks and rewards of investments or knowledgeably propose or negotiate transactions with governments.

An analysis of the areas which might interest U.S. firms suggests that:

[26] Akwule, Raymond Survey Report: For Development of the SADC Regional Telecommunications Restructuring Program, U.S. Technical Assistance Component. 1993, p. 6

- There may be enough of a market that one or two of the regional **telecommunications operating companies** in the U.S. (Bell Atlantic and Southwestern Bell) might compete to take a major stake in a privatization of a national phone company in a major country (say, Zimbabwe or South Africa). One or two more would be actively interested in competing to take a major stake in a mobile cellular telephone enterprise.

- **Equipment suppliers** have recognized that an equity position in a telecommunications project can ensure sales of equipment. Motorola, for example, has invested hundreds of millions of U.S. dollars in the Iridium worldwide personal communications system (based on a privately-owned satellite net) as a sound financial investment, but also as a means to lock in the use of Motorola equipment for this new service. With a more open playing field for foreign private investment, it is likely that equipment suppliers like Motorola and GTE will make strategic equity investments in Africa to leverage sales.

- **Small independent telecommunications carriers**. Some of the most aggressive and creative investors in developing countries are relatively new telecommunications companies that see profitable market niches that are too small for larger firms to exploit. The Atlantic Telephone Network (ATN), operator of the U.S. Virgin Islands network, spent over two years researching and negotiating their investment in Guyana Telephone and Telegraph (GTT) despite the minute size of the market; only 14 thousand lines. ATN is now looking at opportunities in East and Southern Africa. Other so called "regional carriers" in the U.S., now busily buying up U.S. rural telephone co-operatives, are also looking overseas for opportunities.

- **Value added service providers** (i.e., services beyond simple transmission of voice or data), which in the U.S., are almost completely deregulated. U.S. cellular telephone companies, such as Millicom, are aggressive investors in overseas markets. Several U.S. cellular operators (Millicom, McCaw, Schelle) would compete aggressively to invest in a cellular telephone franchise, in any of the countries of the region. A myriad of specialized players in other (private and shared data services, financial transfers) will seize opportunities as they emerge in the region.

- **Data Transmission.** Mansatel, a U.S. based telecommunications consulting and design company, has for the past two years been developing a consortium to make a significant investment in high speed secure data communications in Zimbabwe. Together with a group of local businesses, GTE Spacenet, and the Zimbabwe Posts and Telecommunications Corporation (PTC), they propose to construct and operate a private data communications network based on existing satellite technology. Initial capital investment planned for the basic system is approximately US $2 million. In addition to offering basic data transmission capacity, this consortium (or other service providers) could also offer value added services such as E-Mail, Electronic Funds Transfer, Credit validation, paging, and possibly mobile cellular and emergency voice transmission. Total additional investments to provide these services, and expand the backbone capacity, could easily be upwards of $10 million. The major hurdle for the consortium is approval by

PTC, which has yet to be received. PTC, in fact, has been offered an equity position on a deferred payment basis.

- **Specialized Investment Funds.** A number of funds have been established to take advantage of the openings for private sector investment in telecommunications in developing countries, such as the Emerging Telecommunications Markets Fund. These are constantly scouting for opportunities. Developing countries are a particularly strong interest, as long as there is a "clear" license or mandate for a private telecommunications company, an operating securities exchange and liberal foreign exchange regulations, and a low degree of political risk. None of the publicly traded funds have equity investments in any part of sub-Saharan Africa. In countries with both operating stock exchanges and liberalized telecommunications sectors (potentially Zimbabwe, Zambia, Namibia, Swaziland, Botswana, and South Africa), these funds could be interested in taking a passive but significant stake in either pre-privatization or privatization financing of telephone companies or private specialized services.

In short, given the wide range of potential investors and the types of services and investments which could be made with attractive returns in the region there will be some private sector interest in taking part in the transformation of telecommunications services in southern Africa in the telecommunications area, but it is an interest which will have to be developed through proactive steps. For U.S. private telecommunications companies, there is a long list of specific constraints to overcome. And it is the national telecommunications policy makers and systems managers who are going to have to take the lead in making these investment opportunities more attractive.

F. Problem-Solving Options

To address the range and complexity of problems identified, government decision-makers in southern Africa have six options. They can try to:

- Revise PTC governance and management structures to permit greater extension of services at lower costs. Staffing levels, for example, are well above international norms in most countries;

- Introduce alternative new technologies to expand service coverage at lower costs;

- Seek additional donor assistance on concessional or grant terms to expand infrastructure without increasing the debt burden of the PTC;

- Encourage private sector investment and supply of additional services on a commercial basis;

- Allow competition in certain sub-sectors of telecommunications services; or

- Pursue some combination of the above.

What might be involved in implementation of each of these options? A brief review shows that each will require a significant number of changes in the way that governments think about telecommunications as part of the economic enabling environment as well as changes in current PTC structures -- all the way from policy to regulation to financial approaches to day-to-day administration. But the option which is likely to be the most effective is the sixth one: some combination of the others.

1. Revise PTC Governance and Management Structures

Tanzania's and Zambia's PTCs are losing money, Zimbabwe's PTC investment program has not kept pace with demand, and the recent record of the Malawi and Lesotho PTCs is not positive. On almost every indicator of efficiency, there are indications that these PTCs could do better (Table 2). Constraints to realizing greater internal efficiencies in the existing PTCs are structural, administrative, and institutional.

Table 2.
Indicators of PTC Efficiency

Country	Fill Factor[27] (indicating equipment is appropriately configured and used) International norm: 80 - 85 percent	No. Employees per 1000 Direct Exchange Lines Being Used (indicating appropriateness of staffing level) International norm: 5-8/1000 DELs
Botswana	97	44
Lesotho	62	74
Malawi	64	78
Mozambique	58	49
Namibia	70	41
South Africa	77	28
Swaziland	82	22
Tanzania	66	76
Zambia	58	47
Zimbabwe	75	40

Sources: Teleconsult's Telecommunications Scoping Study provided most of the fill factors; the employee/DEL ratios were calculated from both Teleconsult and BMI-TechKnowledge reports. The number of employees in Tanzania was taken from the World Bank Telecommunications III Project Appraisal report.

Structural Difficulties

With the exception of those in Botswana, Mozambique, and -- to a certain extent -- Namibia,

[27] Fill factor is the ratio of lines actually connected to subscribers, to Direct Exchange Lines (the number of lines available on an exchange), expressed as a percentage.

Zimbabwe, Lesotho, and Malawi, most networks in the region consist of old analog equipment that frequently breaks down and provides a poor quality of service. Digitalization programs are underway, but the equipment is costly.

With outdated equipment, it is difficult to offer improved commercial services for which consumers will be willing to pay more money. Underground paper insulated wire needs to be replaced so that faults during the rainy season are not so frequent. Overhead copper wire needs to be replaced by wireless or fiber optic systems; copper is attractive to thieves. Computer systems for billing need to be updated (software as well as hardware) so that bills are actually sent **before** the deadline for cutting service is passed.

Tied donor financing has contributed to the mismatch of installed equipment in the national telecommunications networks. In the more donor dependent countries -- such as Tanzania, Zambia, and Zimbabwe -- one example of this is substantial overinvestment in switching and transmission equipment (high ticket, highly profitable items attractive to donors) and severe underinvestment in the external plant providing service to the individual subscriber (low ticket, low profit items in which donors have less interest). Even though a country may have a digital network, subscribers cannot be connected. Another problem is that telephone company managers are not able to control the integration of different equipment from different vendors. This extracts a substantial additional cost in terms of staff training, spare part inventories, maintenance procedures, and system documentation.[28]

Administrative Constraints

Common management practices have also contributed to management inefficiencies:

- Parent Ministries (generally a Ministry of Transport and Communications) have not accorded PTC managers the **autonomy** necessary for efficient and customer-oriented operation of the system;

- As government entities, **investment authority is placed with civil servants** unfamiliar with and disinterested in the long-term needs of the system;

- **Senior management is assigned or rotated out for political purposes.** Skill matches are not always appropriate and the specialized knowledge required for management of an efficient telecommunications system is simply not there.

- Limited salary levels cause an **exodus of badly needed skills** from the organization.

[28]While equipment from two different manufacturers can be successfully integrated -- and this is desirable, to prevent a risky sole-source situation -- often developing countries are maintaining over six different types of switching equipment.

- Governments set **tariffs (service fees) on political rather than economic or financial grounds**. When fees are set too low, congestion on lines, uncompleted calls, and user frustration ensues. When fees are too high (generally on international calls), illegal tapping and unpaid bills are a result.

- The level of **over-staffing** in some PTTs (see Table 2) indicates their use as an employment creating and/or patronage reward system.

Even those PTT managers who recognize these inefficiencies are often hard-pressed to make the changes needed. They lack flexibility to operate as a private sector firm and must seek administrative approval for all decisions from hiring of personnel to setting of tariffs. The line managers are not accountable to consumers, so all incentives to produce dependable services at reasonable cost are undermined.

Even when profitable, the PTTs are not allowed to retain their earnings or foreign exchange for investment, further limiting their ability to provide services efficiently. Only Botswana currently has private sector management of the core network, and even this is limited.

Institutional Constraints

In all countries in the region except Namibia, South Africa, Botswana, and Lesotho, telecommunications and postal services operate under the same umbrella corporation. In Malawi, post and telecommunications services are treated as a line function of the relevant government ministry and have no autonomous stature. The joint operation of post and telecommunications services fails to recognize the dynamic nature of the telecommunications sector and the substantial differences that have evolved over time. These have eliminated the original economies of scale and scope that were traditionally obtained by combining the two operations.

Steps have been taken in several countries to begin splitting the accounts for posts and telecommunications. Not surprisingly, telecommunications revenues have often been used to subsidize postal service. The next step will be to divide the corporate assets between the two successor entities. Experience to date shows that this, again, takes more time and new investment to be accomplished without a loss of service on either side. There is, however, fairly broad consensus that such a split is essential if telecommunications services are to be improved.

2. Introduce Alternative New Technologies

Development of satellite and fiber optic technologies have increased the capacity and quality of information transmission by several orders of magnitude. Digital switching and transmission allows the simultaneous transfer of voice, data, and video signals so that only one line will be needed to handle all broadcast and telecommunications needs, even at an individual subscribers home. The "cellular" radio concept, developed by Bell Labs, has transformed wireless phone service from a highly elite service to a less expensive, extremely rapid means of linking up

subscribers that could eventually be cheaper than copper wire.

Managers of the telecommunications systems in southern Africa have only begun to learn about the potential of some of the new technologies. Some potential users are even unaware that certain information transmission options exist (e.g., many of the Zambian business people responding to the BMI-TechKnowledge survey had apparently never heard of paging services). Given the very different use and cost structures associated with many of the new technologies, however, it is clear that a PTT utilizing only old technology cannot provide the services its customers require.

To adopt a technology-innovation approach for improving their service, PTTs would have to move beyond a strategy based largely on equitable provision of basic services and develop more highly differentiated strategies (either under their own umbrella or by allowing complementary private service providers to operate) in order to meet the needs of particular groups of consumers (e.g., exporters, transporters, urban-based businesses, etc.).

The restructuring of the Guyana PTT illustrates this differentiated approach and suggests how national PTTs in southern Africa could learn from the experience in restructuring their own services.

NEW SERVICES WITH NEW TECHNOLOGIES

Two years ago, when it entered into a joint venture with a private American company, the Guyana Telephone and Telegraph Company Ltd. was a public company much like those in the southern Africa region, incapable of meeting the expressed demand for even basic services. Thanks to the infusion of capital and know-how from its joint partner, now it has "digital switches linked by fiber optic cable at the exchanges which serve more than 80 percent of the population....[with] its own domestic satellite serving remote parts of the interior...Most of telephones in the country have international direct dialling facilities, facsimile machines which were rare two years ago are now commonplace, public call boxes have been distributed in the two main cities, and mobile and fixed-based cellular services are in operation within a 12-mile radius of the capital city, Georgetown."[29] The result of these innovations is reported to be more in taxes, duties, license and network fees for the government from the joint venture company than were formerly earned by the government in full charge of the GTT operation.

3. Seek Additional Donor Assistance

Donor financing has traditionally played an important role in providing investment financing for telecommunications in Southern Africa. Donor aid is most important in Lesotho, Malawi, Mozambique, Tanzania, Zambia and Zimbabwe; less so in Swaziland; and relatively unimportant or nonexistent in Botswana, Namibia, and South Africa. Despite its relatively important role in many countries, donor funding levels for the sector are not high, probably not more than $150 million or so a year for all of the southern Africa region.[30] However, donor financing for

[29]Hoyte, Hugh Desmond "The Guyana Experience", speech to a Seminar on Telecommunications Policy Regulation and Restructuring for the Countries of the Southern African Development Coordination Conference, Windhoek, Namibia, 17-19 February, 1993, p. 8

[30] Transport and telecommunications are reported as a single "purpose" in the OECD reports on official development assistance (ODA). It seems likely that the lion's share of this assistance has gone to the transport subsector; this has certainly been the case with USAID funding for the Southern Africa Regional Program (SARP) to the Southern Africa Development Community countries, for example. Nevertheless, using the ODA figures for 1990, one can estimate that

infrastructure, without being accompanied by changes in management and ownership, may have had an inadvertent deleterious effect: that is, by preventing the total collapse of the telecommunications system, donors have reduced the pressure for fundamental change, and burdened countries with an unbalanced and expensive to maintain network.

The outlook for increased donor financing to fill the projected investment gap of $700 million a year is extremely unlikely to be realized in these days of shrinking donor resources and expanding development assistance needs (as geopolitical interests and priorities shift and the former Soviet Union and Eastern European countries receive an increased share of assistance).

Given the importance of improved telecommunications services to the development of the enabling environment for greater private investment in the region, some donors (such as USAID) are willing to provide some additional resources to this sector, but these resources should be seen as catalytic -- and used in ways which will leverage other resources -- rather than as sources of cheap investment capital.

4. Encourage Private Sector Investment and Supply of Telecommunications Services

This, clearly, is the most ready source of additional capital and expertise to countries in southern Africa looking to expand and upgrade their telecommunications services. To create the kind of enabling environment that would encourage such investment, however, three conditions need to be changed:

- Government's apprehensions about private sector in telecommunications must be overcome.
- Policy and regulatory reforms to enable more investment are needed.
- Private investors must become more knowledgeable about the sector (if they are domestic investors) or the country's business prospects (if they are foreign).

Policy and regulatory reforms are needed.

Adequate regulatory frameworks for a more modern, efficient telecommunications sector have not yet been established throughout the countries in the region. Currently, legal or regulatory structures do not allow:

approximately $3.3 billion went to nine of the southern Africa countries (this excludes South Africa and Angola). If 11 percent of this went to transport and telecommunications (using the percentage of all ODA for this purpose reported by OECD in the late 1980s), and even assuming that half of this amount went to telecommunications, this means that $180 million was the maximum amount of assistance likely to have been made available for telecommunications investments through the development assistance route.

- provision of telecommunications services by the private sector;
- sale of some or all of the equity of the PTT to the private sector;
- tariff setting mechanisms to ensure that market power is not abused or mis-used and that the regulated or monopoly sub-sectors do not cross-subsidize the competitive sectors; or
- interconnection standards that would allow competing operators to provide services through a network owned by a different entity (e.g., allowing private cellular systems to interface with public-switched systems).

Fortunately, there are enough examples of what might be called "pilot private involvement projects" in the region -- as well as full scale models in other developing countries such as Guyana -- to give one some confidence that this option will look increasingly attractive to southern Africa decision-makers in the relatively near future. And past experience with reforms in other sectors shows that policy and regulatory reforms are feasible if there is agreement among those at the top that such reforms are essential for both economic and political reasons. To get to this stage in the telecommunications sector, however, requires overcoming some constraints which are peculiar to the sector.

Governmental apprehensions must be overcome.

Governments in the southern Africa region have a myriad of apprehensions about private sector investment in the telecommunications sector. Some are legitimate and must be adequately provided for through appropriate regulation. Others stem primarily from a lack of adequate information on the potential benefits of private sector participation in the sector.

Concerns range from national security and secure communications, to loss of revenue, to fears of inadequate service for rural areas. In addition, governments are concerned about ensuring adequate indigenous participation in any private sector investment and of the dangers of creating a private sector monopoly. These concerns and apprehensions -- and how the RTR program and other actors will mitigate them -- are discussed in Annex H, Political Analysis.

Investors must become more knowledgeable.

Even were governments to overcome their own apprehensions and knowledge gaps and to set up new regulatory and legal frameworks, domestic and international private sector may respond weakly to the new environment for telecommunications investments. The information gaps faced by potential domestic private sector investors are often technological. Unfamiliarity with the complex technologies available can make investing in this sector unattractive. The information gaps faced by foreign investors are more related to ignorance of market conditions and general enabling environment issues.

While South Africa may recapture interest from international investors when the transition to majority rule is complete, the rest of the southern Africa region is not well known to most potential investors in the telecommunications sector. The limited information that is known about Africa and its changing environment for investment is poorly disseminated through the U.S. or other foreign investment communities.

Because of the information gaps, on the ground contacts and sources are essential, requiring speculative, expensive trips from the U.S. to the region that only the largest firms can afford. This strongly discourages most firms, but especially the small to medium sized firms, from committing company resources to exploring investment opportunities in the region. In effect, the information gap raises the perceived risk/return ratio of pursuing business opportunities in the region.

So far, the industry associations in the U.S. -- whose main function is the provision of information to members -- are not making much of an effort in the international arena. For example, at the Cellular Telephone Association (CTA), all international enquiries are directed to the U.S. Department of Commerce. The CTA apparently does not perceive that such enquiries are important enough to their members to warrant special attention. Moreover, the range of information needs is broad, so filling the information gap is likely to require more than attendance at a trade fair or even one-time participation in a U.S. based meeting such as the AFCOM annual meetings.[31] However, there is evidence that U.S. providers are interested in the sector and region; for example, one trade association, the National Telephone Co-operative Association (NTCA), is aggressively seeking out opportunities overseas for its members. NTCA is currently involved in developing rural telephone companies in Poland and Tanzania.

In his presentation at the February, 1993, regional conference on telecommunications in Windhoek, Namibia by the president of Atlantic Tele-Network (ATN), Inc., Cornelius B. Prior, laid out the information required by a firm to make a decision to invest in telecommunications, and, to determine the price it will pay for that investment:

- First, he cited the **political climate**. Mr. Prior was concerned with the general attitudes of political leaders toward private investors, the maintenance of open borders for the flow of training and technology, and the freedom to make day-to-day operating decisions without interference.

- Second, he looked at the **economic potential** of the country. Natural resources which can be developed to generate wealth were, he stressed, an important indicator of potential. However, he placed almost equal emphasis on the quality of the human resources. Further, he noted that good monetary management and a healthy per capita income indicate economic potential as well as economic achievement.

[31] See the Akwule paper for a description of the AFCOM participants and process.

- **The condition of the existing telecommunications infrastructure** was noted as a third factor of importance. In addition to the obvious questions of the condition of the physical plant and the current degree of penetration, Mr. Prior drew attention to the work habits of the telecommunications staff.

- For an investor considering a joint venture operation with a restructured public telephone company, Mr. Prior pointed to the past **financial record and accounting procedures as well as the financial outlook** (including the capacity to earn foreign exchange, tax policies, and investment insurance).

- Finally, "a country which has **a history of legal protection of human and property rights** will definitely have an advantage in terms of attracting foreign investment." While there is no one regulatory framework which is attractive to an investor, a functioning legal system in which there are not only laws, but also a system of courts, independent of the political process, to enforce those laws is a must.

5. Introduction of Competition

Telecommunications has traditionally been thought of as a "natural monopoly", where the economies of scale were so great that competition was thought to be inefficient. This was dramatically illustrated in the early days of telephone service in the U.S., when a business who wished to reach everyone with a phone had to subscribe to three or four competing local exchanges, none of whom offered connectivity to the other.

In the last fifteen years, enormous strides have been made in technology development for the telecommunications industry. As a result:

- A wide range of new services has become possible;

- These services embody features more usually associated with computing or broadcasting;

- Players outside the traditional telecommunications industry are technically capable of providing these new services;

- The optimum distribution of function between the customer's phone, the building PBX, and the network itself is not clear and will shift over time.

Wireless technology allows one (or more) additional cost-effective connections to a home or business in addition to the basic wireline service. Cable TV connections can be readily reconfigured cost-effectively to offer a third connection. Similarly, the development of computerized switching systems allows the "unbundling", or separation, of services such as local, long distance, and international, allowing competition to enter at many different points in the path between subscriber to subscriber.

Technological change has altered the economies of scale and has driven regulatory change. The introduction of competition has meant better service, more rapid introduction of services, and lower costs despite the fears of the dominant carriers and regulators. In fact, many local telephone companies routinely charge less than the tariffs allowed by the governing state utility commission, because of competition.[32]

An argument can be made to preserve a (carefully regulated) monopoly in basic services for a temporary period to give an operator the guaranteed cash flow to build out the network. Recently, however, several countries with relatively low network build-out have experimented with deregulation at all levels. Hungary, for example, has put out to tender a local services franchise in 25 of 54 provinces, which will have to operate in direct competition with the Hungarian Telephone Company. It should be noted that penetration rates in Hungary are less than in South Africa.

In any event, competition in value added services can be healthy even in countries still developing basic networks. In Zimbabwe, for example, there have been a number of private companies interested in investing in a cellular telephone system. Because the law prohibits their investments, the PTC has no competitive pressures, and thus has been able to delay introduction of a mobile cellular service for years.

Competition is not necessarily equivalent to private sector participation. The public sector can also offer healthy competition to a PTC. Transtel, the communications arm of the South African parastatal transportation company Transnet, wants to compete directly with Telkoms SA in long distance service, taking advantage of its underutilized fiber optic backbone network that extends throughout South Africa. Transtel is already using its fiber optic system in conjunction with private sector partners in the Mobile Telephone Network, which will compete directly with the public sector dominated Vodacom system.[33]

6. The Combination Option

While gains could be made if PTCs were to pursue any one of these five options, even without increasing their total level of expenditure, there are evident benefits (and considerable synergism) to pursuing them all as part of a comprehensive reform/restructuring package. And certain

[32] The U.S. RBOC Ameritech has written down hundreds of millions of dollars of assets -- which were valued based on being able to charge the regulatory mandated tariff -- to reflect the reality of competition.

[33] The National Railways of Botswana, Zimbabwe, Zambia could follow the lead of Transnet and also press their underutilized fiber optical and digital microwave networks into service in competition (or partnership) with their respective PTCs. One of the largest U.S. long distance carriers, SPRINT, began as a private railway communications network (Southern Pacific Railway Network).

fundamental changes to the regulatory and institutional environment are very important if not essential for the success of any of the above options.

It is this course of action which USAID, through this Regional Telecommunications Restructuring (RTR) Program, with both Project and the associated nonproject assistance,[34] proposes to promote and to support in the southern Africa region. In Section V which follows, the shape of the overall RTR Program is described. The details for the Project alone are laid out in Sections VI through IX.

V. The Program Description

The RTR Program will help the process of change to improve telecommunications within and without southern Africa. Most -- but by no means all -- of Program resources will be devoted to facilitating change at the national change. The rationale for regionality of the RTR program is straightforward:

- The weakest link by far in the chain of intra-regional and international communications is the national telecommunications systems, as discussed above in Section IV.
- One or two national level successes in the southern African region will set a strong example for more cautious countries in the region to follow.
- There will be considerable economies of scale in service delivery to the eleven countries in the SADC region.
- The improved telecommunications systems will relieve a severe constraint to intra-regional trade and investment flows.

Just as it is clear that a combination of restructuring strategies will be needed for national PTCs to resolve the many layers of constraints facing them if they want to provide adequate telecommunications services to their customers, it is also clear that USAID should employ a combination of assistance strategies to provide resources and support in a timely and appropriate way. Many options have been considered. Given the rapidity with which changes have been taking place at both regional and national levels as well as within the structure of USAID, the approach proposed in the PID/PAIP of May, 1993 has been modified.

As originally proposed, a regional project would serve as the "hub" for a series of activities to be coordinated (and, to some extent, staffed) at the regional level and in selected "spoke" countries by an international team of technical assistance. The regional activities were to include: analytical work, technical advisory services, workshops and conferences, study tours,

[34] The total package of project and nonproject assistance is referred to as the Regional Telecommunications Restructuring **Program**.

and a series of efforts to increase the familiarity of U.S. telecommunications businesses with the southern African environment. It was expected that, when "spoke" countries demonstrated the capacity to move ahead with national level reforms, tailored sector (or "nonproject") assistance programs would be developed in each country (with budgetary resources judged to be adequate to support up to three country programs). The "hub" team would continue to provide support to these national programs in start-up phases and for specialized services in the initial years of the national programs.

Since May, 1993, however, both Tanzanian and Zambian governments have moved ahead more quickly than expected on their sectoral reforms. Both pull and push factors have been at work.

- Timely USAID support through ad hoc mechanisms has provided part of the "pull": the February, 1993, conference in Windhoek brought new information into the region and sparked a great deal of interest among policy makers attending; this interest was further fanned -- and given concrete shape -- through follow-up consultations with the Government of Tanzania by a lawyer from Steptoe and Johnson who specializes in telecommunications issues; and a Price Waterhouse consultancy team that supported the Government of Zambia on development of a telecommunications policy.

- These actions -- and others -- have strengthened the leadership (another "pull") now being exerted by skilled and energetic Ministry officials and PTC managers within these countries (one of whom has recently returned home to Lusaka after having worked with SATCC in Maputo for two years) and have made them more knowledgeable, and more effective, proponents of change.

- Further, the PTCs have been increasingly subjected to the increasingly vocal demands of frustrated suppliers and users. These people are pushing for better service, newer technologies, and opportunities to provide them themselves. Potential private cellular phone suppliers in Zambia, for example, have voiced suspicions of a corrupt licensing practice as Ministry decisions on their applications have been delayed for months.[35] In Tanzania, an unsolicited proposal from one private sector firm for the establishment of a cellular system never received a direct response. Instead, the PTC allegedly "pirated" the idea and put it out for competitive tender. While this process resulted in seven bids, and led to the award of a license, the originator of the first proposal remains disgruntled. Other potential investors have learned to be cautious. There is now a belief by some in Tanzania that "private business could lobby for reform but only when some of the larger users, the parastatals, have been privatized and can

[35]Price Waterhouse. Developing a Telecommunications Sector Policy for the Government of the Republic of Zambia. Report for USAID. Nov. 15, 1993. p. V-11.

join the lobby."[36] In Zimbabwe, however, some businessmen are not so reticent. One group of businessmen, led by an ex-PTC engineer, has successfully brought a suit to the High Court of Zimbabwe which has forced the PTC to issue them a license to provide mobile cellular communications services to the public -- or give good cause why not.[37] The PTC fought the suit with considerable vigor, and had placed public advertisements making its case to the public, despite the fact that the matter is *sub judice*, and has notified its intention to appeal to the Supreme Court.

Changes have also taken place at the regional level. SATCC has recently lost two key staff and is temporarily in a weakened position with regard to its telecommunications operations, although it has brought a telecommunications specialist on board recently. South African businesses specialized in telecommunications have begun to explore consulting and investment opportunities elsewhere in the region. With the removal of economic sanctions on South Africa, international private investors are once again looking at investment opportunities in that country -- and an upsurge in demand for telecommunications services can be expected.

And, finally, several relevant changes have taken place within USAID. First, new leadership in USAID/W has announced the closure of more than 20 missions worldwide, of which two (Botswana and Lesotho) are in the southern Africa region. It is not yet clear just what kind of USAID support will be extended to these countries and/or in what mode. Second, at a meeting in May 1993 with the African American Institute, the Administrator of USAID proposed a new "Initiative for Southern Africa." While the details of this Initiative are still being developed, it will define USAID's presence in the region in a post-SARP, post-CAAA[38] era and may involve the relocation of the Regional Office currently resident in Harare, Zimbabwe. The Initiative will include a focus on increasing trade and investment, a thrust which is entirely consistent with the direction in which the regional telecommunications restructuring concept has been developed. Third, USAID/Washington is undergoing a fundamental reorganization of roles and responsibilities with regard to technical leadership and backstopping. Development of the design for this Regional Telecommunications Restructuring activity has been greatly facilitated with the use of the PRE Bureau's contract with Price Waterhouse in the Privatization and Development

[36] BMI-TechKnowledge Telecommunications Sector Restructuring in SADC Countries, October, 1993. p. 23

[37] Financial Gazette 8 September 1993; Parade October 1993; The Herald 1 December 1993; Daily Gazette 26-28 January 1994.

[38] SARP is the Southern Africa Regional Program which has received special funding under USAID legislation since 1981 as part of the U.S. protest against apartheid in South Africa. CAAA stands for the "Comprehensive Anti-Apartheid Act", another piece of legislation which directed USAID to provide support to South African individuals and groups committed to working against apartheid.

Project and AFR/ONI contacts with the U.S. business sector. The final structure after the reorganization notwithstanding, such AID/W support will be needed for at least a year and, it is assumed, will be available.

The concept of the Regional Telecommunications Restructuring Program has thus evolved to take these changes into consideration. It will still be "modular", including a regional project component and up to three national nonproject components, but how and when these components will be structured and staffed, what they will focus on, and how they will work over time has been modified to reflect the changes noted above. It is important to underline, however, that the Program (and Project) goal, sub-goal, and purpose remain as stated in the PID/PAIP of May, 1993. The economic analysis carried out for this Project design (Annex G) reiterates and confirms the logic of the objective tree included in the PID/PAIP.

> The Program Goal is **broad-based sustainable economic growth in the countries of southern Africa**. Growing employment and per capita incomes are expected to be the key indicators of successful attainment of this goal.
>
> Achieving this Goal will require **increased investment for expanding business operations**. This is defined as the Program Sub-goal.
>
> The Program Purpose is **increased and broadened access within the region to a more cost-effective system for information transfer**.

The outputs required to achieve this purpose will be:

1. An **expanded, applicable knowledge base** widely shared by both public and private individuals and organizations concerned with economic growth in general and telecommunications in particular;

2. A **reframed policy and regulatory environment** in several countries in the region;

3. Restructured national **telecommunications systems better meeting the needs of users**; and

4. Greater **private investment**, leading to effective private sector control of the telecommunications sector.

A. The Regional Core Project in Broad Terms

The Regional Core Project will achieve the above outputs and purpose by:

- **strengthening the capacity of southern Africans to develop and manage national and regional telecommunications networks** through the timely

provision of information, analysis, and technical consultations;

- **assisting in solving problems** being encountered by participants in the regional telecom network, particularly those of a legal or regulatory nature, by providing timely, expert technical assistance;

- **laying the groundwork for well-defined, appropriately-sequenced, national restructuring programs** by supporting start-up staff and actions; and

- **linking private U.S. telecommunications service and equipment suppliers into the regional network** in an effort to generate increased levels of investment and efficiency into regional and national telecom systems.

The Regional Core Project will work with a wide variety of public officials (including those not directly in the telecommunications sector) and with a broad spectrum of private sector business interests including providers and users of all kinds of telecommunications services. The Project activities will specifically target the U.S. private telecommunications sector for greater involvement in southern Africa. The major responsibilities for Project implementation will be assumed by an Institutional Contract team.

To accomplish its objectives, the Regional Core Project resources will consist of:

- **people** with the organizational and technical knowledge to provide leadership in the area of telecommunications reforms and the ability to work collaboratively with public officials and private businesspeople in problem-solving; and

- **financing** for workshops, seminars, analyses, and consultancies to ensure that knowledge about telecommunications restructuring options are appropriately tailored to the southern African scene and as widely shared as possible.

A more detailed description of the RTR Regional Core Project mechanism is found in Section VI.

B. National Restructuring Programs

Support for national telecommunications restructuring programs is expected to:

- increase and broaden **access of national users** to more cost-effective systems for information transfer; and

- contribute to **increased investments** in expanding business opportunities in that country.

Exactly how these objectives will be achieved will vary with country circumstances as the pattern of constraints and the potential for restructuring are somewhat different in each case and will be accomplished primarily through non-project resources. Each focus country activity will be the subject of a separate authorization.

In general, the National Restructuring Programs will focus on the users (or customers) of telecommunications services -- businesses of all types and sizes and individuals both urban and rural. Because of the readiness of the Tanzanian and Zambian governments to proceed with serious sectoral restructuring efforts in order to improve services for their customers, Tanzania and Zambia will be the loci of the first two National Restructuring Programs. As described below, a third country will be selected when it has demonstrated a readiness to restructure. At the time this Project Paper was authorized, Zimbabwe was the most likely prospect, but Mozambique and Malawi are also seen as possibilities.

As noted, Project resources will provide a substantial amount of directed support to develop the National Restructuring Programs in recognition of the importance of getting these efforts off the ground successfully. Preliminary planning for next steps in Zambia was recently completed by Price Waterhouse (with USAID funding through the PRE Bureau Privatization and Development project mechanism). Draft findings and recommendations from this assistance are to summarized in the NEXT STEPS box below and illustrate how the Project can immediately help a country to move toward a broader restructuring program.

NEXT STEPS IN ZAMBIA'S RESTRUCTURING

In Zambia, the process of restructuring the telecommunications system has gotten underway in a somewhat scattershot way. Restructuring legislation was drafted prior to achieving political consensus on a revised sector policy statement and setting out a consistent approach for revising the legal framework for telecommunications. Efforts are now underway to get the process on to a more logical, sequential path.[39] *It is already apparent that certain issues which have emerged from the scattershot approach need further study and debate before any Cabinet-level decisions are made.*[40]

The Price Waterhouse team suggested a number of next steps for sector development which should be addressed in the very near term by the various Zambian stakeholders. Project consultants can assist in:

- *Finalization and implementation of the policy statement and legislation*
  - *Formulation of a policy statement which reflects the Ministry of Communication and Transport's view of the sector and which achieves consensus from a wider groups of interested parties, including the PTC itself, other government agencies, union organizations, large users and user groups, service and equipment providers, potential investors, and PTC suppliers.*
  - *Holding of a symposium to address stakeholders' concerns (in a transparent way).*
  - *Submission of the policy statement to the Cabinet for approval.*
  - *Review of the draft legislation to ensure consistency with the policy statement and compatibility with the regulatory environment.*
  - *Approval by the Cabinet and Parliament.*
  - *Implementation which will require establishment of the regulatory entity with requisite responsibilities and powers (and all that goes*

[39] Price Waterhouse Ibid.

[40] BMI-TechKnowledge Telecommunications Sector Restructuring in SADC Countries, a Report for USAID. October, 1993. pp. 29 ff.

along with setting up a new public organization: job descriptions, development of operating procedures, development of information systems and other management tools, establishing communication links with partner-organizations, and developing information dissemination mechanisms for the public).

- *Formulation and implementation of a comprehensive restructuring plan for the operating entity (the successor to the current PTC)*

  - *The decision has already been made to separate the postal service and the telecommunications services in 1994. However, certain shared facilities and services are not yet assigned to one or the other operating unit. Nor has any individual been assigned responsibility for making sure the separation happens smoothly.*

  - *It is recommended, therefore, that a restructuring coordinator be appointed to establish and enforce action deadlines and to coordinate input from critical sector participants. The coordinator must also finalize decisions regarding disposition of non-core and/or shared enterprises and the transfer of government debt.*

  - *The new telecommunications operating entity will have to review its structure, policies, procedures, and capital at every level.*

  - *Tariff rebalancing will be required to ensure that the new telecommunications operating entity can operate at a profit.*

- *Preparation for licensing of a cellular operator*

  - *The MCT launched a solicitation to the private sector for the provision of cellular service but has not yet decided on an award. Potential service providers are concerned with the delay.*

  - *MCT must come to some decision about the technology system choice, the length of licensing period, and whether or not a successful bidder will have the right to build trunk transmission infrastructure.*

To keep the momentum of reform planning going, technical assistance will be provided to Zambia as soon as the Regional Core Project is approved and obligated. Using both bilateral and Regional Core Project resources, USAID/Zambia in conjunction with the RTR program manager will arrange for highly specialized technical assistance on an as-needed basis. It is expected that this will be sufficient to develop the more detailed, comprehensive plan for sector restructuring which will serve as the framework document for the development of a National Telecommunications Restructuring Program which USAID will support and to get implementation underway.

In Tanzania, in contrast to the Zambian case, the World Bank has packaged a five-year $220 million multi-donor funded project of support to the Government of Tanzania for regulatory reform and restructuring and upgrading the PTC operations. USAID has played a catalytic role in the development of certain aspects of this project but has not committed itself to joint funding of the overall project. Instead, USAID/Tanzania plans to design for funding under the Regional Telecommunications Restructuring Program a nonproject assistance activity which will encourage the entry of private telecommunications service providers into services and areas that will not be directly covered by the World Bank-led program. Targeted design completion date for the USAID Tanzania initiative is mid-CY 1994.

C. Taking into Account U.S. Special Capacities and Concerns

One of the strengths that USAID will bring to bear in both the Regional Core Project and in the National Restructuring Programs is the expertise of the U.S. private sector in the telecommunications industry. U.S. suppliers are world-class competitors in most sub-sectors of the telecommunications services and products industry. This is particularly true in the high-tech, high-end, more lucrative areas such as switching, and satellites and radio transmission. Many American companies have already supplied elements of the infrastructure now operating in southern Africa. But in the restructuring of the telecommunications sector which this Program intends to support, a role greater than that of a distant equipment supplier is envisioned. By including representatives of U.S. telecommunications services companies and consulting firms in the various region-wide activities which the Regional Core Project will sponsor, it is intended to encourage a broader and more hands-on involvement of the U.S. private sector in all aspects of the telecommunications restructuring: policy formulation, regulatory revision, training, operational investments, and long-term management support. Continuing the involvement of telecommunications consulting and training expertise will not be difficult as long as funds are available; ensuring that the best American expertise is available to provide ongoing support will be the task of the Project staff.

It is the next two aspects of involvement -- mobilization of U.S. firms to invest in operating companies and to provide long-term management support -- which will be more challenging. These imply the establishment of long-term business relationships at the national level. The words of wisdom from Mr. Prior, the American investor who has established a successful partnership in Guyana, might well be taken as guidance by the design teams in determining

whether the climate for U.S. investment is "right" and/or what can be done to make it so.

Fortunately, many of the factors cited by Mr. Prior are already being addressed by USAID Missions through the bilateral assistance programs. The USAID Administrator's heightened emphasis on the importance of "democratic governance" -- and the variety of efforts which Missions are supporting to achieve this objective -- could not be more apropos. More may need to be done, but the prospects of engaging the U.S. private telecommunications industry in the role of investors as well as consultants look more promising now than they have in the last decade.

VI. The Project Description

A. Outputs

The outputs of the Regional Core Project will be:

1. An **expanded, applicable knowledge base** widely shared by both public and private individuals and organizations concerned with economic growth in general and telecommunications in particular;

2. A **reframed policy and regulatory environment** in several countries in the region;

3. Restructured national **telecommunications systems better meeting the needs of users** in conjunction with country level non project assistance programs; and

4. Greater **private investment**, leading to effective private sector control of the telecommunications sector.

The expected levels of achievement for each of these outputs are discussed in Section IX, on Monitoring and Evaluation.

Policy Determination 20 ("PD-20") was issued during the course of project design. PD-20 contains guidelines to assure USAID programs do not result in the loss of jobs in the United States. Because of the immediacy of this ruling, the ECPR held on February 2, 1994 to review the draft Project Paper suggested that an analysis of the RTR project activities, using the PD-20 guidelines, be contained in the body of the Project Paper. In addition, Annex Q contains comments by the RLA on PD-20. This analysis follows.

Analysis of PD-20 Issues

Test Number 1 -- Is the project, or are components or activities under the project, directed at promoting either foreign or local investment in the recipient country?

Yes. Output four explicitly is intended to increase foreign and local investment in telecommunications in the recipient countries.

Test Number 2 -- Could the project reasonably be foreseen to involve the relocation of any U.S. business that would result in a reduction in the number of employees of the business in the United States?

No. There will be no relocation of any U.S. businesses in Southern Africa. In fact, U.S. investments in the region in this sector will increase U.S. jobs. This is explained below.

RTR Program activities will help U.S. telecommunications service providers evaluate investment opportunities in southern Africa. If they find these opportunities attractive, and an investment results, then U.S. jobs will increase, not decrease, because they will exploiting new markets. The U.S. market for telecommunications services cannot be served in any significant fashion from southern Africa. Therefore, relocation of enterprises will not occur. No U.S. telecommunications service provider will close down or downsize their U.S. operations because of an investment in southern Africa.

U.S. manufacturers of telecommunications equipment will benefit from RTR funded activities in three ways; (1) they will have better intelligence about new market opportunities, (2) a far more level playing field in which to compete, and (3) access to limited amounts of program financing from the national restructuring program portion of the RTR program. The result will be increased sales of U.S. equipment and more U.S. jobs.

The RTR program activities will not encourage or support U.S. manufacturers of equipment to invest in manufacturing in southern Africa. The RTR program could provide support to U.S. equipment manufacturers that are interested in investing in service provision in the region. The result of these investments, would be directly creating jobs in the U.S., as explained above. This is to ensure complete compliance with the letter and spirit of PD-20.

It is not wholly inconceivable that a U.S. manufacturer of telecommunications could make an investment in manufacturing in the region that could reduce jobs in the United States. However, this type of investment is not reasonably feasible, because it does not make good business sense for a U.S. firm to invest in telecommunications equipment manufacturing in southern Africa, at least in the high technology end of the business where U.S. industry is most competitive. Southern Africa is not an intelligent choice for high tech manufacturing operations at present. Investments in lower tech manufacturing -- such as copper wire production -- could be sensible, but would be made solely to enter previously unexploited local or regional market, and therefore would not likely affect U.S. employment levels.

In short, the RTR project is most unlikely to encourage U.S. industries to shift U.S. jobs to southern Africa. The result in not "reasonably foreseeable," thus not in violation of PD-20. To the contrary, the Program should stimulate U.S. investment and encourage "opportunities for United States high-technology firms... in supporting capital projects." Aid, Trade and Competitiveness Act of 1992.

B. Achieving the Outputs

For each of the Project Outputs listed above, there will be a different mix of activities. To help focus these activities, an "operational objective" has been articulated for each of the outputs. The operational objectives convey a little more of the "how" the output will be achieved.

OBJECTIVE ONE: Strengthening the capacity to develop and manage telecommunications networks in southern Africa

"Strengthening" in the context of the RTR Project is identified with increases in the knowledge and skills of the people and organizations whose actions affect the provision of telecommunications services.[41] This will be done in two ways.

> First, the Project will strengthen the capabilities and capacities of SATCC, by providing a senior telecommunications policy expert, and improving and expanding the SATCC database on telecommunications.
>
> Second, the Project will provide funding for workshops, seminars, conferences; study tours and internships; individual or group consultations; and formalized training courses.

These are described in more detail below.

1. Strengthen SATCC's Capacity

The Southern African Transportation and Communication Commission (SATCC) is the SADC Coordinating unit for activities in the relevant sector.

Why SATCC?

Four regional bodies could have conceivably been selected to provide the types of coordination and leadership needed at the regional. These four bodies are SATCC,the Southern African Telecommunications Association (SATA), the Preferential Trade Area Transport and Telecommunications Unit (PTA-TTU), and the Africa Regional Telecommunications Conference (ARTC); they are described in some detail in Annex I, Institutional Analysis.

SATCC was chosen over the other three regional organizations for the following reasons:

[41] This includes, for example, people in Ministries of Finance who have an interest in telecommunications revenues but do not play a day-to-day management role as well as people in the Ministries of Commerce and Trade who should understand the impact that telecommunications services are having (or not having) on business enterprises.

- SATCC has shown the strongest interest in the goals and objectives of RTR and in cooperation with USAID.

- SATCC has a relatively strong, full time secretariat: PTA-TTU secretariat is much smaller and weaker; SATA and ARTC have no permanent offices.

- USAID has and will continue to make investments in strengthening SATCC that could be leveraged by RTR.

- The geographical coverage of SATCC precisely tracks the coverage under the RTR project while ARTC and PTA-TTU cover all of Eastern Africa as well. Although the PTA-TTU is prepared to operate sub-regionally, it adds a further level of complication.

Policy Specialist. In part because of its traditional emphasis on obtaining donor finance for infrastructure development, rather than sector reform, the SATCC Telecommunications Division has not employed a telecommunications policy specialist. Because SATCC is now stressing the importance of shifting from a focus on donor funded infrastructure finance to an emphasis on sector restructuring and private sector participation[42], such capability is badly needed.

The RTR Project, therefore, will provide funding to SATCC to retain the services of a Telecommunications Policy Specialist for a period of up to 4 years. After this initial period SATCC plans to hire a Telecommunications Policy specialist as part of its permanent staff, funded from member contributions or other non-donor sources.

Database Development. To support this Specialist and the overall work of SATCC in telecommunications, the Project will provide funding to SATCC to retain the services of a regionally-hired Database Specialist for a period of up to 4 years. While the Telecommunications Division has a functioning PC-based database developed by a consultant (Swedtel) and a SATA working group, the database is incomplete, out of date, and poorly marketed to potential users (including foreign private investors who repeatedly ask for more information). Limited RTR funds will also be granted to SATCC to begin purchasing the necessary computing and communications equipment to make the system more useful and accessible.

2. Strengthen Region's Capacity -- Workshops, Seminars, Conferences, Training, Internships.

These activities will be identified and designed by SATCC and coordinated with the RTR Project staff and consultants, along with other regional bodies as appropriate. Although outside consultants will be needed as sources of expertise and as facilitators, it is expected that new

[42] See, for example, the lead article of SATCC's Quarterly Bulletin of the Southern Africa Transport and Communications Commission, July-Sept. 1993, Maputo.

insights, new skills, and new information about telecommunications options will come as well from neighbors in the region. Mozambique, for example, has moved well ahead in terms of establishing a viable, autonomous telecommunications regulatory agency. The newly created Tanzania Communications Commission, for example, may benefit tremendously from the experiences of Mozambique.[43]

a. Two Regional Workshops on Financing Telecommunications

Many countries only realize that there are fundamental problems in sector structure and regulation when they attempt to obtain finance for developing the network. SATCC staff and consultants, therefore, have suggested the topic of financing telecommunications be used as the "hook" to engage policy makers in the region to broader issues of sector reform, as well as being a vital topic in its own right.

The first "Financing Telecommunications" workshop will be held in 1994, prior to the arrival of the Institutional Contract team. It will be funded through a buy-in to USAID's Privatization and Development project managed by the PRE Bureau in USAID/W. The purpose of this three-day workshop will be to lay out the financial constraints being faced by PTCs and to explore the contribution which encouraging private sector investment could make to meeting users' needs. Two case studies of telecommunications financing in countries which have involved the private sector and which are analogous to southern Africa. One of the case studies will be done about Guyana.

Project funds will help ensure adequate participation from each country; the target number of participants will be five per country (one each from the Finance/Planning Ministry, the line Ministry responsible for telecommunications, dominant telecommunications entity, potential local investor, and potential private financier).

The second "Financing Telecommunications" workshop will developed and implemented by the Institutional Contractor in 1996. It will focus on alternative approaches to and sources of financing and should be timed to coincide with a U.S. telecommunications mission to the region. Project funds will assure participation of Southern African country delegations of three persons each. Other participants are expected to be self-financing.

b. Four Regional Workshops on *Regional* Policy, Institutional, and Technical Issues

Although the most binding constraint to intra-regional telecommunications is the inadequacy within the national networks, there are nonetheless certain important policy and technical issues that must be addressed on a regional level. Thus, the RTR project will finance four workshops on regional policy and institutional issues, over the life of the project.

[43] BMI-TechKnowledge, ibid., 1993. p. 13

The principal participants will be from the Government policy making bodies (ministries and regulatory commissions), the operators, and technical consultants.

At the time the Project Paper was written, two topics seemed of paramount importance on a regional level[44]:

-- **The Cellular/Mobile Radio** -- examination of issues, and development of consensus, on standards, roaming agreements, licensing, reciprocal agreements, etc.

-- **Transit/Connectivity/Tariffs** -- This might best be covered in two meetings. The first one could provide the basis for developing policy on the new supra-regional transmission sources such as LEOs, fiber optic cables, non-Intelsat satellite systems. The second, in year three (1997), could contribute to developing regional tariff arrangements which will maximize use of regional networks for transit.

Funding will be provided for workshop preparation, logistics and facilitation, travel and per diem for between 15 and 20 participants per workshop from the region, plus travel and per diem for outside resource personnel.

c. Six Regional Workshops on Policy and Institutional Issues of Regional Interest

Up to six regional workshops on topics of vital concern to organizations (public or private) in at least three countries in the region. These organizations will include policy makers, regulators, operators, and users of telecommunications services and infrastructure.

The intent is to stimulate cross-fertilization of ideas within the region, and a cost-effective forum to provide new information from outside expert consultants. These workshops will be developed by SATCC with support from the Institutional Contractor team, USAID, and other regional bodies.

SATCC and other relevant institutions in the region will propose a list of topics based on the needs of member states. There will be consultation with operating entities, national governments, and private sector bodies in developing this list. The following list is illustrative only.

-- **User Groups.** User group formation, fund-raising, government relations. Resource personnel will be provided from national and regional user groups in both developed and developing countries.

-- **Rural Service.** Techniques of extending rural service: incentives and obligations; the

[44]The exact topics and timing of these workshops will be developed by the Institutional Contractor, in consultation with SATCC and the USAID Southern Africa Regional Mission.

latest technological solutions.

-- **Restructuring/Regulatory Working Groups.** Share experiences and problem solving techniques in restructuring the telecommunications sector: licensing private operators; tariff setting methodologies and experiences; allocation of the frequency spectrum in a competitive environment.

-- **Technology and Supplier Choice.** Bring objective experts to the region to provide experiences and analytical methodologies to assess new technologies, supplier offerings.[45]

-- **Human Resource Development.** Restructuring the regional and national training/education facilities to serve a restructured telecommunications sector, both public and private, operating in a competitive environment. Preparation will include in-depth analyses of the regional facilities and the key national facilities (that could be utilized regionally). These meetings will not be limited to telecommunications-dedicated training facilities, but to all who train telecommunications operators, users, and regulators.

-- **Boards of Directors of Telecommunications Entities.** Although the board of directors have the potential to influence the pace and nature of restructuring or privatization, many telecommunication entity board members are ill prepared for the task. Resource personnel will include board directors from telecomms entities that have recently undertaken significant restructuring, or that operate in competitive, regulated environments.

Funding will be provided for workshop preparation, logistics and facilitation, travel and per diem for at least one participant per country, per workshop from the region, plus travel and per diem for outside resource personnel.

3. Resources Required for Objective One

Table 3 presents a summary of the personnel and other inputs which will be necessary to accomplish the activities associated with the production of an expanded, applicable, knowledge base widely shared by all participants in the regional telecommunications network. Overall, these activities will absorb a little over $3 million or approximately 21 percent of the Project resources.

[45] Objective in the sense that the specialist has no beneficial ties to a supplier of the service or product.

Table 3.

Objective One -- Summary of Estimated Resources Required

Activities	Total Staffing, Other Support	Estimated Cost in U.S. $ Thousands
Strengthen SATCC capacity	Policy Specialist -- 3 p.y. Database Specialist -- 4 p.y. Computer/Communication Equip.	1,047
Two Workshops on Financing Telecommunications	25 external resource people Logistics participant travel & per diem	635
Up to Four Regional Telecommunications Policy/Institutional Workshops	8 external resource people Logistics participant travel & per diem	565
Up to Six Workshops on Topics of Regional Interest	Logistics 12 external resource people participant travel & per diem	935
		3,182

OBJECTIVE TWO: **Solving specific problems of policy, regulations, and institutions in non-core countries.**

The kinds of Project services that are likely to be involved in accomplishing Objective Two include:

- stakeholder analyses;
- focus group discussions;
- policy analyses and development;
- assistance in drafting laws and regulations; and
- support for dissemination of revised regulations.

The decisions as to which requests will be responded to in the first year of the Project will be made by USAID/Zimbabwe with technical input from the RTR Program Manager, under the guidance of the Southern Africa Regional USAID Mission until the Institutional Contractor is on board. Various contracting mechanisms (IQCs, purchase orders, buy-ins) will be used to acquire the technical expertise necessary. Four criteria will be applied:

- How well the request meets (or could meet) the goal and purpose of the RTR Program;

- The financial need of the country;
- The possibilities for seeking other donor financing; and
- Degree of complementarity with USAID regional and country development strategies.

Once on board, the Institutional Contractor will be responsible for prioritizing requests for action, using the same criteria. An overall budget level will be set each year as part of the annual work plan.

Some of the requests which have been made to date that might merit such assistance:

Angola: Development of a telecommunications sector policy statement (years 4,5)

Malawi: Development of a telecommunications sector policy statement (years 2 - 4, intermittently)

Mozambique: Privatization Plan and Implementation Support, (12 person-months, years 4, 5)

Namibia: Developing and strengthening the regulatory entity (6 person-months, years 2, 3)

South Africa: Support for the Center for Development of Information and Telecommunications Policy (CDITP), to provide intellectual guidance for the development of information and telecommunications policy in southern Africa.

Resources Required for Objective Two:

A total amount of $450,000, or about 5 percent of the total Project resources will be allocated for responses to specific requests for technical assistance by national governments or private institutions.

OBJECTIVE THREE: Lay the groundwork for well-defined, appropriately-sequenced national telecommunications systems restructuring programs

As already illustrated in Section V above, the Project will initially provide assistance to Zambia and Tanzania. But to the extent of resources and interest, the Project will work with at least one more government ready to consider restructuring options in the interests of better customer service. Zimbabwe appears at present to be the most likely candidate, although Malawi or Mozambique are also possibilities.

The services to be provided by the Project will include: advisory services (on a long-term basis for start-up purposes), technical analyses, training support, financial and audit services, assistance in drafting regulations, assistance in establishing private sector contracting and

licensing procedures.

On an indicative basis, Project support for each country will include:

Tanzania

- Long-term technical assistance

  -- One Country Team Leader to be based in Dar Es Salaam. Approximately 2 person-years, supervised by the Chief of Party;

  The Country Team Leader will: supervise Core Project technical assistance activities carried out in Tanzania; coordinate the PAAD development process; and supervise National Restructuring Program implementation.

- Short-term technical assistance tasks

  -- ***Telecommunications Policy and Institutional Development, 1994 - 1996***

  Special emphasis will be placed on analysis and implementation of those legislative and institutional changes necessary for development and implementation of the National Restructuring Program PAAD. Approximately 9 person-months of specialist consultants' time.

  -- ***Tanzania Telecommunications Company Privatization, 1996 - 1999***

  Specialized consulting services are likely to be need to develop and implement a privatization plan. Approximately 6 person-months.

Zambia

- Long-term technical assistance

  -- One Country Team Leader to be based in Lusaka, supervised by the Chief of Party. Approximately 2 person-years

  The Country Team Leader will: supervise Core Project technical assistance activities carried out in Zambia; coordinate the PAAD development process; and supervise National Restructuring Program implementation.

- Short-term technical assistance tasks

  -- ***Telecommunications Policy and Institutional Development, 1994 - 1996***

Special emphasis will be placed on analysis and implementation of those legislative and institutional changes necessary for development and implementation of the National Restructuring Program PAAD. Approximately 8 person-months.

-- *Telecommunications Entity Restructuring, 1994 - 1997*

This will focus on telecommunications operations, although if needed could also include assistance targeted at entities which will not become part of the telecommunications operating company, e.g., the PTC training college, the Post Office. Approximately 4 person-months.

-- *Design and implementation of a National Telecommunications Forum, 1994*

A National Telecommunications Forum will educate all participants on the objectives and parameters of the draft telecommunications sector policy and get their input, thus speeding the development and implementation of the best possible legislation. Participants will include all important actors in the sector, including the private sector, unions, and financial institutions. Approximately 3 person-months of specialists from external sources.

-- *Assistance in Awarding a Mobile Cellular Telephone License, 1994*

Technical assistance can help the Government in analyzing licensing needs, managing the bidding process, evaluating and negotiating the final proposals. Approximately 5 person-months of specialists in cellular marketing, legal, and transactions specialists.

-- *Tariff Rebalancing, 1995 - 1996*

Zambia's PTC tariffs have led to losses for the company and distorted patterns of use. Cost-based tariff rebalancing is necessary to send appropriate market signals to consumers and to enable the telecommunications entity to earn appropriate returns on investment. In addition, tariff policy must take into consideration the goals of universal/rural service and interconnectivity with other service providers and competitors. Technical assistance will help to develop the analytical methodology and train local analysts. Approximately 5 person-months.

Third Country

A third country will be selected for participation in a National Restructuring Program based on certain criteria which assess its readiness to undertake the policy, regulatory, and operational reforms required for program success. An initial listing of these criteria is set forth below.

Readiness for an NPA Restructuring Program

Indicators of readiness for a national NPA restructuring program include the following. It should be noted that this is not a comprehensive or exclusive list:

- an explicitly stated policy to allow the private sector the leading role in all aspects of the economy;
- request for a Telecommunications Restructuring sector loan;
- a start at separating posts and telecommunications;
- separating regulatory and operating responsibilities;
- a serious, commercially-oriented rebalance of tariff structures and rate-setting mechanisms; and,
- positive feedback from assistance in legal or regulatory revisions affecting the sector.

Once these initial criteria have been met, it is anticipated that the project will provide short term resources to assist in the first stage of restructuring program development and analysis. An illustrative list of the types of activities which could be included follows:

♦ Short-term technical assistance tasks

-- ***Design and implementation of a National Telecommunications Forum*, 1995**

A National Telecommunication Forum will expose all important stakeholders to the principles of a modern telecommunications sector, worldwide experience in telecommunications reform, and the situation in the selected country to date. The Forum will also provide valuable input into other donor funded sector policy analysis. Participants will be all important actors in the sector, including the private sector, unions, and financial institutions. Approximately 4 person-months of specialists from external sources.

-- ***Telecommunications Policy and Institutional Development, 1995-1997***

It is anticipated that activities would complement other donor funded comprehensive analytical work of the telecommunications sector, including: separation of postal and telecomms services, development of a telecommunications sector policy, development of a regulatory framework for the sector, and a tariff study. The topics which technical assistance or training are likely to follow up on which could be supported by the project include: legislative analysis and development; regulatory entity development; developing

and implementing cellular, VSAT and other value-added service licensing and interconnect arrangements. Approximately 3 person-months.

-- ***Telecommunications Entity Restructuring, 1995-1996***

Other donor funded analyses are likely to provide a blueprint for restructuring of the PTC. The RTR Project will facilitate preparation and implementation of the process, including technical assistance for some of the PTC entities which may not be part of the telecommunications service provider, e.g., such as training facilities, postal services, or postal savings bank. Topics covered in restructuring technical assistance might be: organizing for a competitive, market oriented environment; identifying outsourcing possibilities; successful analysis, negotiation, and implementation of joint ventures. Approximately 3 person-months.

Resources Required for Objective Three:

Overall, initial assistance for the development of the National Telecommunications Restructuring Programs and backstopping assistance after than will require close to $ 3.3 million in financing, or approximately 22 percent of the total resources available to the Project.

Table 4.

Objective Three -- Summary of Illustrative Inputs for Supporting National Program Development

ACTIVITIES	RESOURCES AND PERSONNEL NEEDED	ESTIMATED COST (U.S. $ thousand)
Tanzania	Long-term technical assistance: 2 person-years	900
	Short-term technical assistance: 15 person-months	450
Zambia	Long-term technical assistance: 2 person-years	900
	Short-term technical assistance: 25 person-months	750

Third Country	Long-term technical assistance: 0 person-years	0
	Short-term technical assistance: 10 person-months	300
		3,300

OBJECTIVE FOUR: **Link private U.S. telecommunications service and equipment providers into the regional network in an effort to generate increased levels of investment and efficiency into regional and national telecommunications systems**

This Project objective will require the Institutional Contractor to have a U.S.-based team to work with the private telecommunications sector in the U.S. Implementation of this objective will involve:

- focussed interactions with the U.S. trade associations dealing with various segments of the telecommunications industry;
- preparation and placement of materials about the southern Africa region in trade publications;
- support for investment conferences or other support activities in conjunction to be held in conjunction with investment missions or reverse investment missions sponsored by other USG agencies and private entities;
- arranging internships for southern Africans with appropriate U.S. organizations; and
- facilitation of U.S. participation in regional seminars, workshops, conferences, and training sessions.

During the course of project design there has been some discussion of the ability of U.S. manufacturers to compete in overseas markets, when non-U.S. standards have been adopted. It was suggested that technical assistance be made available to the SADC region countries to develop specifications and standards to ensure that U.S. manufacturers are able to compete on an equal basis with suppliers from other countries.

This option was rejected. The primary reason is that due to the internationalization of the telecommunications industry, U.S. manufacturers have the capability to produce equipment the either European, Japanese, or American standards. Motorola, for example, has installed the cellular telephone equipment in Norway, meeting the new European digital GSM standard. In

fact, all serious international competitors can and do produce equipment that can meet all international standards.

During intensive review, it was suggested that an overlap existed between some of the types of RTR activities proposed, and current activities of other USG agencies such as the Trade Development Agency (TDA) and the Overseas Private Investment Corporation (OPIC). This issue has been addressed in two fashions. First, recognizing the different mandates of USAID *vis a vis* these other agencies, certain RTR activities have been dropped or substantially modified to ensure that there is not an overlap or duplication.[46] Second, a significant part of the time of the proposed AID/W Telecommunications Officer will be spent in liaison with USG agencies such as OPIC and TDA, to ensure that their efforts in the region are leveraging the RTR program resources and vice versa.

Specific Activities for Objective Four:

The Institutional Contractor will establish a U.S.-based team (with appropriate administrative support) to implement this Project component. The Team Leader, will be responsible for personal liaison with the telecommunications community in the U.S.; a Research/Communications specialist will carry out the data collection, analysis, and dissemination efforts. As was noted above, information (or the lack of it) has been identified time and time again to be a key constraint to increased U.S. private sector involvement in the region. As per the earlier discussion, only U.S. firms interested in telecommunications services investments in southern Africa will be supported.

The institutional contract and specific instructions to the U.S. based contract team will stress the distinctions between promoting U.S. firms' relocation or expansion into southern Africa (prohibited) and promoting investment, sales, consultancies, and service provision in the region. The output of the U.S. staff will be monitored to ensure that its communications are appropriate.

The U.S. based staff will be responsible, on an ongoing basis, for developing and maintaining activities that will achieve Objective Four. Two ongoing activities which are likely to be included are:

- **Data base development and dissemination**

  Key statistics on the southern African region from existing sources (especially the SATCC data base should be accessible on-line (e.g., through Internet) to be downloaded without human intervention from any requestor through services such as Compuserve.

[46]The primary objective of the RTR project is economic development in the southern African region; enhancing U.S. commercial interests are an important but ancillary benefit. The primary objectives of TDA or OPIC programs, in contrast, is to benefit U.S. businesses, with economic development an important but ancillary benefit.

- **Library and information clearinghouse development and dissemination**

  A southern African telecommunications library with relevant publications that will be maintained for public use in conjunction with the data base. This library will include: carefully selected reference material on general economic and political trends in the region; Program/Project reports and documentation that do not contain proprietary business or government information (assumed not to be unless otherwise specified); and contacts for obtaining further information (e.g., trade publications, specialized consultants, donor/USG officials, PTC officials).

  The Team will proactively offer information services to USG or trade associations that may be interested in information on the region (e.g., to the Trade and Development Agency (TDA) if it is planning a reverse trade mission to the U.S.).

  The U.S.-based Institutional Contractor team will also be expected to respond to ad hoc requests for information on telecommunications in the region for information through E-mail, fax, letter, phone enquiry, etc. that may come from the U.S. private sector, USG agencies, overseas entrepreneurs, PTCs, and government ministries. If the Team cannot respond through library materials, then the enquirer will be provided with a list of contacts. The Team will track all requests; i.e., who requested what information when.

Other intermittent activities which are likely to be included are:

- *A bi-monthly newsletter: The Southern Africa Telecommunications Newsletter*

  A "Kiplinger-style" newsletter, each issue will have:

  -- updates on issues relevant to telecommunications in all countries: PTT and ministry actions, private sector investments and deals, tender information, donor funding decisions, ITU/SATCC/PTA activities, etc.

  -- an in-depth feature on one (or more) of the countries in the region, which will include: general economic and political trends; infrastructure/services/traffic statistics; investment climate readout; and details on the key personalities in the PTT, the relevant Ministries, and current/potential private sector actors. Most information should come from available sources.

  -- an in-depth feature on a specific telecommunications issue tied to the region (cellular telephony, fiber optics, regulation/policy, etc.).

  A special issue will be produced every year to publicize and disseminate results and impacts of the Regional Telecommunications Restructuring Program interventions and outline the types of assistance on offer.

- *Southern Africa Market Research Studies, 1995 - 1996*

  Three of these studies should be produced, following the basic outline of the never-completed U.S. Department of Commerce African Telecommunications Marketing Guide market research studies. The first issue will be based on existing data from the Department of Commerce, the Teleconsult study, BMI-TechKnowledge reports, and other sources. Depending on the availability of data, later studies may require field work.

- *Development of Tailored Articles, 1995 - 1998*

  Based on the market research and contacts built up with trade publications, articles will be developed to meet information needs of high priority potential investors, tailored in substance and form to be published in the general business press (Wall Street Journal, e.g.); trade publications; and or for presentations at relevant conferences (AFCOM, Cellular Telecommunications Association (CTA) annual general meeting, etc).

- *Private Sector Internships, 1995 - 1998*

  The regionally based Institutional Contract staff will link private sector operators/manufacturers in the southern African region to U.S. telecommunications corporations via working internships. The U.S. firms will organize and finance all costs once the intern is on site. Under exceptional circumstances, interns from public sector firms could be included if the public sector firm is seriously considering a joint venture, a strategic joint venture partners, or similar arrangement.

- *Quick Response Fund 1995 - 1998*

  The U.S.-based Project team will propose, based on involvement in other activities, undertaking specialized research studies, conferences, or other interventions that will support long term participation of U.S. firms in the region. These might include: financial information on potential customers/joint venture partners in the region; focused market research on needs for specific telecommunications services (e.g. data transmission) in a country; development of a telecommunications directory for the region (names and contact information for key players in the sector); case studies of successful deals in southern Africa and what can be learned. Depending on the level of interest, staff workload, and availability of funding, the Regional Program Manager will approve or concur in the use of the Quick Response Fund for each activity.

b. Summary of Inputs Needed to Implement the Activities

While the ongoing activities noted at the outset should be carried out by the U.S. based staff of the Institutional Contractor, it will be necessary to employ short-term consultants to accomplish one or more of the specific items on the action agenda. Overall, it is anticipated that developing adequate links with the U.S. private telecommunications sector will require at least 8

professional person-years of effort and funding in the range of $ 2.5 million or approximately 16 percent of total project funding. Table 5 summarizes the indicative level of inputs for each activity.

Table 5.
Objective Four -- Indicative Level of Effort/Financing

ONGOING AND SPECIFIC ACTIONS	Level of Effort and/or Frequency of Production	Estimated Cost U.S. $ 000
L.T.T.A. Administration	Chief of Party (half time, 2 p.y.) Communications Specialist (4 p.y)	400 400
Investment Promotion	[No Direct Activities]	0
Information Dissemination	Publications, Conferences	1,340
Internships and Research	Interns (14), Research Reports	300
		2,440

C. Personnel and Financing to Accomplish Project Activities

This is a labor-intensive Project. Funding for technical staff and consultants will claim the lion's share of the $15 million budget. Virtually all other funding will be required to ensure that the ambitious schedule of networking, training, information-gathering, and other face-to-face interactions can actually take place. See the Project budget for details.

Three centers of leadership for Project activities are envisioned:

- The Institutional Contractor's offices, located in southern Africa and the United States[47].
- USAID offices in the field and in Washington.
- The SATCC office in Maputo.

As the nature of the activities are, by and large, facilitative and service-oriented in nature, it is likely that for any particular action, "leadership" will be taken by or allocated to a number of other people or organizations in the region and the United States. Specific responsibilities of the implementing partners are described in Section VIII.

[47] The location of this office will be in the same city as that of USAID's Regional Office. At the present time, this Regional Office is in Harare.

D. Mobilization of Others' Resources

The Institutional Contractor staff will be charged with the identification of other sources of funding to provide services above and beyond those which can be accomplished within the Project budget but which are entirely consistent with, and supportive of, the objectives of the Project. The Institutional Contractor staff will notify the USAID project manager of these potential sources of funding and, with USAID approval, will formally assist the relevant individuals and organizations in tapping these funds.

Some of the key institutions that are likely to provide funds include the World Bank group, the African Development Bank group, the Commonwealth Development Corporation, sister USG agencies, and the U.S. private sector.

These mobilization activities will involve preparation of scopes of work, identification of appropriate consultants, consultation with other donors, and work with the bilateral Missions in the region. Where the resources in question are private, a prior assessment of the extent to which assistance in programming these funds would be inappropriate for USAID and/or compromise the integrity or neutrality of the Project staff vis a vis any particular private interest, the Chief of Party of the Institutional Contractor will consult with USAID (via the RLA) and SATCC.

During the course of project design, concerns were raised about the potential for transgression of the OECD DAC Helsinki accords on tied overseas development assistance. Specifically, a situation could arise where a U.S. firm received both Ex-Im credits and RTR project assistance; and this combination might violate the Helsinki accords.

While this is of concern to the RTR program; more importantly, it is a much broader issue which cuts across all sectors, and all forms of USAID (or OPIC, or TDA) assistance. The mission has requested GC to probe the matter further and develop guidance on firm level technical assistance and the Helsinki accords.

E. Coordination with Regional Organizations, Public and Private

As already noted, there are a number of telecommunications organizations working in the southern Africa region. The RTR program will work closely with one of these organizations, SATCC; and indirectly with them all. Descriptions of the more important of the rest are found in Annex I, Institutional Analysis.

VII. Financial Plan

The financial plans by activity have already been presented above. Tables 6 and 7 summarizes the financial planning by year and by contract/grant mechanism. Table 8 provides detail on annual projected costs of carrying out project activities and Table 9 is a projection of project expenditures against planned obligations.

Table 6

Summary of Project Financial Plan
U.S. $000s

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Objective One "Capacity Strengthening"	462	820	1,000	518	385	3,185
Objective Two "Regulatory & Policy Problem Solving	0	180	150	120	0	450
Objective Three "National Restructuring Programs"	300	1,590	1,170	240	0	3,300
Objective Four "Linking U.S. Firms"	0	670	725	635	410	2,440
Program Management and Core Technical Assistance	125	1,295	1,280	1,245	1,230	5,175
Monitoring and Evaluation	50	75	100	75	50	350
Audit			50		50	100
TOTAL PROJECT COSTS	937	4,630	4,475	2,833	2,125	15,000

REGIONAL TELECOMMUNICATIONS RESTRUCTURING
SUMMARY FINANCIAL PLAN ($000s) TABLE 7

SUMMARY FINANCIAL PLAN BY OBJECTIVE

OBJECTIVE ONE: STRENGTHENING THE CAPACITY TO DEVELOP AND MANAGE TELECOMMUNICATIONS	
STRENGTHEN SATCC CAPACITY	
TWO WORKSHOPS ON FINANCING TELECOMMUNICATIONS	1,050
1994 Workshop Financing Telecomms	635
1996 Workshop Financing Telecoms	405
UP TO FOUR WORKSHOPS ON REGIONAL TELECOMMUNICATIONS POLICY ISSUES	230
UP TO SIX WORKSHOPS ON TOPICS OF REG'L INTEREST	565
TOTAL COSTS FOR OBJECTIVE ONE:	935
	3,185
OBJECTIVE TWO: REGULATORY AND POLICY PROBLEM SOLVING	
RESPONSE TO REQUESTS FROM NON-CORE COUNTRIES	
SHORT TERM TECHNICAL ASSISTANCE	
TOTAL COSTS FOR OBJECTIVE TWO	450
	450
OBJECTIVE THREE: SUPPORT FOR NATIONAL RESTRUCTURING PROGRAMS	
TANZANIA	
ZAMBIA	1,350
THIRD COUNTRY	1,650
TOTAL COSTS FOR OBJECTIVE THREE:	300
	3,300
OBJECTIVE FOUR: U.S./REGIONAL LINKAGES	2,440
CORE TECHNICAL ASSISTANCE	4,050
PROGRAM MANAGEMENT	1,125
MONITORING AND EVALUATION	350
AUDIT	100
TOTAL	15,000

REGIONAL TELECOMMUNICATIONS RESTRUCTURING PROJECT BUDGET - TABLE 8
PROJECT COSTS BY OBJECTIVE BY YEAR

All in '$000 U.S.

Activities	Personnel and other resources	Unit cost	Year 1 No. Units	Year 1 Cost	Year 2 No. Units	Year 2 Cost	Year 3 No. Units	Year 3 Cost	Year 4 No. Units	Year 4 Cost	Year 5 No. Units	Year 5 Cost	UN ITS	ESTIMATED TOTAL COST
OBJECTIVE ONE: STRENGTHENING THE CAPACITY TO DEVELOP AND MANAGE TELECOMMUNICATIONS NETWORKS														
STRENGTHEN SATCC CAPACITY				55		355		255		255		130		1,050
1 SATCC	Telecomms Policy Specialist (py)	175	0.2	35	1.0	175	1.0	175	1.0	175	0.5	90	3.7	650
1 SATCC	Database Specialist (py)	80	0.2	20	1.0	80	1.0	80	1.0	80	0.5	40	3.7	300
1 SATCC	Database Equipment and Training					100								100
TWO WORKSHOPS ON FINANCING TELECOMMUNICATIONS														
	1994 Workshop Financing Telecomms			405										635
1 BUY-IN	Workshop preparation (pm)	30	8.0	240										405
1 BUY-IN	Workshop participants (per cap)	2	50.0	75									8.0	240
1 BUY-IN	Workshop Facilities, supplies	15	1.0	15									50.0	75
1 BUY-IN	Exter'l resource people (travel/per diem)	5	15.0	75									1.0	15
													15.0	75
	1996 Workshop Financing Telecoms							230						
1 IC	Workshop preparation STTA (pm)	30					4.0	120					45.0	230
1 IC	Workshop participants (per cap)	2					30.0	45					4.0	120
1 IC	Exter'l resource people (travel/per diem)	5					10.0	50					30.0	45
1 IC	Workshop facilities, supplies	15					1.0	15					10.0	50
													1.0	15
UP TO FOUR WORKSHOPS ON REGIONAL TELECOMMUNICATIONS POLICY ISSUES														
	TOTAL					145		145		138		138		565
1 IC	Workshop Facilities, supplies	15			1.0	15	1.0	15	1.0	15	1.0	15	4.0	60
1 IC	Workshop preparation (pm)	30			3.0	90	3.0	90	3.0	90	3.0	90	12.0	360
1 IC	Workshop participants (per cap)	2			20.0	30	20.0	30	15.0	23	15.0	23	70.0	105
1 IC	Exter'l resource people (travel/per diem)	5			2.0	10	2.0	10	2.0	10	2.0	10	8.0	40
UP TO SIX WORKSHOPS ON TOPICS OF REG'L INTEREST						290		290		145		210		935
1 IC	Workshop preparartion (pm)	30			6.0	180	6.0	180	3.0	90	3.0	90		540
1 IC	Workshop Facilities, supplies	15			2.0	30	2.0	30	1.0	15	1.0	30		105
1 IC	Workshop participants (per cap)	2			40.0	60	40.0	60	20.0	30	20.0	30		180
1 IC	Exter'l resource people (travel and per di	5			4.0	20	4.0	20	2.0	10	2.0	60		110
TOTAL COSTS FOR OBJECTIVE ONE:				460		790		920		538		478		3,185
OBJECTIVE TWO: REGULATORY AND POLICY PROBLEM SOLVING														
RESPONSE TO REQUESTS FROM NON-CORE COUNTRIES														
2 IC STTA	Problem-solving consultants (pm)	30			6.0	180	5.0	150	4.0	120	0.0	0		450
TOTAL COSTS FOR OBJECTIVE TWO						180		150		120		0		450
OBJECTIVE THREE: LAY THE GROUNDWORK FOR WELL-DEFINED, APPROPRIATELY-SEQUENCED NATIONAL TELECOMMUNICATIONS RESTRUCTURING PROGRAM														
TANZANIA				0		480		720		150		0		1,350
3A IC	Prog/Proj Manager (py)	450	0.0	0	0.8	360	1.0	450	0.2	90			2.0	900
3A IC	Telcom Pol/Inst Development (pm)	30	0.0	0	4.0	120	5.0	150					9.0	270
3A IC	Telcom Entity Privatization (pm)	30					4.0	120	2.0	60	0.0	0	6.0	180
ZAMBIA				300		810		450		90		0		1,650
3b IC	Prog/Proj Manager (py)	450	0.0	0	0.8	360	1.0	450	0.2	90	0.0	0	2.0	900
3b BI	National Telcoms Forum (pm)	30	3.0	90		0	0.0	0	0.0	0	0.0	0	3.0	90
3b BI	Cellular Licens Dev (pm)	30	2.0	60	3.0	90	0.0	0	0.0	0	0.0	0	5.0	150
3b BI	Telcom Pol/Inst Development (pm)	30	3.0	90	5.0	150	0.0	0	0.0	0	0.0	0	8.0	240
3b BI	Telcom Entity Restructuring (pm)	30	2.0	60	2.0	60	0.0	0	0.0	0	0.0	0	4.0	120
3b IC	Tariff Rebalancing (pm)	30	0.0	0	5.0	150	0.0	0	0.0	0	0.0	0	5.0	150

REGIONAL TELECOMMUNICATIONS RESTRUCTURING PROJECT BUDGET – TABLE 8
PROJECT COSTS BY OBJECTIVE BY YEAR

All in '$000 U.S.

Activities	Personnel and other resources	Unit cost	Year 1 No. Units	Year 1 Cost	Year 2 No. Units	Year 2 Cost	Year 3 No. Units	Year 3 Cost	Year 4 No. Units	Year 4 Cost	Year 5 No. Units	Year 5 Cost	UNITS	ESTIMATED TOTAL COST
THIRD COUNTRY (BUDGETED AS ZIMBABWE)				0		300		0		0		0		
3c IC	National Telcoms Forum (pm)	30	0.0	0	4.0	120	0.0	0	0.0	0	0.0	0	10.0	300
3c IC	Telcom Pol/Inst Development (pm)	30	0.0	0	3.0	90	0.0	0	0.0	0	0.0	0	4.0	120
3c IC	Telcom Entity Restructuring (pm)	30	0.0	0	3.0	90	0.0	0	0.0	0	0.0	0	3.0	90
													3.0	90
TOTAL COSTS FOR OBJECTIVE THREE:				300		1,590		1,170		240		0		3,300
OBJECTIVE FOUR: LINK PRIVATE U.S TELECOMS SERVICE AND EQUIPMENT PROVIDERS WITH REGL/NATIONAL ORGANIZATIONS														
4 IC	U.S. COP (py)	200		0	0.5	100	0.5	100	0.5	100	0.5	100	2.0	400
4 IC	U.S. Research/Communications Speciali	100		0	1.0	100	1.0	100	1.0	100	1.0	100	4.0	400
4 IC	U.S. Adminstrative support (py)	45		0	1.0	45	1.0	45	1.0	45	1.0	45	4.0	180
4 IC	Library and Database			0		75		75		75		75	0.0	300
4 IC	Southern Africa Telecomms Newsletter	60	0.0	0	1.0	60	1.0	60	1.0	60	1.0	60	4.0	240
4 IC	Southern Africa Market Research Studies	30		0	1.0	30	3.0	90		0	0.0	0	4.0	120
4 IC	Private sector internships (per participan	15		0	2.0	30	5.0	75	5.0	75	2.0	30	14.0	210
4 IC	Quick Response Fund: Tailored Researc	100		0	1.0	100	1.0	100	1.0	100	0.0	0	3.0	300
4 IC	Tailored media pieces	10		0	3.0	30	3.0	30	3.0	30	0.0	0	9.0	90
4 IC	Ongoing Information (print, internet)			0		100		50		50		0	0.0	200
TOTAL COSTS FOR OBJECTIVE FOUR				0		670		725		635		410		2,440
TOTAL COSTS FOR ALL OBJECTIVES				760		3,230		2,965		1,533		888		9,375
REGIONAL CORE TECHNICAL ASSISTANCE AND SUPPORT COSTS														
5 IC	Chief of Party (py)	450	0.0	0	0.8	360	1.0	450	1.0	450	1.0	450		1,710
5 IC	Deputy Chief of Party (py)	200	0.0	0	1.0	200	1.0	200	1.0	200	1.0	200		800
5 IC	Office Rental, Furnishing			0		200		120		100		100		520
5 IC	Regional Office Equipment			0		205		180		165		150		700
5 IC	Administrative Staff (py)	80	0.0	0	1.0	80	1.0	80	1.0	80	1.0	80		320
	TOTAL CORE TECHNICAL ASSISTANCE		0.0	0	2.8	1,045	3.0	1,030	3.0	995	3.0	980	0.0	4,050
PROGRAM MANAGEMENT														
5 INDIVID	Regional Program Mgr PASA or PSC (py	250	0.5	125	1.0	250	1.0	250	1.0	250	1.0	250		1,125
MONITORING AND EVALUATION				50		75		100		75		50		350
AUDITS		0		0		0		50		0		50		100
TOTAL PROJECT COSTS		0		935		4,600		4,395		2,853		2,218		15,000

REGIONAL TELECOMMUNICATIONS RESTRUCTURING – TABLE 9

'$000s

Fiscal Year	Obligation	Expenditure	Balance
1994	4,000		4,000
1995	4,000	935	7,065
1996	3,000	4,600	5,465
1997	2,000	4,395	3,070
1998	2,000	2,853	2,218
1999		2,218	0

Methods of Implementation and Financing

Regarding overall project management responsibilities, the Director of the Southern African Regional Program or its successor will authorize the project and continue to execute all actions related to the Project Authorization as defined by Delegation of Authority 551, as amended. The Director, USAID Mozambique will sign the grant with the Government of Mozambique, thereby obligating funds on behalf of the U.S. Government.

The Government of Mozambique, as SADC Sector Coordinator for Transport and Communications, will sign the grant on behalf of SATCC. Upon obligation of project funding, the Director, USAID SARP will retain responsibility for the implementation of the RTR Project. The relative roles of SATCC, host governments, the institutional contractor, bilateral USAID missions, and the USAID Southern Africa Regional Mission are outlined in the following section.

This project will be implemented using the standard operating procedures which have been established between SATCC, the Government of Mozambique and USAID to provide donor assistance to SATCC. The Project Agreement will authorize USAID to negotiate and sign USAID direct contracts for the technical services required, for project management services, and for periodic audits and evaluations. In addition, USAID will execute a separate grant with the International Telecommunications Union (ITU) to provide a long term policy advisor and a regional data base development expert to SATCC.

The Project Agreement will contain in Annex I, a detailed project description which will provide a project narrative, and an overall project budget. Annex I will describe the responsibilities of all parties under the grant and will be supplemented by a project implementation letter which will amplify specifically how the project will be administered and implemented. A key point is that the Government of Mozambique, as SADC Sector Coordinator for Transport and Communications, will act only as the official recipient of project funding. SATCC, in carrying out its SADC mandate, will be the host country home base for project activities.

Table 10

METHODS OF IMPLEMENTATION & FINANCING

Cost Element	Method of Implementation	Method of Financing	Estimated Amount
Technical Assistance	Direct Contract Institutional Contract	Direct Reimbursement	$10,378,000
			$ 2,000,000

Training/ Workshops	Buy-ins IQC Direct Contract Institutional Contract	Direct Reimbursement	
Support to SATCC	Grant to Public International Organization (ITU)	Direct Payment	$ 1,047,000
Evaluation	Direct Contract or IQC	Direct Payment	$ 350,000
NFA Audit	Direct Contract	Direct Payments	$ 100,000
Project Management	Participating Agency Service Agreement (PASA)	Direct Reimbursement	$ 1,125,000
TOTAL			**$15,000,000**

VIII. Implementation Arrangements

A. A Chronological Recap

As already noted, the Regional Mission for Southern Africa will have responsibility for the Regional Telecommunications Restructuring Project management and oversight. The Regional Mission will recruit and supervise a Project-funded U.S. Program manager to provide overall direction to and oversight of the Project on its behalf. The Regional Telecommunications Program Manager will be responsible for keeping the appropriate mission personnel informed as to the progress of the Project on an continuing basis.

In the first year of the Project, or until the Institutional Contractor is operational in the region, the Regional Telecommunications Program Manager will maintain close liaison with the SATCC telecommunications staff, the bilateral missions, and other key stakeholders in the regional telecommunications network. The Regional Program Manager will also assist in coordinating the implementation of the activities acquired through the Privatization and Development project buy-in or other mechanisms. He/she will also assist USAID/Tanzania and USAID/Zambia in the selection of the long term technical assistance team.

B. Roles and Responsibilities of Implementing Partners

1. SATCC/Government of the Republic of Mozambique

The Government of the Republic of Mozambique (GRM), as the SADC Transport and Communications Sector Coordinator, will sign the bilateral agreement. After signature of the agreement, the GRM will Delegate project implementation authorities for activities under the scope of this agreement to the Director of SATCC Technical Unit or his designee(s). Subsequently, the GRM will not play an implementation role, except to carry out its normal sector coordination responsibilities regarding donor financed SATCC projects. The Director of SATCC/TU will be the official USAID liaison and signatory on all project implementation actions falling under the scope of this Agreement, and will appoint in his absence, an alternate official(s) with the same authorities.

In addition to the responsibilities laid out above, SATCC will have two primary roles in the implementation of the Regional Telecommunications Project. It will be recipient of direct assistance with a mandate for improving information flows and development of a regional data base; it will be the coordinator and lead institution for regional dialogue, seminars, and workshops on issues related to telecommunications restructuring and investment. Specific responsibilities will include:

- **Technical and policy oversight** for activities of the project;
- **Participation on selection committee** for Institutional Contractor;
- **Provision of office space and support services and supervision** of long term technical advisors;
- **Development and dissemination** of telecommunications information data base;
- **Identification, development, and coordination** with relevant stakeholders regarding workshops and seminars.
- **Liaison with institutional contractor personnel** regarding regional policy issues and training events;
- **Coordination with USAID Southern Africa Regional Program and Program Manager** regarding administrative approval and technical oversight of grant for technical advisors;
- **Coordination** with both public and private technical personnel in the regional telecommunications sector to ensure that Project efforts are additive rather than duplicative.

2. Bilateral Governments/Operating Entities

For the purposes of the project financed activities, the responsibilities and participation roles identified below for bilateral governments are reduced. Those countries which have complementary NPA programs will require a much more active role on the part of host governments and operating entities which will be defined in individual country program approval documentation. In general bilateral governments/operating entities will be responsible for:

- **Developing or concurring in terms of reference** for short term technical assistance from the institutional contractor;
- **Identifying and nominating individuals to attend regional workshops and training** events;
- **Make available and supply relevant statistics** to SATCC for database development.
- **Identify and generate policy issues** in the telecommunications sector.

3. USAID Southern African Regional Program

The USAID Southern African Regional Program management and technical responsibilities will be executed by the Regional Mission with guidance from its Regional Telecommunications Program Manager. They will include:

- **Policy dialogue and discussion** with SATCC and PTA as well as other national and regional public and private stakeholders in the telecommunications sector;
- Substantive **supervision** of the overall Regional Telecommunications Restructuring Program as it evolves: supervision of the Institutional Contractor and monitoring of grant to ITU/SATCC; preparation of briefing materials and periodic reports; active and regular consultation with host government institutions; meetings with potential American investors or equipment suppliers; coordination with other members of the regional telecommunications network; and frequent coordination with participating bilateral Mission staff;
- Administrative **management of the institutional contract and the grant to ITU/SATCC**, including review and administrative approval and processing of vouchers under contracts and grants;
- **Reporting on program impact** to AID/W;

- **Chair periodic regional meetings** of bilateral USAID staff involved in the Program to: share information; iron out problems; lay out new directions;

- **Coordination of RTR Program concerns** with other aspects of the regional USAID program; and

- **Coverage of telecommunications issues and dialogue** in countries within the southern African region where there is no bilateral USAID presence.

4. USAID Bilateral Missions

4.1 USAID Bilateral Missions with NPA Programs

Each bilateral Mission in countries implementing the Non Project Assistance Funded National Restructuring Programs will be responsible for:

- Adequate **supervision** of project-financed technical assistance provided through buy-ins or through the Institutional Contractor.[48]

- Regular **consultations with other donors** involved in telecommunications activities on a bilateral basis, and reporting on such consultations;

- **Policy dialogue** with the relevant private sector and host government institutions;

- **Impact reporting** to the USAID Regional Office staff noted above;

- **Coordination and integration of RTR issues with other programmatic objectives and concerns** being addressed by the individual bilateral program;

- **In-country meetings** with international and local private sector operators involved in the telecommunications sector; and

- **Written semi-annual progress reports.**

4.2 Other Bilateral Missions

USAID Missions to countries that do not have a concurrent NPA program in telecommunications will have a reduced role in the implementation of the RTR Project.

[48] During the period of final review of the project paper, USAID Zambia has indicated that it may not have USDH capacity to manage or monitor the planned NPA activity. This issue will be resolved during PAAD development and finalization.

Specific responsibilities will be as follows:

- **Identify or concur** in selection of participants/attendees at regional conferences/workshops:

- **Concurrence with terms of reference** for short term technical assistance provided by Institutional Contractor.

- **Informing USAID Southern Africa Regional Program** of any issues/problems in project implementation or activities in country.

- **Informing USAID Southern Africa Regional Program** of substantive policy or operational developments in telecommunications in country.

5. Institutional Contractor

The institutional contractor (IC) will be selected through full and open competition. This contractor, in full cooperation and coordination with SATCC, will be required to provide specialists in a range of technical areas, demonstrate a capability in managing several offices in different countries simultaneously, and offer innovative approaches to policy reform and restructuring for telecommunications entities in southern Africa. The following list is not intended to be comprehensive, but rather to cover the principal roles that the institutional contractor will meet.

Principal functions of the institutional contractor will include:

- **Overall coordination and supervision** of contractor personnel located in southern Africa and in the United States;

- **Liaison** with SATCC, USAID Southern Africa Regional Program and other USAID offices regarding project implementation;

- Drafting detailed **scopes of work** for specific tasks for which short-term technical assistance is to be used and assuring that these scopes of work are carried out as anticipated;

- Identification and support of **appropriate short-term technical assistance** personnel, with preference for regional personnel if possible, to carry out the tasks defined, including eliciting feedback on short-term TA performance from the recipient entity;

- In conjunction with SATCC, **coordination** with both public and private technical personnel in the regional telecommunications sector to ensure that Project efforts are additive rather than duplicative;

- Acting as a **technical resource on telecommunications sector** matters with representatives of U.S. public and private entities in the telecommunications sector; and

- **Supporting** national telecommunications restructuring;

- **Reporting** annually on achievements at the purpose and output level (product delivery) as well as on the management and delivery of inputs.

- **Establishment and maintenance of a U.S. based technical assistance team** for outreach to potential U.S. entrants into the southern African market;

- **Development of a project impact monitoring system**;

- **Reporting** quarterly to SATCC and USAID on progress toward project objectives and execution of annual implementation plan.

6. International Telecommunications Union (ITU)

The International Telecommunications Union will provide technical advisory services and relevant backstopping facilities for advisors to SATCC. Specifically, ITU will be responsible for:

- **Provision of a long term Policy Advisor** with regional experience and knowledge;

- **Provision of a long term Database Development Specialist** with regional background who will liaise with national governments, operating entities and other relevant bodies to maintain a viable telecommunications database for southern Africa;

- **Procurement of equipment and peripheral software** necessary to establish and maintain regional database;

- **Reporting** on a quarterly basis to USAID regarding grant implementation, financial expenditures, and progress toward grant objectives.

C. Implementation Sequencing

The sequence of major Project implementation milestones is as follows:

♦ **Approval and obligation of the Project**

The Project will be obligated (with the concurrence of bilateral Missions in the region

and USAID/SARP review and approval) with the Government of Mozambique, on behalf of Southern Africa Transport and Communications Commission (SATCC). During the first quarter of project implementation a grant will be signed with ITU to provide two long term policy advisors and a data base specialist to SATCC. Selection of advisors will be carried out jointly with SATCC and ITU. USAID will concur in the selection of the senior telecommunications policy adviser. Target date for initial obligation of Project funds is May 1994.

- **Recruitment and Placement of Regional Telecommunications Program Manager (May - August 1994)**

  At present, it is anticipated that the position will be filled through a PASA arrangement with the National Telecommunications and Information Administration of the U.S. Department of Commerce, with an expected start date of August/September of 1994.

- **Selection of the Institutional Contractor (May - December 1994)**

  A Request for Proposals will be issued to identify an appropriate institutional contractor through the normal USAID procedure supplemented by advertisements in selected general business and specialized trade publications. The contractor selection process will be handled by USAID REDSO/ESA RCO, with technical direction from the Regional Mission. A briefing for potential bidders will be held in Washington, DC by USAID/Zimbabwe staff. SATCC and interested USAIDs will be invited to send a representative to sit on the technical review panel. Selection is expected to be completed by late 1994.

- **Buy-in to Privatization and Development and other central Projects to Initiate Program Activities (May - December 1994)**

  A buy-in to the PRE Bureau's Privatization and Development Project will be negotiated to: prepare for and hold the 1994 Financing Telecommunications Workshop, to provide short term technical assistance for activities to be carried out in Zambia, and to establish a methodology and baseline data for monitoring and evaluation purposes. The term of the buy-in will run through at least the end of calendar year 1994. Other central projects may be utilized if necessary.

- **Institutional Contractor teams in southern Africa region and the U.S. operational**

  The Institutional Contractor teams are expected to be in the field and ready for work in early 1995. The IC will prepare an initial workplan to be reviewed in a project launch meeting early in calendar year 1995. The specific date for this event will be set in consultation with SATCC and USAID.

- **Project Operations**

  An annual work planning and execution process will be followed to ensure that the Project responds to the situation as well as making adequate progress toward the Project objectives. This annual work planning exercise will take place in early October (the beginning of the USG fiscal year). These workplans will be approved by the Program Manager.

- **Mid-Term Evaluation and Course Correction**

  At the end of the second year of the institutional contract (and the third year of the project), a collaborative evaluation of progress will be undertaken with participation from SATCC and the institutional contractor as well as an outside consultant. This will serve to redirect the Project as needed for maximum effectiveness in its final two years.

- **Final Evaluation**

  An outside contractor will prepare a draft final evaluation of the Project, to be presented at an evaluation conference involving wide representation of the regional telecommunications expertise as well as USAID/W, to be held six months prior to the Project Assistance Completion Date.

The charts and tables on the following pages provide more detailed information regarding the planned sequencing of project implementation. The references to Years and Quarters in the charts below are based on project years rather than the United States Government fiscal year.

Project Inputs	Prior to Project	Year 1				Year 2				Year 3				Year 4				Year 5			
		1 Q	2 Q	3 Q	4 Q	1 Q	2 Q	3 Q	4 Q	1 Q	2 Q	3 Q	4 Q	1 Q	2 Q	3 Q	4 Q	1 Q	2 Q	3 Q	4 Q
PP Development	X																				
Negotiation W/SATCC	X																				
Negotiation W/GOMOZ	X																				
PROAG Drafted	X																				
PP Authorized		X																			
PROAG Signed		X																			
PIO/Ts for:																					
PASA		X																			
Financing Workshop		X																			
Institutional Contract		X																			
Contract negotiated																					
PASA			X																		
Financing Workshop			X																		
Institutional Contract				X																	
Grant to ITU/SATCC			X																		
PASA in Place			X																		

Project Inputs	Prior to Project	Year 1				Year 2				Year 3				Year 4				Year 5			
		1 Q	2 Q	3 Q	4 Q	1 Q	2 Q	3 Q	4 Q	1 Q	2 Q	3 Q	4 Q	1 Q	2 Q	3 Q	4 Q	1 Q	2 Q	3 Q	4 Q
Financing Workshop held				X																	
Institutional Contractor in place					X																
SATCC Advisors in place					X																
TA to SATCC via ITU					X	X	X	X	X	X	X	X	X	X	X	X					
TA to Tanzania through I/C							X	X	X	X	X	X	X	X							
TA to Zambia through Buy-in				X	X																
TA to Zambia through I/C							X	X	X	X	X	X	X	X							
2nd Financing Telecomms workshop											X										
Regional Workshops (Policy)							X				X				X				X		
Regional Workshops Regional Topics						X		X		X		X			X			X			

Project Inputs	Prior to Project	Year 1				Year 2				Year 3				Year 4				Year 5			
		1 Q	2 Q	3 Q	4 Q	1 Q	2 Q	3 Q	4 Q	1 Q	2 Q	3 Q	4 Q	1 Q	2 Q	3 Q	4 Q	1 Q	2 Q	3 Q	4 Q
US Telecomms Contract																					
Newsletters									X				X				X			X	
Research Studies								X			X	X	X								
Library Development									X	X	X	X	X	X	X	X					
Information Dissemination						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Mid-Term Project Review												X									
Special Evaluation Studies									X		X				X			X			
Final Project Evaluation																			X		

D. Procurement Planning

1. Technical Assistance

Technical assistance under the RTR project will be procured through two channels: an institutional contract which will use full and open competition for selection of contractor, an a grant to the International Telecommunications Union (ITU), a public international organization with expertise in this sector. Each of these procurements will include financing not only for technical assistance, but will provide funds for workshops, commodities, information and monitoring and audit. These procurements are discussed below.

USAID will use full and open competitive procedures to select the institutional contractor. I is anticipated that the successful offeror may be a consortia with a variety of capabilities ranging from policy experts, to technical specialists, to training facilitators and with a capability to carry out outreach to U.S. companies (suppliers and investors) in the telecommunications sector. The grant to ITU will follow the guidelines and standard provision for grants to Public International Organizations set forth in Handbook 13, Chapter 5. No competition is required in the selection of a Public International Organization as a grant recipient. The Grant to ITU will finance approximately 86 months of long term technical assistance.

2. Training and Workshops

Training activities and workshops to inform key policy and decision makers in the Southern Africa Region will be included under the institutional contract for technical services. It is not anticipated that the Southern Africa Regional Mission will contract directly for other training events. In addition, the project does not anticipate any long term participant training.

3. Commodities

The RTR project will not include a major commodity procurement component. Only commodities essential to the delivery of technical assistance services and the development of the SATCC data base system will be procured. Specific telecommunications equipment associated with implementation of policy based programs will **not** be financed through the project; such items may be financed under complementary NPA activities which use a Commodity Import Program method of disbursement.

Under the institutional contract items to be procured include, computers, photocopiers, office furniture, telephones, fax machine, vehicles and household furniture for long-term expatriate personnel. The institutional contractor will procure items directly for offices in southern Africa and the U.S.-based operation.

The International Telecommunications Union will be responsible for procurement of computer and related equipment necessary to establish and maintain a regional telecommunications data base within SATCC. Under a Handbook 13 Grant to a Public International Organization, the procurement rules of the PIO are used. USAID will encourage the maximum use of competition on the part of ITU in procuring the required equipment.

Relevant USAID Guidelines for commodity procurement

a. DFA

This project will be financed by resources provided under the Development Fund for Africa (DFA). Per Congressional guidelines set forth in the legislation authorizing DFA, all reasonable efforts will be made to procure U.S. source and origin goods to the maximum extent practicable. Only those items which are currently not made in the U.S. or which because of the very nature of the items cannot be purchased and shipped from the U.S. at a reasonable cost or for which there exists no service and maintenance capabilities in Zimbabwe, have been designated as eligible for purchase from code 899/935 source/origin. When the Institutional contractor procures items the order of preference will be: (a) U.S. only, (b) host country, (c) Code 941 (Selected Free World), and (d) Code 935 (Special Free World). It is anticipated that all technical assistance, other than that provided regionally, will be procured from U.S. sources.

The Institutional Contractor will provide the USAID Southern Africa Regional Mission with a report on a quarterly bias of all commodities purchased during the period covered, the geographic codes and the dollar amount per geographic code. This will enable the Southern African Regional Mission to report this information to AID/W as required under both DFA and Buy America regulations.

b. Commodity Marking

Goods purchased by the RTR Project shall be appropriately marked with the USAID emblem in accordance with USAID policy set forth in Handbook 1., Chapter 9, entitled "Requirements for Marking AID Financed Commodities." It is USAID's responsibility to assure compliance with these requirements. When they have not been met, USAID should initiate corrective action which would simply entail informing the contractor or grantee of the noncompliance and request correction, or may necessitate the submission of AID Form 1450-1, "Reporting of Violation - Marking Requirements" to AID/W.

4. Project Management

As noted above, the services of a Project Manager are likely to be procured through a Participating Agency Services Agreement (PASA) with the United Stated Department of Commerce (USDOC), specifically the National Telecommunications Information

Administration (NTIA) in the USDOC. Initially the PASA will be for a period of 2 years. The procurement plan indicates the sequencing of this procurement.

5. Evaluations

The USAID Southern Africa Regional Mission will have responsibility for procuring assistance services related to the mid-term and final evaluations. These may be obtained using central Indefinite Quantity Contracts (IQCs) or may be procured through a competitive selection process. In addition, the Southern African Regional Mission will contract for any special evaluation studies which may be required during the life of the project.

6. Audits

In accordance with USAID standard procedures, implementing institutions will be audited on an annual basis. Project funds will be used to finance these audits using direct contracts, IQCs established for such audits, or other mechanisms.

7. Gray Amendment Contracting

The Institutional Contract is not proposed for a set aside procurement with 8(a) or Gray Amendment firms due to the complexity of the endeavor, the wide range of skills and expertise required and the need to establish, maintain, and backstop several offices simultaneously. Gray Amendment firms are anticipated to compete and are likely to form collaborative consortia arrangements in their proposals.

In order to promote the use of Gray Amendment firms in the procurements related to this project, the source list of all those firms requesting RFPs will be made available to Gray Amendment firms, and the solicitation announcing the RFP will state this availability. In addition, the RFP will be structured to encourage the use of Gray Amendment firms, such that the evaluation criteria will state that proposals which exceed the minimum 10% Gray Amendment subcontracting requirement for contracts above $500,000 will receive additional consideration.

USAID Zimbabwe considered the use of a Gray Amendment firm to procure the services of the Program Manager, but determined that program needs would best be met through a PASA due to the importance of a governmental agency to engage the counterpart governments of the region. Annex R contains the waiver required for use of a PASA. In its direct procurements, particularly for evaluations and audits, the Southern Africa Regional Mission will maximize efforts to use Gray Amendment firms.

The following charts give the procurement sequencing for some of the major procurement actions.

PROCUREMENT ACTIONS

Financing Workshop Buy-In Contract Actions	Date	Responsible Organization
PIO/T drafted	Month 1	SARP
PIO/T signed	Month 1	SARP
PIO/T transmitted	Month 1	SARP
Request for Proposal from Contractor	Month 2	FA/OP
Team Selected	Month 2	Contractor
Proposal Submitted	Month 3	Contractor
Negotiations Completed	Month 3	FA/OP
Delivery Order Issued	Month 3	FA/OP
Workshop held	Month 4	Contractor
PASA		
PIO/T drafted	Month 1	SARP
PIO/T signed	Month 1	SARP
PIO/T transmitted	Month 1	SARP
Request for Proposal from DOC	Month 2	REDSO/ESA
Proposal Received	Month 2	REDSO/ESA, DOC
Technical Review	Month 2	SARP
Negotiations	Month 2	REDSO/ESA
PASA issued	Month 3	REDSO/ESA
Program Manager arrives at post	Month 4	DOC
SATCC Grant/Advisor		
SATCC Agreement with ITU	Month 2	SATCC/ITU
PIO Grant to ITU signed	Month 2	SARP/REDSO/ESA
ITU recruitment of advisors	Month 2	ITU

SATCC/ITU and Program Manager select	Month 4	SATCC/ITU/SARP
Advisors in-place	Month 6	ITU/SATCC

Institutional Contractor	Date	Responsible Organization
PIO/T drafted	Month 1	SARP
PIO/T signed	Month 1	SARP
PIO/T transmitted	Month 1	SARP
PIO/T received	Month 1	REDSO/ESA
RFP issued	Month 2	REDSO/ESA
Proposals Received	Month 4	REDSO/OFFICERS
Technical Review of Proposals	Month 4	SARP/SATCC
Technical Review Completed	Month 5	SARP/SATCC
Best & Final proposals	Month 6	SARP/REDSO
Negotiations with top offeror	Month 7	REDSO/ESA
Contract signed	Month 8	REDSO/ESA
Chief of Party in place	Month 10	Contractor
Office established	Month 12	Contractor

IX. Monitoring and Evaluation

The results of the Program as a whole will be easier to measure than the results of the Project alone. However, the ability to assess the impact of activities undertaken in the context of the Project and to judge when to offer what kinds of services in the future will be fundamental to good Project management.

A. Readiness for an NPA Restructuring Program

The Regional Telecommunications Program Manager, the Chief of Party of the Institutional Contractor, and bilateral Mission staff will have to work together to determine when a national restructuring program is ready for more intensive, nonproject assistance. It is assumed here that Tanzania and Zambia are likely to be ready within the next year to 18 months.

Zimbabwe was at one time considered to be the strongest candidate for the third nonproject assistance program. The Government of Zimbabwe has indicated to USAID/Zimbabwe that

they are not yet ready for policy related nonproject assistance in the telecommunications sector. It is envisioned that encouraging Zimbabwean participation in the regional telecommunications activities (which will be strengthened by Project inputs) and offering short-term problem-specific assistance will make a difference. Other candidate countries are Malawi or Mozambique.

Indicators of readiness for a national NPA restructuring program have been set forth in Section IV. above.

B. Results Expected

Project goal, sub-goal, and purpose are shared with the overall Program. Monitoring efforts at these levels will, therefore, be more detailed in the countries receiving nonproject assistance than they will be at the Project level. Because telecommunications services are necessary but not sufficient for increased private sector investments, there will be a need for analysis of the "other" factors if indicators do not behave as expected.

The Project outputs have been articulated in "product" terms, which makes it relatively easy to identify appropriate indicators for measurement. However, those which rely on government reporting will be difficult to compile in a timely way. The project-funded database specialist at SATCC will help assure better-than-normal access and turnaround to national data sources.

Selecting appropriate methodologies for measuring the more qualitative indicators is somewhat more difficult but, for the most part, there is ample experience with the use of focus groups and more broad-based surveys as ways of gathering opinion data that we are confident that these will work.

When access to telecommunications occurs, the lives of people in cities, towns and rural areas should improve because of: higher incomes, more and better social services, increased participation in democratic process, and more timely personal communications.

Table 11
Summary of Monitoring and Evaluation Indicators

PROGRAM/PROJECT OUTCOMES EXPECTED	INDICATORS OF ACHIEVEMENT	SOURCES OF INFORMATION TO MEASURE INDICATORS
Goal level: -- economic growth -- sustainable economic growth -- broad-based economic growth	• GDP growth rate • Central Government budget deficit • External current account deficit • Jobs created (disaggregated by urban/rural and gender)	World Bank, IMF reports Standard Chartered Outlook, EIU analyses
Sub-Goal level: -- investment in business operations	• Level of total investment each year (public, private) • Number of businesses licensed or registered	Government reports, IMF Banking sector sources reporting public/private credit Ministry of Commerce and Trade, Investment Promotion Offices

Purpose level: -- increased access to telecommunications services -- broadened access to telecommunications services for urban and rural populations in three countries -- cost and quality changes which define more "cost-effective" systems for information transfer	• Number of active DELs (disaggregated if possible by business/individual; urban/rural) • Types of services being offered (public, private, mixed) • Call completion rates • Number of clinics (urban and rural) with phones in selected countries. • Number of schools with phones in selected countries. • Number of villages over 100 people with phones in three countries. • Faults/line/year, fault clearance speed • Cost per minute for local and international calls	Telecommunications sector statistics (relevant Ministry and/or PTC) Observation, informal surveys PTC records, World Bank implementation reports

Output level:		
(1) expanded, applicable knowledge base about telecommunications	• Target audiences' information base about telecommunications issues • Level of sophistication in regional publications on telecoms issues (including policy)	Before/after questionnaires at workshops, seminars Focus group discussions Regular reading of publications, clipping files Official publications
(2) reframed policy and regulatory environment	• Concrete legal and regulatory changes enacted by official bodies (Cabinet, Parliament, etc.) • Revenue per PTC employee • Revenue per DEL • Percent of billings collected • Contribution to general revenues (as taxes, license feeds, etc.)	PTC records and/or SATCC database " " " " "
(3) national telecommunications systems better meeting needs of users	• Availability and cost of VAS • Efficiency and effectiveness of telecommunications in transport, tourism, industrial, and financial sectors • Efficiency and effectiveness of telecommunications in non-business social sector use (hospital, schools, etc.)	PTC records Sector studies, case studies Newspaper/magazine articles, annual reports, interviews with government/PTC officials
(4) greater private investment in telecommunications.	• Volume of private investment in telecoms services	

Input level:		
(1) Quality of technical assistance supplied (match of expertise to problem)	• Feedback/rating sheets from recipients of consultancy	Routine soliciting of confidential written feedback from recipients
(2) Timeliness of services provided	• Weeks between identification of need (agreement on scope or work and arrival of consultant) and delivery of services required.	Office tracking system
(3) Cost containment	• Costs for various Project services	Institutional Contractor financial reporting
(4) Number of services provided	• Tracking numbers of inquiries, letters, information provision, etc.	Institutional Contractor Service and Information Tracking System

C. Monitoring & Evaluation System Design and Management Responsibility

Additional refinements will be made to this Monitoring and Evaluation plan as the National Restructuring Programs are defined. The Regional Program Manager will be expected to develop an integrated RTR Program M&E plan as the country programs are developed. Agreements as to reporting (via the Assessment of Program Impact) responsibilities will be worked out with the bilateral Missions involved. The Regional Program Manager, of course, will be responsible for ensuring that the Institutional Contractor provides adequate tracking information for the Project effort. Holding the annual work planning meeting in early October will facilitate this.

As noted above, adequate and timely information will be key to effective project implementation. The Institutional Contractor will be the foci for project information and measurement. However, this regular project monitoring and reporting system will be supplemented by independent evaluations. There will be a mid term evaluation and a final evaluation of project progress and impact. The mid term evaluation will assess progress toward objectives and focus upon the process of implementation, and the mid term evaluation report will also help the project to identify shifts in project implementation which may be needed to achieve project objectives. This will be especially important in the implementation of the RTR project and program as the policy situation in various Southern African countries is rapidly evolving and a realignment of funding and priority country status may be merited by Year 3 of project implementation.

The project monitoring and information system maintained by the contractor will collect data and

information from primary and secondary sources to determine levels of change in the indicators noted above. The task of information gathering will be shared with the SATCC technical unit which will house a regional telecommunications data base. The individual in charge of information gathering for the institutional contractor will be responsible for liaising with contract-financed advisors in various countries and the U.S. to ensure that their input is included in the project information system.

During the course of project implementation it is likely that there will be a need for special evaluative studies to examine a potential problem or issue or to recommend a new approach to an issue of regional concern. The project will provide funding for special studies, rapid appraisals, and mini-evaluations to ensure that corrective action or alternation is taken as needed. Such studies may be required to supplement existing national and information bases and be on topics of specific concern to project implementation such as: linkages between access to telecommunications and income generation in rural areas, case studies for increased business efficiency with increased or improved access to telecommunications, and change in private sector enterprise revenues and income with value added services.

X. Analytical Background

This section provides a cross reference to four sections of the Annexes which provide greater detail regarding analytical work completed in the preparation of this Project Paper. Other analytical work is referenced in the Annexes. Country specific analysis will be carried out in conjunction with each National Restructuring Plan.

Technical Analysis

Over the course of more than two years the USAID Southern African Regional Program commissioned several studies to ascertain the current status of telecommunications development in the SADC region, examine policy and technical constraints to further growth and to examine the relationship between increased access to telecommunications and economic growth, and prospects for future investment in the sector. Annex J contains the Executive Summaries of two reports and the full text of a third. The full text of Annexes J.1 and J.2 are available in the PDIS office of USAID Zimbabwe.

Annex J.1 **Telecommunications Sector Scoping Study for Southern Africa:** This comprehensive study is based on an extensive desk study of information pertaining and relevant to telecommunications in Southern Africa which was supplemented by field visits. One of the primary purposes of this work was to analyze the supply, demand, and shortfall for telecommunications services in 1990 and projected to 2000. This information is used to examine economic, technology and policy issues in meeting projected demand. The report is divided into six sections:

I Analysis of Current and Projected Demand, Supply, and Shortfalls in

Telecommunications Services

II Telecommunications Impact on Economic Development

III Policy and Institutional Issues

IV The Role of the Private Sector in Telecommunications Development

V Preliminary SADC Action Plan for USAID

Annex J.2. **Telecommunications Sector Restructuring in SADC countries:** This report builds on basic information presented in the Teleconsult Study and provides additional insight into the telecommunications structure - both public and private - in four southern African countries, Mozambique, Zambia, Tanzania, and Zimbabwe.

Annex J.3 **Development of the SADC Regional Telecommunications Restructuring Program - U.S. Technical Assistance Component:** In response to an identified need to examine and maximize the role for U.S. participation in the telecommunications sector in Southern Africa, USAID Zimbabwe commissioned a survey report to determine: the perceived attractiveness of the SADC telecommunications market to American companies; the requirements of U.S. telecommunications companies which are current or would-be investors in the SADC region; the nature of the constraints to investment in the region by U.S. telecommunications companies; and the potential role of USAID in facilitating U.S. private sector involvement in the region's telecommunications development.

These broad technical reports provide the base for the regional project core support and the rationale for individual country interventions. Additional information regarding the state of telecommunications in countries which will undertake national restructuring programs is available in PDIS in publications and reports of other donors. As individual country programs are designed specific information related to policy and technical needs of those countries will be developed and included in the country PAAD documentation.

Economic Analysis

The Economic Analysis included in Annex G sets forth broad economic impact of telecommunications on economic growth in the SADC region and describes the potential links between use of USAID's dollar resources and impacts on regional business investments and therefore job creation; indicates possible scenarios of the impact of the project and program through an analysis of "with" program resources and "without" program resources; and suggests some selected indicators which should be monitored to assess economic impact of the program.

As indicated in the analysis, funds at both the project and program level are relatively insignificant in terms of the level of annual investment required to maintain and increase access to telecommunications. Based on an extensive analysis of worldwide patterns of telecommunications investment, we have assumed that changes created by project and program activities will create an environment for investment that will attract -- or leverage -- the additional resources from the private sector.

The analysis makes the case that while not possible to prove that telecommunications investments will generate more economic growth and job/income creation that any other investment of equivalent size, USAID's overall economic rationale for investment in the telecommunications sector is based on the observation, supported by international analysis, that increased telecommunications investment will cause GDP to increase. Firm level benefits will also accrue as a result of improved telecommunications and the project will monitor impact at the individual firm level through specific studies.

Specific economic analysis at the country level will be carried out with each national restructuring program in accordance with Non Project Assistance Guidance.

Institutional Analysis

Annex I provides an overview of the range of participants in the telecommunications sector. The implementation of the RTR program will depend on through and ongoing analysis of the key stakeholders in the telecommunications sector. **Who** are the key stakeholders? **What** are their concerns and interest? **How** can these interests and concerns be met so that sector development can proceed?

The objective of the program is to help meet **users'** needs for telecommunications services. For this to happen, the Program intends to support a process of restructuring in **the public telecommunications entities** that will involve increased participation of **private sector providers of telecommunications service and goods.** USAID support will be coordinated with that of other **donors** and **international organizations**.

Annex I provides information on the following groups:

1. Regional/International Organizations
   - SATCC
   - SATA
   - ARTC
   - AFRALTI
   - PTA
   - PATU
   - ITU

2. Donors and other foreign government interests
   - USAID and other USG agencies
   - Other Bilateral Donors
   - AFDB
   - World Bank Group
   - EU

3. Public Sector Providers of Telecommunications Services

4. Private Firms Offering Telecommunications Services/Equipment
   - Telecommunications Service Providers
   - Manufacturers and Equipment Suppliers
   - U.S. Industry

5. Labor Unions

6. The Parent Ministries of PTTs
   - Communications
   - Information/Broadcast
   - Transport

7. Other Ministries/Entities
   - Treasury/Finance (balance of payments, budget)
   - Industry and Commerce (local manufacture, indigenous participation)
   - Defense/State Security (national security)
   - Privatization
   - National Planning
   - Health, Education, and other Social Services
   - Transport

8. Users Groups
   - SMEs
   - Industry and Energy
   - Transport
   - Banking and Finance
   - Agriculture and other Rural Based Enterprise
   - Tourism

Political Analysis

Telecommunications in southern Africa, as elsewhere in the world, are a sensitive issue with host governments. Concerns range from national security and secure communications, to loss of revenue, to fears of inadequate service for rural areas. In addition, governments are concerned about ensuring adequate indigenous participation in any private sector investment and

of the dangers of creating a private sector monopoly. Most of these concerns can be mitigated by a combination of the provision of information, design of appropriate regulatory safeguards, technical assistance, and in certain select instances program assistance. Annex H reviews the most common political objections to restructuring telecommunications sectors and increasing private sector involvement and presents means to allay host country fears to outside involvement in the sector. The areas reviewed are: National Security, Telecommunications as a source of revenues, Labor concerns, Indigenous Participation, Local Manufacturing Base, Ideology, and Rural Service.

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REGIONAL TELECOMMUNICATIONS RESTRUCTURING PROJECT LOGFRAME

SUMMARY		OBJECTIVELY VERIFIABLE INDICATORS:	SOURCES OF INFORMATION	ASSUMPTIONS
PROGRAM SUBGOAL: Increased investment in expanding business opportunities in southern Africa		Level of total investment each year (public, private, foreign, and domestic) increases Number of businesses licensed or registered increases	EIU Reports Central Statistics Offices, IMF Ministry of Industry	Macro Economic situation remains stable
PROGRAM PURPOSE: Increased and broadened access with the SADC region to more cost effective systems for information transfer		No. of active DELs (disaggregated by business/individual; urban/rural) improves in at least three countries by 1998	PTC or other service provider records	NPA resources are available for national restructuring programs
		Types of services being offered (private, public, mixed) increase for urban and rural populations in at least three countries by 1998.	Survey, Interviews PTC records	LOP adequate to achieve project purpose.
		Foreign exchange balance for international telecommunications services through rationalized pricing structure in 2 Southern African countries.	MOF, National Budget, EIU, IFI report	Private sector invests in most appropriate technology. Population growth rates remain stable Rural/Urban split of population remains relatively fixed.
PROJECT OUTPUTS: **OUTPUT 1:** An expanded, applicable knowledge base widely shared by all participants in the region	INPUTS TO ACCOMPLISH OUTPUTS/ACTIVITIES **TOTAL:** TA: Long term, Institutional Contractor, SATCC TA: Short-term, through PRE Buy-In and through Institutional Contractor	OBJECTIVELY VERIFIABLE INDICATORS Target audiences' information base about telecommunications increases – specifically related to: private sector roles; social implications, financial management, labor relations.	Project MIS Surveys of key groups	SATCC will retain/increase clout as regional body for telecommunications
ACTIVITIES TO ACHIEVE OUTPUT 1:		Level of sophistication in regional publications on telecoms issues, including policy and technolgy issues increases over the life of the project.	Review of regional publications	South Africa will join SADC and participate in regional activities
(1) Support to SATCC	Staff and database support :$1,047,000 Telecommunications Policy Specialist, 4.5 py Database Specialist, 2 py			Policy makers will use insight gained to effect policy change
(2) Two regional workshops on financing telecommunications	Preparation costs: STTA Workshop costs, total: $635,000			Participation at seminars is broad-based and reaches critical stakeholders.
(3) Four regional workshops on regional policy and institutional issues	Preparation costs: STTA Workshop costs: $565,000 Plus unattributed core TA resources			

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REGIONAL TELECOMMUNICATIONS RESTRUCTURING PROJECT LOGFRAME

SUMMARY		OBJECTIVELY VERIFIABLE INDICATORS:	SOURCES OF INFORMATION	ASSUMPTIONS
(4) Six regional workshops on policy and institutional issues of regional interest, including but not limited to: -- user groups -- rural services -- problem-solving techniques in restructuring -- technology and supplier choice -- human resource development -- training for Boards of Directors of PTCs	Institutional Contractor staff Workshop costs: $935,000 Plus unattributed core TA resources			
OUTPUT 2: Reframed policy and regulatory environment in at least three countries in the region by 1998	**TOTAL** TA: Shorrt Term Technical Assistance: $450,000	Concrete legal and regulatory changes enacted or other legal basis which promote the role of the private sector in telecommunications	National gazettes legislative records	Zambia and Tanzania remain on track in restructuring
ACTIVITIES TO ACHIEVE OUTPUT 2:		Revenue per TPC employee increases in 3 countries by 1998.	TPC records National Accounts	Other donor support links in for telecoms reform where necessar
In response to requests: -- stakeholder analyses -- focus group discussions -- policy analyes		Revenue per DEL rationalized in 3 countries	TPC records	Third country is ready for restructuring during LOP.
-- assistance in actual drafting of laws and regulations -- support for dissemination of revised regulations		Percent of Accounts Receivable Collected increases by 25% in three countries.	TPC records	Other national legislation re: revenues, etc. remains favorable or neutral.
		Net Contribution to General Revenues (Taxes, license fees, etc.) increases in three countries	National Budget	Adequately trained/qualified staff available at national level to operate and regulate effectively.

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SUBJECT: SOUTHERN AFRICA REGIONAL PROGRAM (SARP) REGIONAL TELECOMMUNICATIONS RESTRUCTURING PROGRAM (690-0274/78)

REF:HARARE 08585

1. SUMMARY: THE ECPR FOR THE SUBJECT PROGRAM WAS HELD TUESDAY JUNE 22, 1993. IT WAS CHAIRED BY ACTING DEPUTY ASSISTANT ADMINISTRATOR FOR AFRICA, TIM BORK, AND WAS ATTENDED BY REPRESENTATIVES FROM AFR/SA, GC/AFR, AFR/DP, AFR/ARTS, AFR/ONI, PRE/CAP, PRE/EM, FA/PPE, FA/OP, FA/B, AND USAID/HARARE. THE PROPOSED PROGRAM IS FOR DOLLARS 75 MILLION, WITH DOLLARS 60 MILLION FOR NON PROJECT ASSISTANCE (NPA) AND DOLLARS 15 MILLION FOR PROJECT ASSISTANCE (PA). THE SARP MISSION DIRECTOR MAY EXERCISE HIS DOA 551 AUTHORITY TO APPROVE AND AUTHORIZE THE PROJECT PAPER. WHILE PA WILL BE AVAILABLE TO ALL SARP COUNTRIES, THE NPA WILL BE AVAILABLE TO A MAXIMUM OF THREE. A SEPARATE PAAD WILL BE DESIGNED FOR EACH NPA COUNTRY. GIVEN THE NEWNESS OF THIS TYPE OF INVOLVEMENT, THE ECPR RECOMMENDED THAT THESE PAADS BE APPROVED IN USAID. MOST USAID/W ISSUES WERE RESOLVED DURING OR SHORTLY AFTER THE ECPR. THE MAJOR OUTSTANDING CONCERN ON USE OF CASH VERSUS A CIP AND BUY AMERICA ISSUES WAS RESOLVED

THROUGH A CABLE FROM THE MISSION, HARARE 08585, THE FIRST FOUR PARAGRAPHS OF WHICH ARE APPENDED HERE. END SUMMARY.

2. (A) THE ECPR BEGAN WITH A DISCUSSION BY THE MISSION OF THE BACKGROUND TO THE TELECOMMUNICATIONS PROGRAM. THE MISSION DESCRIBED THE RATIONALE FOR USAID INTERVENING IN THE SECTOR, INCLUDING THE IMPACT OF TELECOMMUNICATIONS ON DEVELOPMENT IN SOUTHERN AFRICA. THE PROPOSED PROGRAM IS

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FOR DOLLARS 75 MILLION. OF THIS, DOLLARS 15 MILLION WILL BE PROJECT ASSISTANCE AND DOLLARS 60 MILLION WILL BE NON-PROJECT ASSISTANCE (NPA). PROJECT ASSISTANCE WILL BE AVAILABLE TO ALL COUNTRIES THAT ARE MEMBERS OF THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY (SADC). NPA RESOURCES WILL BE AVAILABLE FOR A MAXIMUM OF THREE COUNTRIES. TO BE ELIGIBLE FOR NPA, A COUNTRY MUST BE UNDERTAKING MAJOR POLICY REFORM IN THE TELECOMMUNICATIONS SECTOR.

(B) THE PROGRAM WILL USE A MODULAR APPROACH FOR NON PROJECT ASSISTANCE WHICH WILL BE SUFFICIENTLY FLEXIBLE TO RESPOND TO THE SPECIFIC POLICY NEEDS OF THE RELEVANT COUNTRIES. AN INDIVIDUAL PAAD WILL BE PREPARED FOR EACH COUNTRY RECEIVING NPA RESOURCES. DUE TO THE NEWNESS OF A POLICY-BASED APPROACH FOR AID INVOLVEMENT IN THIS SECTOR AND THE USES OF NPA RESOURCES TO LEVERAGE SUCH REFORM, THE ECPR CONCLUDED THAT THE PAADS BE REVIEWED AND APPROVED BY USAID/W.

(C) THE ECPR DECIDED TO HAVE FURTHER CONSULTATIONS WITH THE SARP MISSION BEFORE PROVIDING DEFINITIVE GUIDANCE. THE FOLLOWING SECTIONS DESCRIBE THE ISSUES THAT WERE DISCUSSED IN THE ECPR AND SUBSEQUENT TO IT AND THE RESULTING GUIDANCE TO THE FIELD.

3. ISSUE 1: CHOICE OF TELECOMMUNICATIONS SECTOR

(A) DISCUSSION: THE ECPR REVIEWED THE INITIAL RATIONALE FOR INVOLVEMENT IN THE TELECOMMUNICATIONS SECTOR, WHICH INCLUDES THE CONTRIBUTION OF TELECOMMUNICATIONS TO OVERALL ECONOMIC DEVELOPMENT IN A COUNTRY, ITS CRITICAL ROLE IN INTRA-REGIONAL AND INTERNATIONAL TRADE AND INDUSTRIAL DEVELOPMENT, THE POTENTIAL FOR SIGNIFICANT U.S. PARTICIPATION IN THE SECTOR ON A MEDIUM AND LONG-TERM BASIS IN AN IMPROVED POLICY ENVIRONMENT, AND THE TECHNOLOGICAL CHANGES IN THE SECTOR WHICH GREATLY EXPAND OPTIONS FOR EFFECTIVE DELIVERY OF SERVICES. THE ECPR REVIEWED THE CHOICE OF INVESTMENT IN TELECOMMUNICATIONS AND THE ANTICIPATED RATES OF RETURN IN RELATION TO OTHER SECTORS. THE MISSION ADDRESSED THESE CONCERNS BY DISCUSSING THE IMPORTANCE OF ADEQUATE AND RELIABLE

TELECOMMUNICATIONS TO POTENTIAL INVESTORS.

(B) GUIDANCE: IT WAS DETERMINED THAT TELECOMMUNICATIONS IS AN APPROPRIATE SECTOR FOR FINANCING UNDER THE SADC AUTHORIZATION STATUTE (FAA 496(0) INDUSTRIAL DEVELOPMENT AND TRADE (INCLUDING PRIVATE SECTOR INITIATIVES) PROVISION, AND THAT INVOLVEMENT IN THIS SECTOR IS CONSONANT WITH THE AGENCY'S BROAD-BASED ECONOMIC GROWTH GOALS AND POTENTIAL PROGRAMMATIC THRUSTS OF THE NEW

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INITIATIVE FOR SOUTHERN AFRICA.

4. ISSUE 2: MAXIMIZING U.S. PARTICIPATION IN THE SECTOR

(A) DISCUSSION: MUCH OF THE DISCUSSION CENTERED ON HOW TO MAXIMIZE U.S. PARTICIPATION IN THE TELECOMMUNICATIONS SECTOR WHILE STILL ACHIEVING POLICY REFORMS THAT PROMOTE INCREASED EFFICIENCY AND PRIVATE SECTOR PARTICIPATION AND COMPETITION IN THE TELECOMMUNICATIONS SECTOR IN SOUTHERN AFRICA. THE U.S. IS A WORLD LEADER IN TELECOMMUNICATIONS TECHNOLOGY, HARDWARE, SOFTWARE AND MANAGEMENT OF SYSTEMS. U.S. INTERESTS RANGE FROM MANUFACTURERS. THE ECPR NOTED THAT THESE PARTIES WILL BE ACTIVELY INTERESTED IN THE PROPOSED PROGRAM AND THAT THE PROGRAM SHOULD BE STRUCTURED TO RESPOND TO THESE GROUPS IN A CONSTRUCTIVE MANNER AND TO FULLY INCORPORATE U.S. TELECOMMUNICATIONS ACTORS INTO PROGRAM IMPLEMENTATION.

(B) MECHANISMS WERE DISCUSSED WHICH APPEAR TO MEET THIS OBJECTIVE, INCLUDING THE PROPOSED PROJECTIZED ASSISTANCE TO FULLY INFORM U.S. INVESTORS OF POTENTIAL SOUTHERN AFRICAN MARKETS AND OF CHANGES IN EXISTING POLICIES LIMITING OR PROHIBITING INVESTOR PARTICIPATION. ALSO DISCUSSED WERE MECHANISMS FOR DIRECTING PROCUREMENT TO U.S. TELECOMS FIRMS THROUGH SUCH THINGS AS PUBLIC OR PRIVATE SECTOR COMMODITY IMPORT PROGRAMS. THE MISSION NOTED THAT PAAD DEVELOPMENT COULD INCLUDE ANALYSIS TO DETERMINE THE DEGREE TO WHICH COMMODITY IMPORT PROGRAMS OR OTHER DISBURSEMENT MECHANISMS COULD BE USED TO MAXIMIZE ACHIEVEMENT OF PROGRAM GOALS AND U.S. INVOLVEMENT. INITIALLY, THE MISSION AND POL OBJECTED TO A COMMODITY IMPORT PROGRAM TIED TO PUBLIC SECTOR TELECOMMUNICATIONS EQUIPMENT, FEELING THAT PROVISION OF EQUIPMENT ON A GRANT BASIS AT THE ANTICIPATED FUNDING LEVEL COULD UNDERMINE POLICY EFFORTS TO INCREASE PRIVATE SECTOR PARTICIPATION. BASED ON FURTHER CONSULTATIONS IT WAS DETERMINED BY THE MISSION THAT IN CERTAIN CIRCUMSTANCES AND WITH CREATIVE DESIGN, BOTH PRIVATE AND PUBLIC SECTOR COMMODITY IMPORT PROGRAMS COULD LEVERAGE SIGNIFICANT PRIVATE SECTOR PARTICIPATION IN THE TELECOMMUNICATIONS SECTOR.

(C) FUNDING OF FEASIBILITY STUDIES: PPC NOTED THAT PROJECT DESIGN MAY INVOLVE FEASIBILITY STUDIES. THERE IS AN INTER-AGENCY AGREEMENT THAT THE TRADE AND DEVELOPMENT AGENCY (TDA) IS RESPONSIBLE FOR ALL FEASIBILITY STUDIES FOR TRADE PROMOTION AND THAT ALL FUNDS FOR SUCH ACTIVITIES WILL BE TRANSFERRED TO TDA. MISSION IS ADVISED THAT IF YOU ONLY PLAN A FEASIBILITY STUDY AND DO NOT INTEND TO

FUND THE FOLLOW-ON PROJECT, THEN YOU MAY HAVE TO TURN OVER SUCH FEASIBILITY STUDY FUNDING TO TDA.

GUIDANCE: IT WAS DETERMINED THAT THE INDIVIDUAL PAADS MUST PROPOSE MEANS TO MAXIMIZE U.S. INVOLVEMENT IN THE SECTOR. NON-PROJECT ASSISTANCE DISBURSEMENT MECHANISMS WILL BE IN THE FORM OF A PRIVATE OR PUBLIC SECTOR COMMODITY IMPORT PROGRAM. IF THE FOREIGN EXCHANGE REGIME IN THE INDIVIDUAL COUNTRY DOES NOT WARRANT A COMMODITY IMPORT PROGRAM, ANY ALTERNATIVE DISBURSEMENT MECHANISM PROPOSED MUST DEMONSTRATE THAT U.S. PROCUREMENT WILL BE MAXIMIZED.

EACH PAAD MUST INCLUDE A DETAILED ANALYSIS OF THE TOTAL DEMAND FOR TELECOMMUNICATIONS EQUIPMENT FOR THE SECTOR DURING THE PROPOSED LIFE OF THE PROGRAM, WITH RELEVANT CATEGORIES OF BUYERS IDENTIFIED (BOTH PUBLIC AND PRIVATE SECTOR). THIS INFORMATION, ALONG WITH THE POLITICAL, TECHNICAL, AND ECONOMIC ANALYSES, WILL BE USED TO DETERMINE THE APPROPRIATE DISBURSEMENT MECHANISMS AND LEVEL OF FINANCING FOR EACH PROPOSED COUNTRY PROGRAM. SEE PARA. 10 BELOW FOR DISCUSSION OF BUY AMERICA OPTIONS.

5. ISSUE 3: PEOPLE LEVEL IMPACT

(A) DISCUSSION: THE ECPR QUESTIONED THE DEGREE TO WHICH PROGRAM IMPACT WILL BE MEASURED AT THE HOUSEHOLD LEVEL AND WHETHER THE PROPOSED PROGRAM SATISFIES DFA GUIDANCE REGARDING PEOPLE LEVEL IMPACT. ACCORDING TO THE MISSION, THE PROGRAM IS DESIGNED TO OBTAIN PEOPLE LEVEL IMPACT THROUGH INCREASED ACCESS TO TELECOMMUNICATIONS SERVICES, WHICH WILL BE MEASURED AT THE HOUSEHOLD LEVEL WITH PARTICULAR ATTENTION TO TRADITIONALLY UNDER-SERVED AREAS SUCH AS RURAL POPULATIONS.

(B) GUIDANCE: THE ECPR DETERMINED THAT THE PID/PAIP CONFORMS WITH GUIDANCE REGARDING PEOPLE LEVEL IMPACT AND THAT THE SPECIFIC INDICATORS FOR MEASURING IMPACT WILL BE SET FORTH IN EACH PAAD.

6. ISSUE 4: CONDITIONALITY

(A) DISCUSSION: THE PID/PAIP PRESENTS SEVERAL INDICATORS

OF EXPECTED ACHIEVEMENT AT THE END OF THE FIVE-YEAR PROGRAM. EACH INDICATOR IS ASSOCIATED WITH INCREASED ACCESS TO TELECOMMUNICATIONS SERVICES. ANNEX C OF THE PROGRAM DOCUMENT PRESENTS ILLUSTRATIVE CONDITIONALITY SHOWING THAT ACTIONS TO INCREASE ACCESS TO SERVICES MAY

RANGE FROM PRIVATE SECTOR MANAGEMENT CONTRACTS TO SALE OF A CONTROLLING INTEREST IN THE PT AND T BY THE END OF THE PROGRAM. DURING THE ISSUES MEETING, A DISCUSSION CENTERED AROUND THE PROGRAMIS END OBJECTIVE. THE MISSION EXPLAINED THAT ITS OBJECTIVE WOULD BE QUOTE EFFECTIVE PRIVATE SECTOR CONTROL UNQUOTE OF THE SECTOR IN THE SELECTED NPA COUNTRIES, BUT REQUESTED THAT NO ONE SPECIFIC BENCHMARK, SUCH AS 51 PERCENT PRIVATE SECTOR OWNERSHIP, BE DICTATED NOW DUE TO THE VARYING APPROACHES WHICH MAY BE USED IN EACH COUNTRY.

(B) GUIDANCE: EACH PAAD MUST PROVIDE A DETAILED DESCRIPTION OF HOW QUOTE EFFECTIVE PRIVATE SECTOR CONTROL UNQUOTE WILL BE ACHIEVED IN EACH COUNTRY. TARGETS AND CONDITIONALITY LEADING TO THIS END MUST ALSO BE EXPLICITLY OUTLINED IN EACH PAAD.

7. ISSUE 5: MANAGEMENT OF THE PROGRAM

DISCUSSION:

(A) THE PID/PAIP DOCUMENT ACCOMMODATES, AS MUCH AS POSSIBLE, MISSIONS' EXPRESSED CONCERNS ABOUT THE MANAGEMENT BURDEN. NEVERTHELESS, IT IS QUITE PROBABLE THAT THE NEW PROGRAM WILL ADD A QUOTE POLICY DIALOGUE UNQUOTE BURDEN AT THE UPPER LEVEL OF MISSION MANAGEMENT, WHICH PARTICULARLY IN THE CASE OF ZAMBIA, FURTHER STRETCHES CAPABILITY LIMITS. UNDER ANY ARRANGEMENTS, THE PROGRAM WILL REQUIRE SOME MANAGEMENT ATTENTION.

(B) IN ADDITION, IT IS POSSIBLE THAT OTHER SADC MEMBER COUNTRIES, SUCH AS NAMIBIA OR MOZAMBIQUE, MAY BE IN A POSITION TO MOVE FORWARD ON THE POLICY FRONT IN THE TELECOMMUNICATIONS SECTOR. IF ONE OF THE CURRENTLY IDENTIFIED COUNTRIES IS NOT MAKING SUFFICIENT HEADWAY IN POLICY REFORM, PROGRAMMATIC IMPACT MAY BE MAXIMIZED BY TARGETING RESOURCES AT A DIFFERENT SADC COUNTRY.

(C) THE ECPR NOTED FURTHER THAT THE MANAGEMENT BURDEN WILL FALL PRIMARILY UPON THE SARP MISSION AND THAT NPA ASSISTANCE AND THE CONCOMITANT POLICY DIALOGUE ARE TIME CONSUMING ACTIONS. THE MISSION WAS ASKED TO REVIEW CRITICALLY ITS OWN AS WELL AS OTHER MISSIONS' CAPACITY TO MANAGE THE PROPOSED MULTI-COUNTRY INITIATIVE EFFECTIVELY.

(D) GUIDANCE: BEFORE APPROVAL OF INDIVIDUAL PAADS, PARTICIPATING MISSIONS SHOULD BE ASKED FOR A FORMAL DETERMINATION OF THEIR ABILITY TO MANAGE ACTIVITIES ASSOCIATED WITH THIS PROGRAM.

8. ISSUE 6: OTHER DONORS

(A) DISCUSSION: AS NOTED IN THE PID/PAIP AND THE MISSIONIS OPENING STATEMENT, OTHER DONORS, BOTH BILATERAL AND MULTILATERAL ARE ACTIVELY INVOLVED IN THE TELECOMMUNICATIONS SECTOR. AT PRESENT, MOST PROVIDE ASSISTANCE DIRECTLY TO THE PARASTATAL ENTITY WITH LITTLE OR NO POLICY CONDITIONALITY LINKED TO THEIR PROGRAMS. ASSISTANCE IS NORMALLY IN THE FORM OF TIED LOANS. THE ECPR EXPRESSED CONCERN ABOUT PROGRAM IMPLEMENTATION VULNERABILITIES AND USAIDIS ABILITY TO EFFECTIVELY INFLUENCE THE ACTIONS OF OTHER DONORS IN THIS SECTOR DUE TO COUNTRY SPECIFIC COMMERCIAL INTERESTS. THE MISSION ADVANCED THE IDEA THAT POLICY CHANGES RESULTING IN PRIVATE SECTOR PARTICIPATION AND INVOLVEMENT IN THE SECTOR ARE THE MOST EFFECTIVE MEANS FOR LEVELING THE PLAYING FIELD FOR U.S. MANUFACTURERS AND U.S. INVESTORS. THE MISSION NOTED THAT A JUNE 1992 STATE DEPARTMENT STUDY OF INTERNATIONAL FINANCING OF TELECOMMUNICATIONS MADE THIS SAME POINT. WITH INCREASED PRIVATE PARTICIPATION AND THE PROPOSED END GAME OF EFFECTIVE PRIVATE SECTOR CONTROL, TIED AID TO GOVERNMENTAL OR PARASTATAL ENTITIES IS OF LITTLE IMPACT, SINCE INVESTMENT AND PROCUREMENT DECISIONS WILL BE MADE ON A COMMERCIAL BASIS.

(B) GUIDANCE: EACH INDIVIDUAL COUNTRY PAAD SHOULD INCLUDE AN EXPANDED DISCUSSION OF SPECIFIC DONOR ACTIVITY IN THE TELECOMMUNICATIONS SECTOR. THIS DISCUSSION SHOULD NOTE THE TYPE OF ASSISTANCE, ANY POLICY CONDITIONALITY ASSOCIATED WITH THE ASSISTANCE, AND ANY RESTRICTIONS WHICH

OTHER DONORS ARE PLACING ON THE USE OF FUNDS. ACTIVITY BY OTHER DONORS THAT WOULD JEOPARDIZE ACHIEVEMENT OF USAID PROGRAM OBJECTIVES IN A GIVEN COUNTRY WOULD CAUSE RECONSIDERATION OF USAIDIS PARTICIPATION IN THAT COUNTRY. THE SARP MISSION SHOULD CONTINUE TO MONITOR, COORDINATE, AND LIAISE WITH OTHER DONORS DURING THE DEVELOPMENT OF THE INDIVIDUAL COUNTRY PAADS.

9. ADDITIONAL PP/PAAD PREPARATION GUIDANCE

(A) CONSTRAINTS ANALYSIS

-- (1) EACH INDIVIDUAL PAAD SHOULD CONTAIN A DETAILED ANALYSIS OF THE MACROECONOMIC SITUATION IN THE COUNTRY, THE SECTOR SPECIFIC CONSTRAINTS (INCLUDING THE

TECHNOLOGICAL AND FINANCIAL ASPECTS OF THE SECTOR OPERATING ENTITY IN THAT COUNTRY), AND A RATIONALE FOR THE LEVEL OF FUNDING IN THAT COUNTRY. GENDER ISSUES MUST ALSO BE ADDRESSED.

(2) DUE TO THE INTERRELATED NATURE OF INVESTMENT IN THE TELECOMMUNICATIONS SECTOR AND THE GENERAL INVESTMENT CLIMATE IN THE COUNTRY, EACH PAAD SHOULD INCLUDE AN ANALYSIS INDICATING ADDITIONAL CONDITIONALITY WHICH MAY BE REQUIRED DUE TO PROBLEMS IN THE GENERAL INVESTMENT CLIMATE.

-- (3) THE PAAD MUST INCLUDE AN EXPANDED DISCUSSION OF THE POTENTIAL FOR U.S. INVESTMENT IN TELECOMMUNICATIONS IN SOUTHERN AFRICA, INCLUDING EXAMPLES OF U.S. INTEREST EVIDENCED TO DATE AND EXPERIENCE IN SIMILAR COUNTRIES WHERE PRIVATE SECTOR PARTICIPATION IS PERMITTED.

(B) HOST COUNTRY COMMITMENT

EACH PAAD SHOULD INCLUDE AN ANALYSIS WHICH DISCUSSES THE LEVEL OF COMMITMENT TO CHANGE OF THE RELEVANT MINISTRIES OF FINANCE AND COMMUNICATIONS. FOR THOSE MINISTRIES OBJECTING TO CHANGE, THE ANALYSIS SHOULD EXPLAIN WHY. THE MISSION SHOULD CONTINUALLY ASSESS THE HOST COUNTRY LEVEL OF COMMITMENT TO SECTORAL REFORM THROUGHOUT DEVELOPMENT OF THE PAAD.

(C) BUY AMERICA

THE DESIGN FOR TECHNICAL ASSISTANCE TO BE PROVIDED THROUGH THE PROJECT SHOULD ENSURE THAT THE PROJECT PROVIDES ASSISTANCE IN THE DEVELOPMENT OF SPECIFICATIONS AND STANDARDS FOR INTERCONNECT SERVICES AND EQUIPMENT TO ENSURE THAT U.S. MANUFACTURERS ARE ABLE TO COMPETE ON AN EQUAL BASIS WITH SUPPLIERS FROM OTHER COUNTRIES.

(D) LOCAL CURRENCY: THE ECPR MADE CLEAR THAT, IN ACCORDANCE WITH THE DFA NPA GUIDANCE, LOCAL CURRENCY GENERATIONS WERE TO BE USED IN SUPPORT OF THE SECTOR PROGRAMSIS OBJECTIVES IN ALL CASES, NOT JUST WHERE SPA GUIDELINES PREMITTED THIS. (SEE CONFLICT WITH PARA. 10C BELOW). SUBSEQUENTLY, AT THE ZAMBIA CPSP REVIEW, THE PREDOMINANCE OF DFA GUIDANCE WAS EMPHASIZED BY DAA/AFR, BUT THE ZAMBIA MISSION DIRECTOR STATED THAT PROGRAMMING LOCAL CURRENCY TO SECTORS WOULD LIKELY BE CONSISTENT WITH THE SPA IN ZAMBIA. (FOR EXAMPLE, PROGRAMMING LOCAL CURRENCY IN SUPPORT OF TELECOMMUNICATIONS RESTRUCTURING WOULD ALLOW THE GOVERNMENT THE DISCRETION TO MANAGE THE SPECIFIC LINE ITEM BUDGETS AND EXPENDITURES, YET STILL FULFIL

PAADS IN FY 94-95.

(A) A COMMODITY IMPORT PROGRAM FOR PRIVATE SECTOR

IMPORTS: THIS MODE WILL BE EXPLORED IN EACH COUNTRY, TAKING INTO ACCOUNT THAT THE FUNDAMENTAL PREREQUISITE FOR A SUCCESSFUL CIP IS SIMPLY THAT THE COUNTRY OR SECTOR NEEDS THE FOREIGN EXCHANGE; (DAA/FA-POL/OD MEMO DTD/APRIL 1993) THE KEY HERE WILL BE A DETERMINATION TO WHAT EXTENT THE PRIVATE SECTOR WOULD BE WILLING TO UNDERTAKE THE ADMINISTRATIVE ACTIONS REQUIRED TO TAP CIP FOREIGN EXCHANGE WHEN FOREIGN EXCHANGE IS READILY AVAILABLE ON THE OPEN MARKET. A CRITICAL ASPECT OF THE FOREIGN EXCHANGE MARKET SYSTEM TO BE ANALYZED DURING PAAD(S) DEVELOPMENT IS THE EXTENT TO WHICH THE HOST COUNTRY HAS AN ACTIVE AND SAVVY BANKING SECTOR AND CAN NEGOTIATE EXPEDITED CLEARANCE FOR CIP FINANCED MERCHANDISE. IT IS CLEAR THAT AN UNDERDEVELOPED BANKING SYSTEM IS INDEED A MAJOR CONSTRAINT. BUT WE WILL EXAMINE IN SUCH SITUATIONS THE EXTENT TO WHICH U.S. BANKS COULD BE A MAJOR SOURCE OF FREE TECHNICAL ASSISTANCE TO LOCAL BANKS, IN AN EFFORT TO ESTABLISH THEMSELVES IN THE MARKET.

(B) A COMMODITY IMPORT PROGRAM FOR PUBLIC SECTOR IMPORTS. ALL OF THE ABOVE ANALYSES WILL BE CARRIED OUT UNDER THIS MODE, IN ADDITION TO GATHERING OF INFORMATION ON HOST COUNTRY GOVERNMENT TENDER BOARDS AND THE ROLE THEY PLAY WHEN COMPETITION IN INTERNATIONAL TENDERS IS USED.

IN THIS CASE, THE MISSION WILL SEEK TO DESIGNATE PARTICULAR KINDS OF COMMODITIES TO BE ELIGIBLE FOR CIP FINANCING IN ORDER TO MAXIMIZE THE ACHIEVEMENT OF PROGRAM OBJECTIVES AND AT THE VERY LEAST NOT UNDERMINE SUCH REFORMS. FOR EXAMPLE, IF GREATER PRIVATE PARTICIPATION AND INVESTMENT IN THE TELECOMMUNICATIONS SECTORS IS DESIRED, THE MISSION MAY DECIDE AFTER CAREFUL ANALYSIS OF THE SECTOR IN THE PARTICULAR COUNTRY THAT A PUBLIC SECTOR CIP MIGHT BE MORE APPROPRIATE FOR ACCOMPLISHING GOVERNMENT OBJECTIVES SUCH AS A RURAL TELEPHONE SYSTEM EXTENSION, WHICH MAY BE LESS ATTRACTIVE FOR PRIVATE INVESTMENT.

(C) LOCAL CURRENCY PROGRAMMING

WHERE FEASIBLE AND PERMITTED UNDER SPA GUIDANCE, LOCAL CURRENCY PROGRAMMING WILL BE FOR BUDGETARY SUPPORT IN THE TELECOMMUNICATIONS SECTOR, WITH SPECIAL FOCUS ON RETRENCHMENT FINANCING AND RURAL EXTENSION OF TELEPHONE SERVICE WHEN NEGOTIATIONS SUGGEST THAT THESE ARE THE HOST COUNTRY PRIORITY.

(D) ESTABLISHMENT OF A TRAINING/TECHNICAL ASSISTANCE FACILITY:

THE SPIRIT OF SPA.

(E) PD 20. USAID/W UNDERSTANDS THAT THE MISSION IS CAREFULLY REVIEWING WITH THE RLA THE EFFECT ON THE PROJECT OF RECENTLY-ISSUED PD 20, GUIDELINES TO ASSURE USAID PROGRAMS DO NOT RESULT IN THE LOSS OF JOBS IN THE U.S. THE PP SHOULD CAREFULLY DOCUMENT COMPLIANCE WITH THIS P.D.

10. BUY AMERICA: MISSION RESPONSE

SUBSEQUENT TO THE ECPR, THE MISSION SENT A CABLE ADDRESSING MANY OF THE ISSUES RAISED CONCERNING BUY AMERICA, WHICH ARE CONTAINED IN THE FIRST FOUR PARAGRAPHS OF HARARE 08585, AUGUST 6, 1993. THEY ARE APPENDED HERE TO PROVIDE A COMPLETE EXPLANATION OF ALL ACTIONS SUBSEQUENT TO THE ECPR. FOLLOWING IS THE CABLE:

(1) THIS CABLE PROVIDES ADDITIONAL CLARIFICATION OF THE INFORMATION PROVIDED IN REFTEL WHICH STATED THAT THE MISSION BELIEVES THAT THE SUBJECT PROGRAM DESIGN CAN BE

SUBJECT:

EFFECTIVELY MODIFIED TO ADEQUATELY TAKE INTO ACCOUNT BUY-AMERICA CONCERNS. SPECIFICALLY, THE DISCUSSION BELOW PROVIDES ILLUSTRATIVE EXAMPLES ON HOW THE AGENCY'S QUOTE BUY AMERICA UNQUOTE CONCERNS WILL BE TAKEN INTO ACCOUNT IN PROGRAM DESIGN AND SHOULD BE TREATED AS AN ADDENDUM TO THE PID/PAIP. AS NOTED IN REFTEL (HARARE 8246), AT THE ECPR REVIEW, AND IN THE PID/PAIP, THE MISSION INTENDS TO PRESENT THE FINAL PAAD DOCUMENT(S) TO USAID/W FOR APPROVAL IN FY 94-95. THIS PROCEDURE WILL PROVIDE USAID/W WITH ANOTHER OPPORTUNITY TO REVIEW THE PROGRAM AND DETERMINE IF THE QUOTE BUY AMERICA UNQUOTE CONCERNS HAVE BEEN ADEQUATELY ADDRESSED.

(2) U.S. DOLLAR PROGRAMMING WILL USE A VARIETY OF MODES WHICH ARE PRESENTED ILLUSTRATIVELY BELOW DEPENDING ON THE FX MECHANISM IN EACH OF THE PROPOSED COUNTRIES. THE DETAILS OF THESE PROPOSALS WILL BE APPROPRIATELY ANALYZED IN COUNTRY-SPECIFIC SITUATIONS BEFORE THE MISSION CAN CONFIRM THAT THE ILLUSTRATIVE MODES OR SOME FORM OF MODIFICATION TO THE SAME WILL BE INCORPORATED INTO FINAL DESIGN. IT SHOULD BE NOTED THAT THE MISSION HAS ALREADY CONSULTED WITH FA/PPE AND FA/OP TO DETERMINE IF THE EXPERTISE OF COMMODITY OFFICERS COULD BE INCORPORATED INTO THE DESIGN TEAM. EFFORTS WILL ALSO BE MADE TO INCLUDE THE REGIONAL COMMODITY OFFICER IN REDSO/NAIROBI IN THE DESIGN ACTIVITY. BELOW, PLEASE FIND SOME OF THE SPECIFIC MODES WHICH WILL BE EXPLORED DURING THE DEVELOPMENT OF THE FINAL

PROJECT ASSISTANCE/USDOLLARS IN THE TELECOMMUNICATIONS

SECTOR WILL FINANCE TRAINING REQUIREMENTS FOR U.S. EQUIPMENT THAT IS FUNDED UNDER THE GRANT. THE FUND WOULD BE CAPITALIZED WITH PROJECTIZED PROGRAM RESOURCES AND WOULD NOT REQUIRE LOCAL CURRENCY COUNTERPART FUNDS. THIS INTERVENTION WOULD BE ATTRACTIVE WHERE HOST GOVERNMENTS WISH TO PROVIDE SOME ADVANTAGE TO AN INDIGENOUS IMPORTER-INVESTOR TO STRENGTHEN PRIVATE INDIGENOUS PARTICIPATION IN THE TELECOMMUNICATIONS SECTOR.

(3) USAID/ZIMBABWE BELIEVES THAT WHILE IMMEDIATE AMERICAN TRADE INTERESTS IN TELECOMMUNICATIONS EQUIPMENT SALES CAN BE ADDRESSED IN THE MODES EXPLORED ABOVE, THE POLICY REFORMS ADVOCATED UNDER THE PROGRAM WILL ALSO BE KEY TO PROMOTING THE U.S. TELECOMMUNICATIONS INDUSTRY'S INTERNATIONAL COMPETITIVENESS IN THE SECTOR. MOREOVER, SIGNIFICANT BENEFITS OF EXPANDING INVESTMENT AND SERVICE, AS WELL AS EQUIPMENT MARKETS, WILL ACCRUE WITH THE ACHIEVEMENTS OF PROGRAM POLICY REFORM OBJECTIVES.

(4) THE POLICY REFORMS PROPOSED UNDER THE SUBJECT PROGRAM WILL INCREASE PRIVATE PARTICIPATION IN THE TELECOMMUNICATIONS SECTOR AND INCREASE COMPETITION. THEY WILL LEAD TO THE INTRODUCTION OF NEW SERVICES SUCH AS CELLULAR TELEPHONES AND SATELLITE AND DATA COMMUNICATIONS WHICH SHOULD CREATE SIGNIFICANT INVESTMENT OPPORTUNITIES FOR U.S. TELECOMMUNICATIONS COMPANIES (ESPECIALLY SERVICE PROVIDERS) AND SHOULD ENHANCE THE COMPETITIVENESS OF THE U.S. TELECOMMUNICATIONS INDUSTRY.

10. BASED ON THE ECPR AND THE ADDITIONAL INFORMATION PROVIDED BY THE MISSION IN HARARE 08585, REPEATED ABOVE, THIS CABLE PROVIDES APPROVAL FOR USAID/HARARE TO PROCEED WITH DEVELOPMENT OF THE PROPOSED TELECOMMUNICATIONS RESTRUCTURING PROGRAM AND FOR THE DIRECTOR, USAID/HARARE, OR HIS DESIGNEE, TO AUTHORIZE THE PROJECT. INDIVIDUAL PAADS FOR NON-PROJECT ASSISTANCE WILL BE REVIEWED AND APPROVED BY USAID/W.
CHRISTOPHER
BT
#7330

SOUTHERN AFRICAN DEVELOPMENT COMMUNITY

SOUTHERN AFRICA TRANSPORT AND COMMUNICATIONS COMMISSION (SATCC)

CP 2877, MAPUTO
MOZAMBIQUE

TELEPHONE: 420214/420246
FAX: 420213
TELEX: 6606/6597 SATCC MO

APR - 7 1994
USAID/HARARE

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DUE DATE
ACTION TAKEN
INITIALS/DATE

FAX MESSAGE COVER SHEET

TO : USAID Harare	Attn. Mr Ted FAX No. 722418
FROM: SATCC/TU, Maputo Mozambique	DATE: 06.04.94 Our Ref.TU/F/285/94
FAX No.+258-1-420213 TEL No.+258-1-420214/420246	No. of pages including this one: 2
Signature:	If message not well received, please, call us back as soon as possible

Dear Ted,

REQUEST FOR FUNDING THE RTR PROJECT

You will recall that since 1992 SATCC and your office have worked together to seek ways to increase investment and improve efficiency in the telecommunications network in Southern Africa. This collaboration began in a formal sense with the assistance your office provided for the first SADC Telecommunications Restructuring Seminar held in Windhoek in February 1993.

What has emerged from the SADC Restructuring Seminar, other similar conferences, and numerous study reports issued by ourselves, USAID, the ITU, the World Bank, and some Member States among others, is that fundamental restructuring is necessary for the telecommunications sector to attract new investment and become more efficient.

More precisely, the telecommunications sector must (a) be open to new sources of investment, including private investment and control, (b) introduce competition as appropriate in certain sub-sectors, and (c) commercialize/privatize the dominant monopoly provider of service. These steps, in turn, require substantial changes in the regulatory and institutional apparatus governing the telecommunications sector.

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The Regional Telecommunications Restructuring Project (RTR) has been developed precisely to address these issues, through activities that will: enhance the capacity of countries in the region to gain better understanding and undertake the necessary changes; provide a forum for the resolution of regional issues; enable the regional exchange of views, ideas and lessons learned; and provide accurate and specific information on the sector in Southern Africa to potential investors.

Although all aspects of the RTR Project will serve to advance the agenda of SATCC to promote the development and operation of an efficient, cost-effective and modern regional telecommunications network, we of course will be most directly involved in those RTR inputs that have been identified as being best put to use by SATCC itself. These include, inter alia, the provision of a long term resident specialist Telecommunications Policy Expert, a long term resident Telecommunications Database Specialist, and support for improving the accuracy, timeliness, and marketing aspects of our SATCC Telecommunications Database.

In this regard, we hereby request the support of USAID in providing inputs that are specified in detail in the RTR Project Paper, which neither SATCC nor its Member countries are able to provide from our own resources during this transitional period to a modern telecommunications network in the region.

Yours sincerely,

Percy M. Mandoaela
Director

Gray Amendment Considerations

The Gray Amendment (Section 579 of P.L. 101-167, the Foreign Operations Export Financing and Related Programs Appropriation Act, 1990) requires A.I.D. to ensure participation in AID projects by business concerns which are owned and controlled by socially and economically disadvantaged individuals, historically black colleges and universities, colleges and universities having a student body in which more than 40 percent of the students are Hispanic American, and private voluntary organizations which are controlled by individuals who are socially and economically disadvantaged, including women, (referred to herein as Gray Amendment entities).

The requirements of AIDAR Notice 90-2, implementing section 579 of the Foreign Assistance Appropriations Act requires that for any contract in excess of $500,000 (except for a contract with a disadvantaged enterprise) not less than 10 percent of the dollar value must be subcontracted to Gray Amendment entities, unless the contracting officer certifies that there is no realistic expectation of U.S. subcontracting opportunities or unless the Administrator approves an exception. This provision applies to "buy-ins" as well as project specific contracts.

Certification

Elements of the project are appropriate for minority or Gray Amendment organization contracting. The procurement plan of this project has been developed with full consideration of maximally involving Gray Amendment organizations in the provision of required goods and services. The Mission will make every effort to identify disadvantaged enterprises, particularly women and minority-owned project. Where possible, qualified Gray Amendment firms will be given considerations for direct contracting as well as in consideration of the buy-in option for services required. The evaluation criteria for the selection of the institutional contractor with responsibility for implementation of the project will include preference for inclusion of Gary Amendment firms above the minimum 10% required.

Furthermore, the Mission will in the case of any contract in excess of $500,000 funded from amounts covered by the Gray Amendment include a provision requiring that no less than ten percent of the dollar value of the contract be subcontracted to Gray Amendment entities unless the Contracting Officer certifies that there is no realistic expectation of U.S. subcontracting opportunities, or unless the prime contractor is a Gray Amendment entity.

Stephen J. Spielman, Acting Director

5/7/94
Date

INITIAL ENVIRONMENTAL EXAMINATION

PROJECT LOCATION: SOUTHERN AFRICA

PROJECT TITLE: SARP REGIONAL TELECOMMUNICATIONS RESTRUCTURING PROJECT

PROJECT NUMBER: (690-0278)

FUNDING: US$15,000,000 (PROJECT ASSISTANCE)

IEE PREPARED BY: Melissa Stephens, Project Development Officer

ENVIRONMENTAL ACTION RECOMMENDED:

Positive Determination_____
Negative Determination_____
Categorical Exclusion____XXX____
Deferral _____

Summary of Finding:

Project Goal and Purpose: The goal of the Regional Telecommunications Restructuring Project is broad-based sustainable growth as measured by more jobs and income. The purpose of the RTR project and program is to increase and broaden access within the SADC region to a more cost effective system for information transfer.

Project Outputs: To achieve the overall program purpose, the RTR project and program seeks to firstly, ensure that effective regulatory structures are established and functioning in a professional and transparent manner that provides for appropriate governmental oversight and competition in the telecommunications sector. Additional outputs related to appropriate and adequate investment and management practices include: a) legislation/ regulations that allow competition, private investment and use of most appropriate cost effective technology; b) adequate levels of financing for private sector investment are available; and c) the implementation and adoption of private sector management techniques.

Project Inputs: To accomplish these ends the project provides $15 million in technical assistance, training, limited commodity support for data base development, funding for project management and for audits and evaluation.

Discussion of Possible Environmental Issues: The project resources of the RTR program which provide technical assistance,

training, and limited commodity support will have no foreseeable environmental impacts.

RECOMMENDED ENVIRONMENTAL DETERMINATION:

Based upon 22 CFR 216.2(c)(i),(iii) and (ix), a **Categorical Exclusion** is recommended for the training and related commodities provided by the RTR program.

Concurrence:

John J. Gaudet, AFR/ARTS
Bureau Environmental Officer

Approved: ✓
Disapproved: ____
Date 9/2/94

Clearance:
GC/AFR: MA Clewman Date: 5/3/94

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TOTAL P.03

NOTE: COUNTRY CHECKLIST COMPLETED FOR MOZAMBIQUE

determined that this government has engaged in a consistent pattern of gross violations of internationally recognized human rights? If so, can it be demonstrated that contemplated assistance will directly benefit the needy?

C. COUNTRY ELIGIBILITY CRITERIA APPLICABLE ONLY TO ECONOMIC SUPPORT FUNDS ("ESF")

Human Rights Violations (FAA Sec. 502B): Has it been determined that the country has engaged in a consistent pattern of gross violations of internationally recognized human rights? If so, has the President found that the country made such significant improvement in its human rights record that furnishing such assistance is in the U.S. national interest?

5C(2) - ASSISTANCE CHECKLIST

Listed below are statutory criteria applicable to the assistance resources themselves, rather than to the eligibility of a country to receive assistance. This section is divided into three parts. Part A includes criteria applicable to both Development Assistance and Economic Support Fund resources. Part B includes criteria applicable only to Development Assistance resources. Part C includes criteria applicable only to Economic Support Funds.

CROSS REFERENCE: IS COUNTRY CHECKLIST UP TO DATE?

A. CRITERIA APPLICABLE TO BOTH DEVELOPMENT ASSISTANCE AND ECONOMIC SUPPORT FUNDS

1. **Host Country Development Efforts** (FAA Sec. 601(a)): Information and conclusions on whether assistance will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations;

1.(a) The RTR project will facilitate international and intraregional trade through increasing economic opportunity and lines of communication.

(b) The project supports and fosters increased participation of the private sector in the provision of telecommunicatior services.

(d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture, and commerce; and (f) strengthen free labor unions.

2. **U.S. Private Trade and Investment** (FAA Sec. 601(b)): Information and conclusions on how assistance will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).

3. **Congressional Notification**

a. **General requirement** (FY 1994 Appropriations Act Sec. 515; FAA Sec. 634A): If money is to be obligated for an activity not previously justified to Congress, or for an amount in excess of amount previously justified to Congress, has Congress been properly notified (unless the Appropriations Act notification requirement has been waived because of substantial risk to human health or welfare)?

b. **Special notification requirement** (FY 1994 Appropriations Act Sec. 520): Are all activities proposed for obligation subject to prior congressional notification?

c. **Notice of account transfer** (FY 1994 Appropriations Act Sec. 509): If funds are being obligated under an appropriation account to which they were not appropriated, has the President consulted with and provided a written justification to the House and Senate Appropriations Committees and has such obligation been subject to regular notification procedures?

c. **Cash transfers and nonproject sector assistance** (FY 1994 Appropriations Act Sec. 537(b)(3)): If funds are to be made available in the form of cash transfer or nonproject sector assistance, has the Congressional notice

(c) The project will not specifically deal with providers of financial services.

(d) Through increasing the number of telecommunications service providers, the RTR project will discourage monopolistic practices.

(e) The introduction of new technologies on communications delivery will improve the technical efficiency of industry, agriculture and commerce.

(f) The project will not work directly with labor unions, but will encourage their participation in discussions related to divestiture and privatization.

2. The project will devote resources to disseminating information about investment opportunities to potential U.S. investors. In addition the technical assistance contract will be completed among U.S. firms.

3.(a) Yes.

(b) No.

(c) Not under an accounts for which funds were not appropriated.

(d) Funds are not for cash transfer and non project assistance.

included a detailed description of how the funds will be used, with a discussion of U.S. interests to be served and a description of any economic policy reforms to be promoted?

4. **Engineering and Financial Plans** (FAA Sec. 611(a)): Prior to an obligation in excess of $500,000, will there be: (a) engineering, financial or other plans necessary to carry out the assistance; and (b) a reasonably firm estimate of the cost to the U.S. of the assistance?

4.(a) Yes.
(b) Yes.

5. **Legislative Action** (FAA Sec. 611(a)(2)): If legislative action is required within recipient country with respect to an obligation in excess of $500,000, what is the basis for a reasonable expectation that such action will be completed in time to permit orderly accomplishment of the purpose of the assistance?

5. No legislative action required.

6. **Water Resources** (FAA Sec. 611(b)): If project is for water or water-related land resource construction, have benefits and costs been computed to the extent practicable in accordance with the principles, standards, and procedures established pursuant to the Water Resources Planning Act (42 U.S.C. 1962, et seq.)? (See A.I.D. Handbook 3 for guidelines.)

6. Project is not for water activities.

7. **Cash Transfer/Nonproject Sector Assistance Requirements** (FY 1994 Appropriations Act Sec. 537). If assistance is in the form of a cash transfer or nonproject sector assistance:

a. **Separate account:** Are all such cash payments to be maintained by the country in a separate account and not commingled with any other funds (unless such requirements are waived by Congressional notice for nonproject sector assistance)?

b. **Local currencies:** If assistance is furnished to a foreign government under arrangements which result

7.(a) N/A
(b) N/A
(1) N/A
(2) N/A
(3) N/A
(4) N/A

in the generation of local currencies:

(1) Has A.I.D. (a) required that local currencies be deposited in a separate account established by the recipient government, (b) entered into an agreement with that government providing the amount of local currencies to be generated and the terms and conditions under which the currencies so deposited may be utilized, and (c) established by agreement the responsibilities of A.I.D. and that government to monitor and account for deposits into and disbursements from the separate account?

(2) Will such local currencies, or an equivalent amount of local currencies, be used only to carry out the purposes of the DA or ESF chapters of the FAA (depending on which chapter is the source of the assistance) or for the administrative requirements of the United States Government?

(3) Has A.I.D. taken all appropriate steps to ensure that the equivalent of local currencies disbursed from the separate account are used for the agreed purposes?

(4) If assistance is terminated to a country, will any unencumbered balances of funds remaining in a separate account be disposed of for purposes agreed to by the recipient government and the United States Government?

8. **Capital Assistance** (FAA Sec. 611(e)): If project is capital assistance (e.g., construction), and total U.S. assistance for it will exceed $1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability to maintain and utilize the project effectively?

8. Project is not capital assistance.

9. **Multiple Country Objectives** (FAA Sec. 601(a)): Information and conclusions

9. See response to Number 1. above.

on whether projects will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions.

10. **U.S. Private Trade** (FAA Sec. 601(b)): Information and conclusions on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).

10. See response to Number 2 above.

11. **Local Currencies**

a. **Recipient Contributions** (FAA Secs. 612(b), 636(h)): Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized in lieu of dollars.

11.(a) N/A. This is a regional project. Local currency will be generated on complementary Non Project Assistance activities.

b. **U.S.-Owned Currency** (FAA Sec. 612(d)): Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release?

(b) No.

12. **Trade Restrictions**

a. **Surplus Commodities** (FY 1994 Appropriations Act Sec. 513(a)): If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely to cause substantial injury to U.S. producers of the same, similar or competing commodity?

12.(a) Assistance is not for the production of any commodity.

b. **Textiles (Lautenberg**

(b) No.

Amendment) (FY 1994 Appropriations Act Sec. 513(c)): Will the assistance (except for programs in Caribbean Basin Initiative countries under U.S. Tariff Schedule "Section 807," which allows reduced tariffs on articles assembled abroad from U.S.-made components) be used directly to procure feasibility studies, prefeasibility studies, or project profiles of potential investment in, or to assist the establishment of facilities specifically designed for, the manufacture for export to the United States or to third country markets in direct competition with U.S. exports, of textiles, apparel, footwear, handbags, flat goods (such as wallets or coin purses worn on the person), work gloves or leather wearing apparel?

13. **Tropical Forests** (FY 1991 Appropriations Act Sec. 533(c)(3)(as referenced in section 532(d) of the FY 1993 Appropriations Act): Will funds be used for any program, project or activity which would (a) result in any significant loss of tropical forests, or (b) involve industrial timber extraction in primary tropical forest areas?

13.(a) No.

(b) No.

14. **PVO Assistance**

a. **Auditing and registration** (FY 1994 Appropriations Act Sec. 568): If assistance is being made available to a PVO, has that organization provided upon timely request any document, file, or record necessary to the auditing requirements of A.I.D., and is the PVO registered with A.I.D.?

14.(a) Assistance is not to a PVO, potential PVO Grantees will be registered with USAID.

b. **Funding sources** (FY 1994 Appropriations Act, Title II, under heading "Private and Voluntary Organizations"): If assistance is to be made to a United States PVO (other than a cooperative development organization), does it obtain at least 20 percent of its total annual funding for international activities from sources other than the United States Government?

(b) Assistance is not to U.S. PVO.

15. **Project Agreement Documentation** (State Authorization Sec. 139 (as interpreted by conference report)): Has confirmation of the date of signing of the project agreement, including the amount involved, been cabled to State L/T and A.I.D. LEG within 60 days of the agreement's entry into force with respect to the United States, and has the full text of the agreement been pouched to those same offices? (See Handbook 3, Appendix 6G for agreements covered by this provision).

15. Confirmation of the date of signing will be cabled and pouched as required.

16. **Metric System** (Omnibus Trade and Competitiveness Act of 1988 Sec. 5164, as interpreted by conference report, amending Metric Conversion Act of 1975 Sec. 2, and as implemented through A.I.D. policy): Does the assistance activity use the metric system of measurement in its procurements, grants, and other business-related activities, except to the extent that such use is impractical or is likely to cause significant inefficiencies or loss of markets to United States firms? Are bulk purchases usually to be made in metric, and are components, subassemblies, and semi-fabricated materials to be specified in metric units when economically available and technically adequate? Will A.I.D. specifications use metric units of measure from the earliest programmatic stages, and from the earliest documentation of the assistance processes (for example, project papers) involving quantifiable measurements (length, area, volume, capacity, mass and weight), through the implementation stage?

16. Yes.

17. **Abortions** (FAA Sec. 104(f); FY 1994 Appropriations Act, Title II, under heading "Population, DA," and Sec. 518):

a. Are any of the funds to be used for the performance of abortions as a method of family planning or to motivate or coerce any person to practice abortions?

b. Are any of the funds to be used to pay for the performance of

17.
(a) No
(b) No
(c) No
(d) No
(e) No
(f) No
(g) No

involuntary sterilization as a method of family planning or to coerce or provide any financial incentive to any person to undergo sterilizations?

c. Are any of the funds to be made available to any organization or program which, as determined by the President, supports or participates in the management of a program of coercive abortion or involuntary sterilization?

d. Will funds be made available only to voluntary family planning projects which offer, either directly or through referral to, or information about access to, a broad range of family planning methods and services? (As a legal matter, DA only.)

e. In awarding grants for natural family planning, will any applicant be discriminated against because of such applicant's religious or conscientious commitment to offer only natural family planning? (As a legal matter, DA only.)

f. Are any of the funds to be used to pay for any biomedical research which relates, in whole or in part, to methods of, or the performance of, abortions or involuntary sterilization as a means of family planning?

g. Are any of the funds to be made available to any organization if the President certifies that the use of these funds by such organization would violate any of the above provisions related to abortions and involuntary sterilization?

18. **Cooperatives** (FAA Sec. 111): Will assistance help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward a better life?

18. The project does not support cooperatives.

19. **U.S.-Owned Foreign Currencies**

a. **Use of currencies** (FAA Secs. 612(b), 636(h); FY 1994 Appropriations Act

Secs. 503, 505): Are steps being taken to assure that, to the maximum extent possible, foreign currencies owned by the U.S. are utilized in lieu of dollars to meet the cost of contractual and other services.

(a) Yes

b. **Release of currencies** (FAA Sec. 612(d)): Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release?

(b) No

20. **Procurement**

a. **Small business** (FAA Sec. 602(a)): Are there arrangements to permit U.S. small business to participate equitably in the furnishing of commodities and services financed?

20.
(a) Yes

b. **U.S. procurement** (FAA Sec. 604(a): Will all procurement be from the U.S., the recipient country, or developing countries except as otherwise determined in accordance with the criteria of this section?

(b) Procurement will be primarily U.S. - Although under DFA the applicable Geographic Code is 935 - Free World.

c. **Marine insurance** (FAA Sec. 604(d)): If the cooperating country discriminates against marine insurance companies authorized to do business in the U.S., will commodities be insured in the United States against marine risk with such a company?

(c) Yes.

d. **Non-U.S. agricultural procurement** (FAA Sec. 604(e)): If non-U.S. procurement of agricultural commodity or product thereof is to be financed, is there provision against such procurement when the domestic price of such commodity is less than parity? (Exception where commodity financed could not reasonably be procured in U.S.)

(d) Yes.

e. **Construction or engineering services** (FAA Sec. 604(g)): Will construction or engineering services be procured from firms of advanced developing countries which are otherwise eligible under Code 941 and which have attained a

(e) No. - No constructions and engineering services anticipated.

competitive capability in international markets in one of these areas? (Exception for those countries which receive direct economic assistance under the FAA and permit United States firms to compete for construction or engineering services financed from assistance programs of these countries.)

f. **Cargo preference shipping** (FAA Sec. 603)): Is the shipping excluded from compliance with the requirement in section 901(b) of the Merchant Marine Act of 1936, as amended, that at least 50 percent of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed shall be transported on privately owned U.S. flag commercial vessels to the extent such vessels are available at fair and reasonable rates?

(f) No.

g. **Technical assistance** (FAA Sec. 621(a)): If technical assistance is financed, will such assistance be furnished by private enterprise on a contract basis to the fullest extent practicable? Will the facilities and resources of other Federal agencies be utilized, when they are particularly suitable, not competitive with private enterprise, and made available without undue interference with domestic programs?

(g) Yes.
Yes.

h. **U.S. air carriers** (International Air Transportation Fair Competitive Practices Act, 1974): If air transportation of persons or property is financed on grant basis, will U.S. carriers be used to the extent such service is available?

(h) Yes.

i. **Consulting services** (FY 1994 Appropriations Act Sec. 567): If assistance is for consulting service through procurement contract pursuant to 5 U.S.C. 3109, are contract expenditures a matter of public record and available for public inspection (unless otherwise provided by law or Executive order)?

(i) Yes.

j. **Metric conversion** (Omnibus Trade and Competitiveness Act of 1988, as interpreted by conference report, amending Metric Conversion Act of 1975 Sec. 2, and as implemented through A.I.D. policy): Does the assistance program use the metric system of measurement in its procurements, grants, and other business-related activities, except to the extent that such use is impractical or is likely to cause significant inefficiencies or loss of markets to United States firms? Are bulk purchases usually to be made in metric, and are components, subassemblies, and semi-fabricated materials to be specified in metric units when economically available and technically adequate? Will A.I.D. specifications use metric units of measure from the earliest programmatic stages, and from the earliest documentation of the assistance processes (for example, project papers) involving quantifiable measurements (length, area, volume, capacity, mass and weight), through the implementation stage?

(j) Yes.

k. **Competitive Selection Procedures** (FAA Sec. 601(e)): Will the assistance utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise?

(k) Yes.

l. **Chemical Weapons** (FY 1994 Appropriations Act Sec. 569): Will the assistance be used to finance the procurement of chemicals that may be used for chemical weapons production?

(l) No.

21. **Construction**

a. **Capital project** (FAA Sec. 601(d)): If capital (e.g., construction) project, will U.S. engineering and professional services be used?

21. N/A

(a) Not a construction project.

b. **Construction contract** (FAA Sec. 611(c)): If contracts for construction are to be financed, will they be let on a competitive basis to maximum extent practicable?

(b) N/A

c. **Large projects, Congressional approval** (FAA Sec. 620(k)): If for construction of productive enterprise, will aggregate value of assistance to be furnished by the U.S. not exceed $100 million (except for productive enterprises in Egypt that were described in the Congressional Presentation), or does assistance have the express approval of Congress? (c) N/A

22. **U.S. Audit Rights** (FAA Sec. 301(d)): If fund is established solely by U.S. contributions and administered by an international organization, does Comptroller General have audit rights? 22. Yes

23. **Communist Assistance** (FAA Sec. 620(h). Do arrangements exist to insure that United States foreign aid is not used in a manner which, contrary to the best interests of the United States, promotes or assists the foreign aid projects or activities of the Communist-bloc countries? 23. Yes

24. **Narcotics**

a. **Cash reimbursements** (FAA Sec. 483): Will arrangements preclude use of financing to make reimbursements, in the form of cash payments, to persons whose illicit drug crops are eradicated? 24. (a) Yes

b. **Assistance to narcotics traffickers** (FAA Sec. 487): Will arrangements take "all reasonable steps" to preclude use of financing to or through individuals or entities which we know or have reason to believe have either: (1) been convicted of a violation of any law or regulation of the United States or a foreign country relating to narcotics (or other controlled substances); or (2) been an illicit trafficker in, or otherwise involved in the illicit trafficking of, any such controlled substance? (b) Yes

25. **Expropriation and Land Reform** (FAA Sec. 620(g)): Will assistance preclude use of financing to compensate owners for expropriated or nationalized 25. Yes

property, except to compensate foreign nationals in accordance with a land reform program certified by the President?

26. **Police and Prisons** (FAA Sec. 660): Will assistance preclude use of financing to provide training, advice, or any financial support for police, prisons, or other law enforcement forces, except for narcotics programs? 26. Yes

27. **CIA Activities** (FAA Sec. 662): Will assistance preclude use of financing for CIA activities? 27. Yes

28. **Motor Vehicles** (FAA Sec. 636(i)): Will assistance preclude use of financing for purchase, sale, long-term lease, exchange or guaranty of the sale of motor vehicles manufactured outside U.S., unless a waiver is obtained? 28. Yes

29. **Export of Nuclear Resources** (FY 1994 Appropriations Act Sec. 506): Will assistance preclude use of financing to finance--except for purposes of nuclear safety--the export of nuclear equipment, fuel, or technology? 29. Yes

30. **Publicity or Propaganda** (FY 1994 Appropriations Act Sec. 557): Will assistance be used for publicity or propaganda purposes designed to support or defeat legislation pending before Congress, to influence in any way the outcome of a political election in the United States, or for any publicity or propaganda purposes not authorized by Congress? 30. No

31. **Marine Insurance** (FY 1994 Appropriations Act Sec. 531): Will any A.I.D. contract and solicitation, and subcontract entered into under such contract, include a clause requiring that U.S. marine insurance companies have a fair opportunity to bid for marine insurance when such insurance is necessary or appropriate? 31. Yes

32. **Exchange for Prohibited Act** (FY 1994 Appropriations Act Sec. 533): Will 32. No

any assistance be provided to any foreign government (including any instrumentality or agency thereof), foreign person, or United States person in exchange for that foreign government or person undertaking any action which is, if carried out by the United States Government, a United States official or employee, expressly prohibited by a provision of United States law?

33. **Commitment of Funds** (FAA Sec. 635(h)): Does a contract or agreement entail a commitment for the expenditure of funds during a period in excess of 5 years from the date of the contract or agreement? — 33. No

34. **Impact on U.S. Jobs** (FY 1994 Appropriations Act, Sec. 547): — 34.

a. Will any financial incentive be provided to a business located in the U.S. for the purpose of inducing that business to relocate outside the U.S. in a manner that would likely reduce the number of U.S. employees of that business? — (a) No

b. Will assistance be provided for the purpose of establishing or developing an export processing zone or designated area in which the country's tax, tariff, labor, environment, and safety laws do not apply? If so, has the President determined and certified that such assistance is not likely to cause a loss of jobs within the U.S.? — (b) No

c. Will assistance be provided for a project or activity that contributes to the violation of internationally recognized workers rights, as defined in section 502(a)(4) of the Trade Act of 1974, of workers in the recipient country, or will assistance be for the informal sector, micro or small-scale enterprise, or smallholder agriculture? — (c) No

B. CRITERIA APPLICABLE TO DEVELOPMENT ASSISTANCE ONLY

1. **Agricultural Exports (Bumpers**

Amendment) (FY 1994 Appropriations Act Sec. 513(b), as interpreted by conference report for original enactment): If assistance is for agricultural development activities (specifically, any testing or breeding feasibility study, variety improvement or introduction, consultancy, publication, conference, or training), are such activities: (1) specifically and principally designed to increase agricultural exports by the host country to a country other than the United States, where the export would lead to direct competition in that third country with exports of a similar commodity grown or produced in the United States, and can the activities reasonably be expected to cause substantial injury to U.S. exporters of a similar agricultural commodity; or (2) in support of research that is intended primarily to benefit U.S. producers?

1. N/A. Not for agricultural development activities.

2. **Tied Aid Credits** (FY 1994 Appropriations Act, Title II, under heading "Economic Support Fund"): Will DA funds be used for tied aid credits?

2. No

3. **Appropriate Technology** (FAA Sec. 107): Is special emphasis placed on use of appropriate technology (defined as relatively smaller, cost-saving, labor-using technologies that are generally most appropriate for the small farms, small businesses, and small incomes of the poor)?

3. Appropriate tele-communications technologi will be discussed.

4. **Indigenous Needs and Resources** (FAA Sec. 281(b)): Describe extent to which the activity recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage institutional development; and supports civic education and training in skills required for effective participation in governmental and political processes essential to self-government.

4. The project will work with local participants, governmental and non governmental to increase their understanding and involvement of the private sector in telecommunications in Southern Africa.

5. **Economic Development** (FAA Sec. 101(a)): Does the activity give reasonable promise of contributing to the

5. Yes

development of economic resources, or to the increase of productive capacities and self-sustaining economic growth?

6. **Special Development Emphases** (FAA Secs. 102(b), 113, 281(a)): Describe extent to which activity will: (a) effectively involve the poor in development by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, dispersing investment from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using appropriate U.S. institutions; (b) encourage democratic private and local governmental institutions; (c) support the self-help efforts of developing countries; (d) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (e) utilize and encourage regional cooperation by developing countries.

6.(a) the RTR project will not directly work with the rural poor, but will encourage use of appropriate technologies to increase access to telecommunications in rural areas; (b) the project will encourage the involvement of private sector groups; (c) self-help efforts will be supported, especially in those countries that are undertaking restructuring of their telecommunications sectors; (d) women will be included as equal participants in project activities; (e) the RTR project includes a regional focus to address telecommunications issues in the field of regional cooperation.

7. **Recipient Country Contribution** (FAA Secs. 110, 124(d)): Will the recipient country provide at least 25 percent of the costs of the program, project, or activity with respect to which the assistance is to be furnished (or is the latter cost-sharing requirement being waived for a "relatively least developed" country)?

7. N/A. Not required for a regional project.

8. **Benefit to Poor Majority** (FAA Sec. 128(b)): If the activity attempts to increase the institutional capabilities of private organizations or the government of the country, or if it attempts to stimulate scientific and technological research, has it been designed and will it be monitored to ensure that the ultimate beneficiaries are the poor majority?

8. Yes

9. **Contract Awards** (FAA Sec. 601(e)): Will the project utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise?

9. Yes

10. **Disadvantaged Enterprises** (FY 1994 Appropriations Act Sec. 558): What portion of the funds will be available only for activities of economically and socially disadvantaged enterprises, historically black colleges and universities, colleges and universities having a student body in which more than 40 percent of the students are Hispanic Americans, and private and voluntary organizations which are controlled by individuals who are black Americans, Hispanic Americans, or Native Americans, or who are economically or socially disadvantaged (including women)?

10. The project procurement will comply with legislation regarding sourcing of assistance and goods from historica economically and sociall disadvantaged groups.

11. **Biological Diversity** (FAA Sec. 119(g): Will the assistance: (a) support training and education efforts which improve the capacity of recipient countries to prevent loss of biological diversity; (b) be provided under a long-term agreement in which the recipient country agrees to protect ecosystems or other wildlife habitats; (c) support efforts to identify and survey ecosystems in recipient countries worthy of protection; or (d) by any direct or indirect means significantly degrade national parks or similar protected areas or introduce exotic plants or animals into such areas?

11.(a) No
(b) No
(c) No
(d) No

12. **Tropical Forests** (FAA Sec. 118; FY 1991 Appropriations Act Sec. 533(c) as referenced in section 532(d) of the FY 1993 Appropriations Act):

12.

a. **A.I.D. Regulation 16:** Does the assistance comply with the environmental procedures se. forth in A.I.D. Regulation 16?

(a) Yes

b. **Conservation:** Does the assistance place a high priority on conservation and sustainable management of tropical forests? Specifically, does the assistance, to the fullest extent feasible: (1) stress the importance of conserving and sustainably managing forest resources; (2) support activities which offer employment and income alternatives

(b) No - Not in scope of project activities.

to those who otherwise would cause destruction and loss of forests, and help countries identify and implement alternatives to colonizing forested areas; (3) support training programs, educational efforts, and the establishment or strengthening of institutions to improve forest management; (4) help end destructive slash-and-burn agriculture by supporting stable and productive farming practices; (5) help conserve forests which have not yet been degraded by helping to increase production on lands already cleared or degraded; (6) conserve forested watersheds and rehabilitate those which have been deforested; (7) support training, research, and other actions which lead to sustainable and more environmentally sound practices for timber harvesting, removal, and processing; (8) support research to expand knowledge of tropical forests and identify alternatives which will prevent forest destruction, loss, or degradation; (9) conserve biological diversity in forest areas by supporting efforts to identify, establish, and maintain a representative network of protected tropical forest ecosystems on a worldwide basis, by making the establishment of protected areas a condition of support for activities involving forest clearance or degradation, and by helping to identify tropical forest ecosystems and species in need of protection and establish and maintain appropriate protected areas; (10) seek to increase the awareness of U.S. Government agencies and other donors of the immediate and long-term value of tropical forests; (11) utilize the resources and abilities of all relevant U.S. government agencies; (12) be based upon careful analysis of the alternatives available to achieve the best sustainable use of the land; and (13) take full account of the environmental impacts of the proposed activities on biological diversity?

(3) No

(4) No

(5) No

(6) No

(7) No

(8) No

(9) No

(10) No

(11) No

(12) No

(13) Yes

c. **Forest degradation:** Will assistance be used for: (1) the procurement or use of logging equipment, unless an environmental assessment

c.(1) No

indicates that all timber harvesting operations involved will be conducted in an environmentally sound manner and that the proposed activity will produce positive economic benefits and sustainable forest management systems; (2) actions which will significantly degrade national parks or similar protected areas which contain tropical forests, or introduce exotic plants or animals into such areas; (3) activities which would result in the conversion of forest lands to the rearing of livestock; (4) the construction, upgrading, or maintenance of roads (including temporary haul roads for logging or other extractive industries) which pass through relatively undergraded forest lands; (5) the colonization of forest lands; or (6) the construction of dams or other water control structures which flood relatively undergraded forest lands, unless with respect to each such activity an environmental assessment indicates that the activity will contribute significantly and directly to improving the livelihood of the rural poor and will be conducted in an environmentally sound manner which supports sustainable development?	(2) No (3) No (4) No (5) No (6) No
d. **Sustainable forestry:** If assistance relates to tropical forests, will project assist countries in developing a systematic analysis of the appropriate use of their total tropical forest resources, with the goal of developing a national program for sustainable forestry?	d. N/A
e. **Environmental impact statements:** Will funds be made available in accordance with provisions of FAA Section 117(c) and applicable A.I.D. regulations requiring an environmental impact statement for activities significantly affecting the environment?	e. Yes
13. **Energy** (FY 1991 Appropriations Act Sec. 533(c) as referenced in section 532(d) of the FY 1993 Appropriations Act): If assistance relates to energy, will such assistance focus on: (a) end-use energy	13. N/A. Project is not focused on energy.

efficiency, least-cost energy planning, and renewable energy resources, and (b) the key countries where assistance would have the greatest impact on reducing emissions from greenhouse gases?

14. **Debt-for-Nature Exchange** (FAA Sec. 463): If project will finance a debt-for-nature exchange, describe how the exchange will support protection of: (a) the world's oceans and atmosphere, (b) animal and plant species, and (c) parks and reserves; or describe how the exchange will promote: (d) natural resource management, (e) local conservation programs, (f) conservation training programs, (g) public commitment to conservation, (h) land and ecosystem management, and (i) regenerative approaches in farming, forestry, fishing, and watershed management.

14. N/A. Project will not fund a Debt-for-Nature Exchange.

15. **Deobligation/Reobligation** (FY 1994 Appropriations Act Sec. 510): If deob/reob authority is sought to be exercised in the provision of DA assistance, are the funds being obligated for the same general purpose, and for countries within the same region as originally obligated, and have the House and Senate Appropriations Committees been properly notified?

15. N/A. Deob/reob authority is not sought.

16. **Loans**

a. **Repayment capacity** (FAA Sec. 122(b)): Information and conclusion on capacity of the country to repay the loan at a reasonable rate of interest.

16. N/A. Project is financed with Grant funds not loan funds.

b. **Long-range plans** (FAA Sec. 122(b)): Does the activity give reasonable promise of assisting long-range plans and programs designed to develop economic resources and increase productive capacities?

c. **Interest rate** (FAA Sec. 122(b)): If development loan is repayable in dollars, is interest rate at least 2 percent per annum during a grace period which is not to exceed ten years, and at

least 3 percent per annum thereafter?

d. **Exports to United States** (FAA Sec. 620(d)): If assistance is for any productive enterprise which will compete with U.S. enterprises, is there an agreement by the recipient country to prevent export to the U.S. of more than 20 percent of the enterprise's annual production during the life of the loan, or has the requirement to enter into such an agreement been waived by the President because of a national security interest?

17. **Development Objectives** (FAA Secs. 102(a), 111, 113, 281(a)): Extent to which activity will: (1) effectively involve the poor in development, by expanding access to economy at local level, increasing labor-intensive production and the use of appropriate technology, spreading investment out from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using the appropriate U.S. institutions; (2) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward better life, and otherwise encourage democratic private and local governmental institutions; (3) support the self-help efforts of developing countries; (4) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (5) utilize and encourage regional cooperation by developing countries?

18. **Agriculture, Rural Development and Nutrition,** and **Agricultural Research** (FAA Secs. 103 and 103A):

a. **Rural poor and small farmers:** If assistance is being made available for agriculture, rural development or nutrition, describe extent to which activity is specifically designed to increase productivity and income of rural poor; or if assistance is being made available for agricultural research,

17.

(1) Project will expand access to reliable telecommunications which is one of the tools of economic growth. Rural Telecommunications will receive special attentio in some countries.

(2) The project will not work with cooperatives.

(3) Self-help efforts will be supported where governments are undertaking changes to increase private participation in telecommunications.

(4) Women will benefit equally from increased access to telecommunications.

(5) Regional cooperation and economic integration will benefit from improved telecommunicatior and alleviation of regional problems or bottlenecks.

18. N/A. Assistance is not being made available for agriculture, rural development, or nutrition.

has account been taken of the needs of small farmers, and extensive use of field testing to adapt basic research to local conditions shall be made.

b. **Nutrition:** Describe extent to which assistance is used in coordination with efforts carried out under FAA Section 104 (Population and Health) to help improve nutrition of the people of developing countries through encouragement of increased production of crops with greater nutritional value; improvement of planning, research, and education with respect to nutrition, particularly with reference to improvement and expanded use of indigenously produced foodstuffs; and the undertaking of pilot or demonstration programs explicitly addressing the problem of malnutrition of poor and vulnerable people.

b. N/A. Project is not financed under Section 104, and does not focus on Population and Health.

c. **Food security:** Describe extent to which activity increases national food security by improving food policies and management and by strengthening national food reserves, with particular concern for the needs of the poor, through measures encouraging domestic production, building national food reserves, expanding available storage facilities, reducing post harvest food losses, and improving food distribution.

c. Food security is not a focus area for the project.

19. **Population and Health** (FAA Secs. 104(b) and (c)): If assistance is being made available for population or health activities, describe extent to which activity emphasizes low-cost, integrated delivery systems for health, nutrition and family planning for the poorest people, with particular attention to the needs of mothers and young children, using paramedical and auxiliary medical personnel, clinics and health posts, commercial distribution systems, and other modes of community outreach.

19. N/A. Assistance is not being made available for population or health activities.

20. **Education and Human Resources Development** (FAA Sec. 105): If assistance is being made available for education, public administration, or human resource

20. N/A

development, describe (a) extent to which activity strengthens nonformal education, makes formal education more relevant, especially for rural families and urban poor, and strengthens management capability of institutions enabling the poor to participate in development; and (b) extent to which assistance provides advanced education and training of people of developing countries in such disciplines as are required for planning and implementation of public and private development activities.

21. **Energy, Private Voluntary Organizations, and Selected Development Activities** (FAA Sec. 106): If assistance is being made available for energy, private voluntary organizations, and selected development problems, describe extent to which activity is: — 21. N/A

a. concerned with data collection and analysis, the training of skilled personnel, research on and development of suitable energy sources, and pilot projects to test new methods of energy production; and facilitative of research on and development and use of small-scale, decentralized, renewable energy sources for rural areas, emphasizing development of energy resources which are environmentally acceptable and require minimum capital investment; — a. N/A

b. concerned with technical cooperation and development, especially with U.S. private and voluntary, or regional and international development, organizations; — b. N/A

c. research into, and evaluation of, economic development processes and techniques; — c. N/A

d. reconstruction after natural or manmade disaster and programs of disaster preparedness; — d. N/A

e. for special development problems, and to enable proper utilization — e. N/A

of infrastructure and related projects funded with earlier U.S. assistance;

f. for urban development, especially small, labor-intensive enterprises, marketing systems for small producers, and financial or other institutions to help urban poor participate in economic and social development. — f. N/A

22. **Capital Projects** (Jobs Through Export Act of 1992, Secs. 303 and 306(d)): If assistance is being provided for a capital project, is the project developmentally sound and will the project measurably alleviate the worst manifestations of poverty or directly promote environmental safety and sustainability at the community level? — 22. N/A

C. CRITERIA APPLICABLE TO ECONOMIC SUPPORT FUNDS ONLY

1. **Economic and Political Stability** (FAA Sec. 531(a)): Will this assistance promote economic and political stability? To the maximum extent feasible, is this assistance consistent with the policy directions, purposes, and programs of Part I of the FAA? — 1. N/A - Not ESF

2. **Military Purposes** (FAA Sec. 531(e)): Will this assistance be used for military or paramilitary purposes? — 2. N/A - Not ESF

3. **Commodity Grants/Separate Accounts** (FAA Sec. 609): If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made? (For FY 1994, this provision is superseded by the separate account requirements of FY 1994 Appropriations Act Sec. 537(a), see Sec. 537(a)(5).) — 3. N/A - Not ESF

4. **Generation and Use of Local Currencies** (FAA Sec. 531(d)): Will ESF funds made available for commodity import programs or other program assistance be used to generate local currencies? If so, — 4. N/A - Not ESF

will at least 50 percent of such local currencies be available to support activities consistent with the objectives of FAA sections 103 through 106? (For FY 1994, this provision is superseded by the separate account requirements of FY 1994 Appropriations Act Sec. 537(a), see Sec. 537(a)(5).)

5. **Capital Projects** (Jobs Through Exports Act of 1992, Sec. 306, FY 1993 Appropriations Act, Sec. 595): If assistance is being provided for a capital project, will the project be developmentally-sound and sustainable, i.e., one that is (a) environmentally sustainable, (b) within the financial capacity of the government or recipient to maintain from its own resources, and (c) responsive to a significant development priority initiated by the country to which assistance is being provided. (Please note the definition of "capital project" contained in section 595 of the FY 1993 Appropriations Act. Note, as well, that although a comparable provision does not appear in the FY 94 Appropriations Act, the FY 93 provision applies to, among other things, 2-year ESF funds which could be obligated in FY 94.)

5. N/A - Not ESF.

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Economic Analysis

I. Objective

The purposes of this economic analysis are to:

- describe the potential **links between use of USAID's dollar resources and impacts** on regional business investments (both within the sector and as a result of improvements in telecommunications systems) and, therefore, on jo creation;
- analyze **the "without" program case**;
- project some possible **outcomes of the "with" project and "with" nonproje cases** (with more emphasis on the project as the nonproject cases will be deal with in the country PAADs); and
- suggest selected **indicators** which should be monitored regularly to assess the economic impacts of this program.

II. The Linkage of Dollar Resources to Businesses to Jobs

For the RTR Project activity as it is currently conceptualized, the chain of causality anticipated is fairly long but clear:

- The Project will provide **technical advisors and funding for various activities**: conferences (seminars, workshops), study tours (internships) and specific consultancies.
- The Project advisers and activities will reach a critical mass of decision makers **working in or making decisions about the regional telecommunications sector** (estimated to be **500 people)** over the life of the project in a significant way[1].

This number was estimated in the following way: Five people per southern African country participating at least once per year in a regional Project-sponsored activity (5 times 10 times 5 = 250). In addition to these people, at least two people from each country will participate at least once in a U.S. based event (training, conference, etc.) 220 more. Smaller

ASSUMPTION: That it will be possible to identify the right people (i.e., potentially effective "champions" for change, a "critical mass" of change agents in each country) and to meet their information needs in a significant way (i.e., that information transferred is adequate to initiate or support action).

- Because of the **knowledge, skills, and services** they acquire through the Project activities, they will **change the way the governments think about telecommunications as well as ways in which they administer the sector** (public sector personnel) or **provide business services** in the telecommunications sector (both public and private).

  ASSUMPTION: They will be sufficiently well-placed, knowledgeable, and motivated to be able to use the information in their jobs.

- Thus, **public sector** personnel will, within three to five years:

  -- establish **new regulations or laws** which will attract private sector provision of telecommunications services (at a minimum non-basic and value-added services) as well as limited competition[2];

  -- make **organizational and staffing changes** in the public telecommunications systems so that greater efficiencies (more service per unit of cost) are achieved; and

  -- attract **additional private and public sector resources** for investment into the public telecommunications system.

  ASSUMPTION: The Project will significantly contribute to these outcomes.

regional activities will accommodate more problem-focussed groups of people. For the six topical seminars it is expected that a minimum of ten people each from a minimum of three countries will be involved (6 times 10 times 3) = 180. In addition to these people, a minimum of 50 people associated with SATCC, SATA, SADC, and the PTA will be engaged in a significant way in Project activities at some time during the five year period. Total minimum estimate of "critical mass" to be reached, 500.

[2] Basic services are defined as plain old telephone services (POTS), telex, and telegraph. Non-basic is everything else. Value-added services include such services as electronic fund transfers, reduced charge callback services, international travel reservation services, etc.

Obviously, other factors -- political, administrative, and financial -- will also have to be in place.

- Private sector individuals and firms in the telecommunications sector will, within three to five years:

  -- pursue **investment opportunities** in southern Africa on a non-subsidized, commercial basis; and

  -- provide an **expanded range of services** to public and/or other private entities in the sector.

- Private sector businesses (not in the telecommunications sector per se) will, as a result of the actions by private or public sector personnel in the sector as described, will benefit by receiving a greater number of reliable basic phone hook-ups:

  -- in a shorter period of time;
  -- for a reasonable cost;
  -- with greater connectivity within the country, the region and throughout the world; and will
  -- acquire other kinds of value-added services; and
  -- purchase an increased volume of telecommunications equipment.

- The **total number of businesses established** in each country will increase. New businesses dependent on improved communications will be established in part because they have access to these communication services.

- The **total volume of business** conducted will increase. Those businesses which are currently limited by telecommunications constraints (e.g., ATM coverage of banks) will expand.

- Both forms of business expansion will lead to **a net creation of jobs**. There is little prospect of improved telecommunications services displacing current workers (except, perhaps, for some courier services and some public sector telecommunications employees).

- Both urban or rural job-seekers will benefit from Project action. It is not likely that employment creation will be biased to one gender or another as a result of the Project.

There is a underlying sequence of economic justifications implicit in this chain of reasoning linking USAID's investment (the cost of the Project) to the ultimate impact (more business and job creation in the countries in the region). While it is not possible to prove that telecommunications investments will generate more economic growth and job/income creation than any other investment of equivalent size, USAID's overall economic rationale for investment in the telecommunications sector is based on the observation, supported by international analysis, that **increased telecommunications investment will cause GDP to increase.**

- Competitive bidding procedures should result in the selection of the most technically-qualified institutional contractor (to provide the required Project services-- technical advisory services and organization of various activities) at the lowest cost (i.e., be the most cost-effective service provider).

- The additional information about telecommunications options and approaches which the Project will provide will be used by public telecommunications sector leaders and managers because they will see the **financial, economic and political benefits**:

  -- restructuring the PTTs and the tariff system will **increase revenue collections** from public telecommunications services, releasing additional funds and foreign exchange for reinvestment in the sector, cross-subsidization of rural service, or for general uses;

  -- the improved telecommunications sector will stimulate business growth that will **create jobs, earn foreign exchange, open new indigenous business opportunities, and broaden/deepen the tax base**;

- The additional information about (the rapidly improving) telecommunications sector opportunities in southern Africa which the Project will generate **interest in investment opportunities** which will result in:

  -- overall **increased investments** in telecommunications services in countries (a benefit from the perspective of the country and its national accounts);

  -- **increased profits to the firms** from the sale of goods or services (including operating a company on a sole or joint venture basis); and

  -- **increased tax revenues** from increased volume and profitability of

private business.

- The primary **benefits** generated by the additional telecommunications services available **to the private businesses** will be:

  -- better access to and from suppliers;
  -- more cost-effective transport services;
  -- more cost-effective banking and finance services;
  -- better information on markets; and
  -- increased efficiency of industrial production.

- To complete the circle on economic impact, the additional business activity **will increase GDP** which should, in turn, strengthen the broader commitment of the government to invest in telecommunications and/or stimulate greater private investment in the sector. Telecommunications and GDP have been shown to have a two-way causal relationship, that is, each contributes to the other.[3]

Before attempting to quantify the dimensions of the economic effects associated with Program/Project activity, we lay out what the situation will be without the Program/Project.

III. The "Without" Program Case

Even were USAID not to undertake this Regional Telecommunications Restructuring Program, there would be development in the telecommunications systems in southern Africa. Drawing on data from the Teleconsult analysis done for this Program design, the **best** case estimate of the "without program" case is[4]:

- financial investments will continue to be made in the sector, mostly by the monopoly PTCs, optimistically estimated at approximately $700 million per annum for all eleven countries in the region (over half that in South Africa);

[3] We return to this again below. Telecommunications is a stronger causal factor when GDP is low; GDP is a stronger causal factor when GDP is high.

[4] This best case scenario assumes donor support continuing at present levels, peace in Angola, and the acceptance of PTC provided projections which in the case of Malawi, Tanzania, and Zambia are not realistic without privatization.

- growth in the number of Direct Exchange Lines by 70 percent, from 4.4 million DELs to 7.5 million DELS (60% of new DELS to be installed in South Africa);

- some non-basic and value-added services will be added (or allowed) by the PTCs in urban areas (such as digital transmission lines for banking use; mobile cellular telephony in some cities) although the extent and speed of these innovations is not known;

- some rebalancing of tariffs in absolute terms, but still insufficient revenues to keep up with inflation and to cover PTC costs of service delivery; and

- some restructuring of PTCs will be undertaken to make them more financially autonomous and accountable,

There will be some increase in U.S. equipment sales in the region (simply because American equipment is internationally competitive and, with World Bank or AFDB financing, international tenders will be required) but there will be little, if any, U.S. investment in telecommunications services **within** the region, with the possible exception of value-added services in South Africa.[5]

Rural areas in general will continue to experience a slow growth in services compared to urban areas, as PTCs continue to direct most investment to business consumers in towns and cities.

Demand will continue to grow faster than supply.

First, given that GDP growth drives increased demand for telephone services in general (again, we return to this below), the anticipated growth in GDP will itself generate more demand for services.

From our general knowledge of the economic and political reforms being undertaken in the region, the outlook for GDP growth is fairly positive (barring a recurrence of drought). The IMF "is forecasting a marked acceleration in the pace of African economic expansion from 2.8 percent over the past 20 years to 1992 to 3.3 percent a year in 1993/94 and 4.4 percent a

[5] Some continued investments will be made in bulk international transmission that will positively impact the region, such as the PANAMSAT (geostationary satellite), IRIDIUM (low earth orbiting satellite), or FLAG (fiber optic) concepts.

year during the 1995-98 period."[6] Standard Chartered analysts note that "it is already clear that growth over the 1993/4 period will fall short of the projected 3.3 percent average, while the faster growth forecast for the post-1995 period will depend on a much improved investment and productivity performance than in the recent past." Noting that the IMF itself finds African forecasts more subject to uncertainty than those for other regions, the Standard Chartered analysts conclude that an annual GDP growth rate of 4 percent is not an unreasonable target, though "in southern Africa, it will depend on the success of political and economic transition in South Africa itself. It is difficult to see the subcontinent prospering without political stability and economic expansion in South Africa. A weak South African economy will become a major constraint on the region as a whole deterring new investment and constraining trade expansion."

While the negotiations between the Government of South Africa and the African National Congress (ANC) have been going well, there are still important factions of the population which are not pleased with the political changes implied, so the ultimate smoothness of the transition is still unknown. Further, ANC has, in the past, espoused an African socialist approach to economic growth. While its partners in this approach (Tanzania, Mozambique, Zimbabwe, and Zambia) have gradually changed their perspectives and adopted a more market-oriented stance, the ANC has only recently evidenced a similar degree of change. There is some feeling that a fear of constraints being placed on market forces in South Africa is one of the factors now driving a substantial growth in outbound investment by South African companies. Between 1990 and 1993, South Africa's outward investments grew by about a billion dollars, from $7.6 to $8.5 billion. Since 1986, foreign investments in South Africa have been minimal. Between 1986 and 1991, it was estimated to be only $37 million. This implies a net outflow of investment from South Africa.

In general, the Standard Chartered analysis reflects a widespread consensus as to the reasons for southern Africa's relatively weak economic performance. Interestingly, however, they emphasize the importance of **foreign investment** in getting productivity and growth up.

> There is no single reason for sub-Sahara Africa's disappointing foreign investment performance. Obviously, in several countries, including South Africa, Angola, and Mozambique, political unrest has been a major factor. A further explanation is the region's failure to switch away from a resource-based growth strategy. The bulk of new foreign investment in Africa is in the energy and mining sectors, with very little

[6] Standard Chartered Africa Quarterly Review, Sept. 1993. This analysis quotes from the IMF World Economic Outlook for 1993 and then comments on it from the perspective of Standard Chartered, an experienced private bank with a long history in all the countries of southern Africa. All of the following information is taken from this report, pp. 2 ff.

being attracted into manufacturing or services, other than tourism. Falling per capita incomes, the shortage of skills, and tiny domestic markets are also to blame.

The region also lacks the reliable infrastructure needed by foreign firms, while the return on investment is lower than elsewhere in the developing world, except for Latin America.

African governments are well aware of the need to liberalise their economies ...[to] broaden their productive base [and] to attract foreign investment. The World Investment Report singles out five sub-Sahara countries that liberalised and revamped their investment codes in 1991/92 - Burundi (setting up Free Zones), Congo, Ethiopia, Ghana, and Malawi. But these examples are easily swamped by the liberalisation under way in Asia (especially China and India) and in Eastern Europe.

The region must try a good deal harder than in the past to attract foreign investment. The hard reality is that modern technology - the flexible factor, the reduced importance of labour costs and unskilled labour generally, the need to be close to the market and the need to emphasise quality rather than price is working against Africa... A recent study by the International Finance Corporation found that direct labour costs have little influence on foreign investment decisions...countries [need] to become part of an integrated network of producers. Governments must learn, it says, that today it is more important to act as host to technology than to own it. As global production becomes more shared out across national frontiers, so African governments must become more hospitable to foreign firms, clearing away administrative and legal obstacles and making it easier for firms to move products, skills and technology across national boundaries..".

The Standard Chartered analysis does not note, specifically, the importance of communication systems in facilitating the recommended moves, but the Teleconsult report -- along with various other analysts -- does:

"For the developing world, a modern telecommunications infrastructure is not only essential for domestic economic growth, but a prerequisite for participation in increasingly competitive world markets and for attracting new investments".[7]

In general, then, our assessment of the "without" Program outlook for southern Africa is that there will be insufficient growth in the telecommunications sector if the current pace of investment and restructuring is pursued. Further, this insufficient growth will

[7] Teleconsult p. II-2

measurably constrain the process of business investment (both local and foreign), job creation, and economic growth overall.

This assessment is based upon the following:

- The projected expansions of PTC services (the addition of 3.1 million DELs) will be more than outweighed by the projected growth in **expressed** demand (of 4.6 million DELS); thus, there will be **an additional 1.8 million more customers waiting for basic service** in the year 2000 than there were in 1990. If between 60 and 80 percent of these unserved customers are businesses (or potential investors)[8], then the "loss" in terms of economic activity is obvious although not readily quantifiable.

- In the countries most vigorously undertaking economic reforms (Zambia, Tanzania, Malawi, and Mozambique), **the gap between what is planned to be spent on telecommunications systems improvements and what should be spent to meet consumer demands** is greatest. Further, the projected density of service in these countries (except Zambia) will continue to be the lowest in the region. If one accepts that telecommunications services are a necessary complement to other economic enabling reforms, then telecommunications is likely in these countries to emerge as a more serious constraint in 2000 than it was in 1990.

- These same four countries are also the lowest income countries in the region, with average per capita incomes in 1990 of approximately $270, $160, $170, and $105 compared to a region-wide average of $336 (not including South Africa). According to an ITU study[9], "the incremental contribution of a telephone to GDP is higher at the lower end of the development spectrum. At the GDP per capita of $100 per year, an additional telephone line can contribute statistically $12,000 to GDP." The projected unmet demand of consumers in these four countries alone in the year 2000 will be some 980,000 individuals or businesses. Even using the more conservative estimate of $7800 in GDP contributions generated by an additional telephone in these four

[8] Data on the breakdown between business and residential service is not available for all countries in the region. For Zambia, Zimbabwe, and Lesotho, 44 percent of the Direct Exchange Lines active were business connections. (Teleconsult, ibid., Section I)

[9] ITU, 1988. Cited in Teleconsult, p. II-8.

countries[10], this implies **a "loss" of potential GDP of almost $8 billion to these countries**, more than 50 percent of their projected GDP.

- Without greater levels of investment than those planned by the PTCs, it is **unlikely that the quality of service in the region will improve markedly** -- although they will improve because the network will have been expanded because more reliable and effective technologies will be installed. A low quality of service has been shown to affect individual businesses' productivity[11].

The data on which these conclusions are based are, admittedly, rough estimates derived from at times questionable secondary data sources, and using statistical relationships based on worldwide trends and experiences. They are, however, the best information available.

Table 1 summarizes the data which Teleconsult was able to compile on the impact of planned PTC expenditures in all countries of the region except Angola. Table 2 recaps the investment indicators either reported by the PTCs themselves or found in general development plans issued by the governments of the countries concerned. Table 2 includes Teleconsult's calculation of the amount of PTC investment that would be needed to meet the unmet demand which is noted in Table 1. More detailed numbers are in Annex Table 1; these are reproduced directly from the Teleconsult report.

Table 3 looks at a more region-specific estimation of the likely GDP contribution of an additional telephone than the $12,000 figure which the ITU reported for low income countries. The results are more modest (incomes are higher than the ITU's $100) but still indicate that more phone connections will make a big difference in GDP.

A final table (Table 4) presents the results of a simple econometric model done by Teleconsult to explore whether the empirical data for the southern Africa region support the finding of international analyses that telecommunications investments drive GDP growth and,

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[10] This comes from a Teleconsult estimate discussed below.

[11] The Teleconsult report cites a micro-analysis done with nine Kenyan firms that showed a loss of potential profits (2.8 percent) and gross revenues (0.2 - 0.5 percent), higher sales prices for products, higher costs of inputs, excessive inventories, higher costs for vehicle use, increased idle time for machinery due to delayed access to repair personnel and spare parts, diminished capacity to deliver goods to remote consumers, additional labor costs for messengers, drivers, etc., and loss of management time (1 to 1.5 hours per day). Teleconsult, ibid., pp. II-4,5.

at the same time, that GDP growth contributes to an increase in telephone services. This two-way causal relationship has been tested time and again around the world. Correlations are generally high for lower income countries; for higher income countries, the marginal contribution of telecommunications to growth drops.

The results in the regional analysis are positive and significant except for Mozambique and, in one equation, for Zambia. A one percent increase in the number of direct exchange lines (used as a proxy for telecommunications investments as most of the expansion in services projected is basic telephone service) will lead to anywhere between a 0.06 percent and a 0.8 percent change in GDP one year after the telephone is installed. Conversely, a one percent increase in GDP is estimated to contribute to between a 1.2 percent and 3.11 percent to DEL increases.

Table 1. Demand and Supply for Telecommunications Services in Southern Africa

Country	1990 Direct exchange lines (DELs) supplied to customers	1990 Density (DELs per 100 inhabs)	1990 Fill Factor (% of switching capacity used)	1990 Shortfall (% of demand not met by supply)	Projected density in year 2000 using current plans	Projected shortfall
Botswana	29,832	2.29	87	30	3.04	39
Lesotho	10,900	0.61	50	73	1.59	36
Malawi	25,972	0.32	64	41	0.97	243
Mozambique	47,439	0.30	57	69	0.73	99
Namibia	51,925	2.88	87	3	3.87	38
South Africa	2,866,000	7.24	77	6	9.44	19
Swaziland	13,524	1.69	75	58	3.06	20
Tanzania	73,011	0.30	87	105	0.71	176
Zambia	70,472	0.87	62	167	1.64	59
Zimbabwe	123,665	1.26	77	58	3.05	75

Source: Teleconsult p. 1-6, Table 1.

Table 2. An Assessment of PTC Expenditure Plans and Projected Needs for Telecommunications Investments

Country	GDP in 1990 (billions of U.S. $)	Amt. (US$ millions) estimated to be spent on telecomms 1991-2000	Percent of GDP that is planned to be spent on telecomms	Percent that "should" be spent on telecomms to meet demand
Botswana	1.8	119	0.3	0.5
Lesotho	0.4	58	1.1	1.9
Malawi	1.4	236	1.2	5.4
Mozambique	1.7	280	1.2	3.2
Namibia	1.7	135	0.6	1.2
South Africa	100.0	3782	0.3	0.5
Swaziland	0.7	61	0.8	1.1
Tanzania	3.9	830	1.4	4.6
Zambia	2.2	320	0.6	1.7
Zimbabwe	6.2	1103	1.4	2.8

Source: Teleconsult p. I-6, Table 1.

Table 3. Potential Contributions of Telecommunications Investments to GDP in the SADC Countries

Country	1990 Per Capita GDP U.S. $	Estimated GDP Contribution of Additional Telephone (to estimated "normal" density) is installed
Botswana	1,385	960
Lesotho	249	2300
Malawi	170	5550
Mozambique	105	12000
Namibia	944	1440
Swaziland	83	1640
Tanzania	160	11000
Zambia	274	2750
Zimbabwe	[illegible]	1950

Source: Teleconsult, p. II-29. South Africa was not included as it has an average GDP per capita of $2,500 and international experience shows that the marginal contribution of phones decreases substantially with increasing levels of incomes.

Table 4. Estimated Elasticity of DELs to GDP and GDP to DELs

Country	Elasticity of GDP with respect to DELs	Elasticity of DELs with respect to GDP
Botswana	0.75	1.21
Lesotho	0.25	3.11
Malawi	0.47	1.91
Mozambique	0.20*	-0.15*
Namibia	0.31	2.99
Swaziland	0.55	1.39
Tanzania	0.49	2.18
Zambia	0.06	13.98*
Zimbabwe	0.77	1.22

Source: Teleconsult, Ibid. p. II-30. * indicates not significant at the 95 percent level of confidence.

IV. "With" the Program and the Project

From the information already presented, it is clear that USAID's $75 million investment in regional telecommunications restructuring over the 1994 - 1999 period would not provide a significant contribution to the region's telecommunication needs if it were simply utilized as an additional capital investment into the region's infrastructure.

> **At about $3,000 per DEL, RTR Project funds could fund the creation of just 25,000 new lines or about one percent of unmet demand.**

Rather, as the logic presented in Section B points out, the Project will attempt to ensure that:

- the $700 million/year in **planned investments by the PTCs themselves serves as many customers as efficiently as possible** because:
  - -- management systems are restructured and tariffs are rebalanced;
  - -- customer-oriented services are introduced which will provide additional gains in the PTT or general government revenues.
- **additional resources for further investments are brought into the public telecommunications system,** through:
  - -- higher retention of increased profits;
  - -- greater government budget allocations;
  - -- increased amount of (especially untied) donor contributions;
  - -- increased private and public equity investment; and
  - -- increased commercial borrowing;

  as it is perceived that such resources can be used effectively and earn commercial rates of return adjusted for risk.
- **private sector individuals and firms** in the telecommunications sector both from the region and the U.S. will:

- -- **pursue investment opportunities** in southern Africa on a non-subsidized, commercial basis; and/or

- -- **provide an expanded range of services** to public and/or other private entities in the sector.

- Limited **competition** further increases the quantity and quality of customer-oriented services at lower costs.

By unleashing an additional (conservative) 10% in investment capital through public and private sector resources per year (a total of $350 million over five years), and lowering the cost of investment (so that the cost per DEL drops by a third to $2,000), RTR Project funds could leverage the creation of an additional 175,000 lines or about seven percent of unmet demand.

The ultimate measure of impact of the Program/Project's facilitative or catalytic actions, however, will extend beyond the telecommunications sector.

- The total number of businesses established in each country will increase. New businesses dependent on improved communications will be established in part because they have access to these communication services.

- The total volume and value added of business conducted will increase. Businesses limited by telecommunications constraints will expand.

- Business expansion will lead to a net creation of jobs. Improved telecommunications services will reduce some workers in telecommunications substitute businesses (e.g., courier services), in outdated telecommunications services (e.g., telex operators), and in restructured public sector telecommunications employees.

Disaggregating, projecting, and monitoring the impact and value of Program/Project contributions in a way which separates out those which are incremental to those likely to be undertaken in the "without" case is not a straightforward task, because of both methodological and statistical shortcomings.

What follows is an outline of an extremely rough, first order framework for analysis that does little more than reflect our current thinking, and which will be continually revised and

improved over project implementation.[12] This model will be further developed in the course of project implementation.

ILLUSTRATIVE INDICATORS

Capital Available for Telecommunications Investment

The total capital invested in the telecommunications sector will increase from US $700 million/year to US $ ___ million/year, because:

-- **Foreign private equity capital** invested will increase from US $ 50 million/year to ___ million/year because of policy/regulatory changes, increased knowledge of investment opportunities, and analysis of specific investment projects.

-- **Domestic private equity capital** invested will increase from US $ ___ million/year to US $ ___ million/year because of policy/regulatory changes, increased knowledge of investment opportunities, analysis of specific investment projects, and firm/co-operative level assistance.

-- **Public sector capital** invested will increase from US $ ___ million/year to US $ ___ million/year because greater retention of earnings because of increased autonomy; and higher earnings (from rebalancing, cost-based tariffs, lower operating costs, greater demand for services) as measured by revenue per employee.

-- **Debt financing** will increase from US $ ___ million/year to US $ ___ million/year because of the ability of the public sector to borrow in commercial market due to greater public sector autonomy; lower D/E ratios because of equity capital increases; more creditworthy public and private telecommunications operations.

-- **Donor financing** will be static at US $ ___ million/year , but will be more appropriately targeted, more concessional or less tied.

[12] We have budgeted for analytical work to be undertaken immediately upon project obligation to develop an appropriate methodology for demonstrating project impact, and to develop the appropriate statistical baseline.

Cost per DEL

The cost per DEL will decrease from $US 2.5-3.5 thousand to ___ thousand because:

-- More autonomous public sector and private sector managers are better able to make untied, cost-effective procurement choices.

-- Increased competition amongst world-wide suppliers in the region because of increased information about opportunities.

-- Information about cost effective technologies will be more readily available to operators.

Access

The **number of DELS** will increase from the baseline of 8.4 million to ___ million, because of the improvement in the following ratio:

$$\frac{\text{Total investment capital available}}{\text{Cost per DEL}}$$

The **number of villages** of over ___ inhabitants with at least one phone booth will increase from ___ thousand to ___ thousand, because of the lower costs of service from management improvements, stricter rural service obligations as condition of operating licenses for both public and private sector operators, and greater retained earnings to plow into rural service.

Cost of Service

The **cost of services** to businesses will drop from an average of $US ___ per call-minute to $US ___ per call minute, because:

-- Rebalanced and cost-based tariffs;

-- Lower cost per DEL (lowering cost of cost-based tariffs); and

-- More efficient usage of national networks (because of above mentioned project interventions as well as competition), as measured by employees per DEL;

-- More efficient use of regional networks (because of better regional co-operation through project support of SATCC and SATA), as measured by cost per intra-regional circuit; and

-- More efficient use of international networks (because of better regional co-operation, and more competition/investment in service by foreign carriers), as measured by cost per international circuit.

The Number of Value Added Services available to businesses

The number of businesses with access to the following Value Added Services will increase because of the already discussed project interventions:

-- Businesses with access to switched or private data services will increase from ___ thousand to ___ thousand.

-- Businesses with a mobile cellular phone will increase from ___ thousand to ___ thousand.

-- The number of video-conferencing centers will increase from ___ to ___.

The Costs of Business Services

-- Truck transport costs will decrease from an average of US$ ___ per metric ton to US$ ___ per metric ton because of higher load factors, reduced transport time, less theft, lower insurance costs (because of a greater variety of cheaper, more widely available telecommunications services to reach customers and drivers).

Business Growth Indicators[13]

-- Sales volume per business will increase __ percent because of ease of reaching and being reached by customers through better telecommunications services.

[13] One of the first studies to be done by the Project will be an analysis of private business demand for, and the impact of, telecommunications services in business. However, data from the very small study in Kenya of nine corporations cited in the footnote above has been confirmed by other micro-studies in Latin America. There seems to be a good basis for hypothesizing that positive results will be measurable at the firm level.

-- The number of employees per business will increase __ percent because of business expansion.[14]

-- The ROI per business will increase from __ percent to __ percent, because the costs and ease of obtaining and transmitting information will decrease with better telecommunications services.

V. Indicators

A number of potential indicators for monitoring Program/Project progress and impact have been suggested in the sections above. In the interests of keeping the monitoring and evaluation (M & E) system simple, but, at the same time, ensuring that there is enough information to confirm (or reject) the economic logic of the Program, a set of 12 indicators is recommended.

Regional/Country Telecommunications Service Penetration/Quality

- Investment in telecommunications services/year (disaggregated by public/private; debt/equity)
- Active DELs (disaggregated by business/individual; urban/rural)
- Types of services being offered (disaggregated by ownership status -- public, private, mixed)
- Call Completion Rate

PTC Efficiency

- Revenue per employee
- Revenue per DEL
- Employees per thousand DELs
- Sales/Accounts Receivable (measure of collection time)

[14] The GEMINI Survey of MSEs in Zimbabwe, 1993 showed that employment growth at small and medium sized enterprise was 2-3 times greater if the enterprise had a private or party line telephone than if the enterprise had no telephone.

Firm/Micro-economic Level

- Transport costs per metric ton
- Sales per firm
- Employees per firm
- ROI per firm

Political Analysis[1]

Governments in the southern Africa region have a myriad of apprehensions about private sector investment in the telecommunications sector. Some are legitimate and must be adequately provided for through appropriate regulation. Others stem primarily from a lack of adequate information on the potential benefits of private sector participation in the sector.

Concerns range from national security and secure communications, to loss of revenue, to fears of inadequate service for rural areas. In addition, governments are concerned about ensuring adequate indigenous participation in any private sector investment and of the dangers of creating a private sector monopoly.

Most of these concerns can be mitigated by a combination of the provision of information, design of appropriate regulatory safeguards, technical assistance, and in certain select instances program assistance.

These concerns and apprehensions -- and how the RTR program and other actors will mitigate them -- are discussed below.

1. **National Security**. The national security implications of private sector control, especially foreign private sector control, appear to be a major concern for many governments. There are three dimensions to this concern:

- **Domestic surveillance**. Governments have a law enforcement interest in being able to monitor the telecommunications network, and fear this may not be possible in a private competitive environment. Digital communications allow encryption techniques that can make surveillance very difficult.

- **Secure government communication**. Governments are concerned with the

[1]These concerns have been drawn from a number of sources. Rogati Kayani's presentation at the Windhoek conference, for example, is especially insightful. Other concerns have been cogently articulated in a series of informal discussions with officials which were carried out in the process of PID/PAIP development.

security of certain communication channels (i.e., military), and fear that this would not be possible in a private competitive environment.

- **Foreign control of strategic infrastructure.** The national security concern over foreign control of the telecommunications network has legitimacy. For example, in the U.S., no major communications provider can have over 25% foreign shareholding.

Mitigation measures:

The countries in the region will be provided with information regarding the steps that countries that share these national security concerns have taken to ensure that technological or ownership patterns do not damage security interests. More specifically,

- Through wire-tap orders or other mechanisms, domestic surveillance can easily be arranged through private telecommunications operators. Regulations can be passed that require all vendors and users of digital encryption to register the "key" with a government entity, with the appropriate safeguards to ensure legitimate privacy concerns.

- Governments can continue to have their own secure networks for classified communication. These are often owned and operated by private operators, who can be thoroughly screened and classified.

- Protection of national interests, even with majority private/foreign control, can be solved satisfactorily through a variety of mechanisms throughout the world. In the U.K., for example, the government retains a "golden share" in the privatized British Telecom that ensures it a veto power over board decisions that it believes would violate strategic national interests.

2. **Telecommunications as a source of revenues.** Many government leaders are afraid of giving up what they perceive as a "cash cow", that can be financed through donor funds. The PTCs usually make a profit in local currency terms, and earn foreign exchange from international traffic.

Mitigation measures:

Governments in the region will be shown in concrete terms that:

- The "profits" shown by most PTCs exist only in an accounting sense, largely because of low depreciation expenses because of completely inadequate investment.

- Under private sector management, profitability could expand so much that the returns from taxes on the privately controlled entity plus the dividends from any residual share would be far greater than the status quo. The indirect positive impact on income tax generation from a more healthy economy due to improved telecommunications services would even more significant.

- Net foreign exchange earnings only come about because of outrageously high international calling rates, which stifle economic development. The superior telecommunications services offered by a restructured or private operator would stimulate the economy so that the economy - wide foreign exchange gains would far outweigh the foreign exchange gains from the imbalanced tariff structure.

3. **Labor concerns.** Unions and workers view private participation and competition as bringing layoffs, not opportunities for higher salaries and advancements. The prospect of layoffs always raises fears of social and political instability.

Mitigation measures:

Governments will be shown that:

- many if not all workers can be protected from adverse impacts of private sector participation. In the 1991 telecommunication privatization in Guyana, for example, **no** layoffs occurred. Even though the Guyana PTC was heavily over-staffed, the new owners projected such rapid growth that the existing staff was easily absorbed. In addition, workers' salaries in Guyana increased on average over 400 percent within the first year of private sector control.

- Job opportunities in private sector telecommunications operations will open up, as well as greater job opportunities from business operations that can start or grow because of better telecommunications services.

- Short-term transitional unemployment impacts might be alleviated by redundancy payments or retraining programs that might be considered by USAID (or other donors).

4. **Indigenous Participation**. Government and business leaders in many SADC regions have expressed a concern that if private sector management and investment were allowed immediately, the indigenous population may not have an opportunity to participate, due to a lack of capital and skills.

Mitigation measures:

It must be plainly acknowledged by all parties that the indigenous business community on its own in all of these countries do not yet have the capital and skills to run all aspects of a modern telecommunications sector.

This does not mean, however, that in many countries there are not indigenous entrepreneurs who with a foreign joint venture partner would be able to participate in a highly significant fashion. In Zimbabwe, South Africa, and Zambia highly qualified indigenous entrepreneurs have been pressing to make investments in the sector.

In all countries, however, increased indigenous investment can be leveraged by creative financial techniques such as Employee Stock Ownership Plans (ESOP), management buy-outs, and "warehousing" equity by international development finance institutions such as the IFC.

For smaller indigenous businesses, the opening up of the sector to private investment and competition would add tremendous opportunities for smaller indigenous businesses. For example, in South Africa, smaller indigenous business will play a major role in retailing of cellular services, while the larger businesses that hold the licenses will concentrate on developing the infrastructure and operating the system.

5. **Local Manufacturing Base**. Many governments view the PTT procurement budget as a potential resource that can be used to build up the local manufacturing base. They fear that a commercially minded private or even independent PTT would ignore this social goal, and source from more competitive outside suppliers. South Africa has considerable capabilities already; Zambia, Zimbabwe, and, to a lesser extent, Tanzania also have some industrial capacity at present to supply the telecommunications sector.

Mitigation measures:

Where a competitive advantage can be expected, opportunities for local manufacture of certain telecommunications equipment can and should be pursued[2]. The more important priority for broad based industrial development is a functioning modern telecommunications system. Sector development should not be retarded by squandering needless resources or time on the promotion of local manufacture of capital intensive, high technology products.

6. **Ideology**. Many governments in the region are relatively recent converts to a free market, private sector oriented economic system. There are still many people within these governments who are uncomfortable with private sector involvement in a "strategic sector". In part, this is due to a belief that the private sector will not respond particularly to the needs of the entire population, i.e., will not ensure "equity" in service delivery. This natural reluctance is further strengthened by the self-interests of parastatal managers whose role would necessarily be diminished in a private sector oriented and competitive market.

Mitigation measures:

The purely ideological discomfort with a private sector telecommunications sector is rapidly eroding in most countries, as structural adjustment programs are introduced and other ancillary issues discussed above are better understood.

On the other hand, by encouraging the separation of operating and regulatory functions, the parastatal managers who resist reform measures will have a less firm grasp on the levers of political power. In addition, through RTR activities, government officials will be better informed and more able to make independent judgments concerning the representations of PTT management.

7. **Rural Service.** Many governments in the region have expressed a belief that private sector firms could not be induced to provide service to less profitable rural/low income customers. As a consequence, they resist structural change that will bring in private sector commercially minded operators.

[2] SATCC, with CIDA financing, has analyzed manufacturing options and have identified immediate opportunities in expanding regional production and trade of cable and utility poles. Further research on higher technology manufacturing options is being undertaken by UNIDO.

Mitigation measures:

The RTR funded activities will clearly demonstrate to policy makers that the public sector PTTs in the region have not been able to provide an adequate level of rural services due to lack of funds and competing priorities. With rural penetration in some countries below one phone per thousand inhabitants, a private sector firm could hardly do worse.

It will be demonstrated that as autonomous privatized entities, however, the telecommunications operators will have the financial and managerial resources to better serve the rural areas.

In fact, many countries have included as covenants of privatization a stipulation that so many thousand lines per year must be provided to targeted rural areas. Operators accept these restrictions in return for the opportunity to provide service to urban areas; after all, some cross-subsidization of rural or low income subscribers by urban or better off subscribers is necessary everywhere in the world.

Other tested alternatives will be presented to governments as options. In the United States, for example, independent rural telephone cooperatives were supported with low interest loans through the Rural Electrification Act. This is being repeated again in Poland and Hungary.

Institutional Analysis

The telecommunications sector and its development touches a wide range of individuals and organizations -- public, private; local, international; urban, rural -- each with different interests, concerns, and levels of involvement in the sector. Some individuals simply want an ordinary telephone installed in their residence so they can call their relatives across town and coordinate week-end plans; others need high-speed digital links that permit the simultaneous transmission of voice and data through a private, secure network spanning three continents. Some individuals would be satisfied with a handset that works reliably; others want to invest in the installation and management of complex systems that provide services to others and a profit to themselves.

The successful structuring and implementation of the ISA initiative in telecommunications will depend on an astute and ongoing analysis of the key stakeholders in the telecommunications sector. **Who** are the key stakeholders? **What** are their concerns and interest? **How** can these interests and concerns be met so that sector development can proceed?

If successful, USAID's Program will help meet **users'** needs for telecommunications services. For this to happen, the Program intends to support a process of restructuring in **the public telecommunications entities** that will involve increased participation of **private sector providers of telecommunications service and goods.** USAID support must be coordinated with that of other **donors** and **international organizations**.

In this Stakeholder's Analysis, the interests and potential involvement of each of these groups of stakeholders is reviewed. The cast of characters includes:

1. Regional/International Organizations
    - SATCC
    - SATA
    - ARTC
    - AFRALTI
    - PTA
    - PATU
    - ITU

2. Donors and other foreign government interests
   - USAID and other USG agencies
   - Other Bilateral Donors
   - AFDB
   - World Bank Group
   - EU

3. Public Sector Providers of Telecommunications Services

   Post, Telephones and Telegraphic (PTT) entities

4. Private Firms Offering Telecommunications Services/Equipment
   - Telecommunications Service Providers
   - Manufacturers and Equipment Suppliers
   - U.S. Industry

5. Labor Unions

6. The Parent Ministries of PTTs
   - Communications
   - Information/Broadcast
   - Transport

7. Other Ministries/Entities
   - Treasury/Finance (balance of payments, budget)
   - Industry and Commerce (local manufacture, indigenous participation)
   - Defense/State Security (national security)
   - Privatization
   - National Planning
   - Health, Education, and other Social Services
   - Transport

8. Users Groups
   - SMEs
   - Industry and Energy
   - Transport
   - Banking and Finance
   - Agriculture and other Rural Based Enterprise
   - Tourism

These entities, their concerns, and their activities are briefly outlined below.

1. Regional and International Telecommunications Organizations active in Southern Africa

a. SATCC, The Southern African Transport and Communications Commission

The Southern Africa Transport and Communication Commission (SATCC) was established in July 1981 as the first Commission of the Southern Africa Development Coordination Conference (SADCC) in explicit recognition that transportation and communications projects were integrally linked to the achievement of SADCC's four broad objectives:

- Reduction of external dependence of SADCC member states, especially but not solely on the Republic of South Africa.
- Creation of operational and equitable regional integration.
- Mobilization of domestic and regional resources to carry out national, regional and international policies to reduce dependence and build genuine regional coordination.
- Joint action to secure international understanding of and practical support for the SADCC strategy.

The Convention to establish SATCC expressed the mandate and responsibilities of the Commission as follows:

- Provide coordination in overcoming transport and communications problems in the region.
- Provide economic and efficient means of transport and communications in the region.
- Achieve self-sufficiency in technical manpower, training and development.
- Encourage the efficient utilization of available resources for the improvement of transport and communication in the region.

Mozambique was nominated as the coordinating country for transport and communications and is host to the Commission's Technical Unit.

The supreme body of the SATCC is the Committee of Ministers comprising one member

from each SATCC state. The members are usually the respective Ministers responsible for transport and communications. The Committee of Ministers is advised by the Coordinating Committee. This is usually made up of the Permanent Secretaries or senior government officials from the same ministries. The Committee of Ministers typically considers issues which have been scrutinized by the Coordinating Committee. As sector coordinator, Mozambique chairs both the Coordinating Committee and the Committee of Ministers.

Within SATCC the Technical Unit is the executive arm of the Commission and reports to the Coordinating Committee. The Technical Unit is the only permanent organization in the SATCC framework. It is staffed by a Director, and about 12 professionals with expertise in specific transport and communication sectors, the planning function, administration and finance, and information-related services.

In addition, a number of "working groups" have been established within the SATCC structure, although they were not specifically called for in the SATCC convention. These working groups are defined on a sectoral or sub-sectoral basis. They are meant to meet once or twice a year to consider technical and operational matters of regional importance. At present, SATCC holds regular working group meetings of its member railways, ports, airlines, and departments of civil aviation, departments charged with road infrastructure, road transport, telecommunications administrations, postal services, and meteorology departments.

SATCC has been involved in three main activities: (i) mobilizing funds from donors for transport and communications projects of a "regional" nature; (ii) operational coordination; and (iii) collecting statistics, data, and documents on the transport and communications systems of the SADC region.

SATCC is strongly oriented towards the transport side of its dual portfolio. Until early 1994, SATCC did not have a full-time staff member working on telecommunications, although two capable regional full time consultants had been available through CIDA funding for the past several years. In the past, one of these consultants, Mr. Gerard Mutti, provided through ITU (on leave from the Zambian PTC) provided much of SATCC's leadership in the policy aspects of telecommunications. Funding for this position was exhausted in February 1993. Mr. Mutti has since returned to Zambia to take the position of head of the telecommunications division of the ZPTC.[1]

[1]SATCC requested AFDB funding for replacing Mutti in this position of Telecommunications Operations Specialist late in 1992, but it is still not clear whether AFDB will have funds to support the position. This position will focus on operational as opposed to policy issues.

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Three important aspects about SATCC. First, it does not have any executive powers *vis-a-vis* member states; it coordinates, but cannot execute or implement. Second, SATCC is a political structure. Everyone involved in SATCC activities is ultimately answerable to the Committee of Ministers of SATCC or the Council of Ministers of SADC. Third, SATCC activities involve public sector bodies and institutions. The private sector has little input, except as advisors or consultants.

SATCC's Future

SATCC's major role in the transition to a Southern African Development Community is the development of the transport and telecommunication protocols for development of SADC. The Director believes that separate protocols should be developed for transport and communications, given the different technological and regulatory issues. But SATCC is still strongly oriented towards transport concerns. It does not currently have a full-time telecommunications specialist on staff, although a position has been created, interviews were scheduled to take place in October, and the successful candidate should begin work in early 1994. This "direct hire position" is intended to be funded from member countries contributions to SATCC (approximately $90,000 a year). Two prior regional telecommunications experts on the SATCC were donor-funded (by CIDA) and have left, or will soon leave, to return to their parent PTCs.

The Director of SATCC envisions that the Commission could implement a new telecommunications mandate in two areas:

- First, providing **leadership** to the member countries in operational and regulatory areas. This could be done by carefully crafted position papers and disseminated through publications and workshops.

- Second, **identifying the areas where regional co-operation is necessary for development of the members' telecommunications sectors** and for the development of SADC. The director wants to insure that all regional cooperation activities are appropriate for the region's level of development, recognizing that integration of southern Africa to the extent of the European Community may require decades to accomplish.

The director believes that to undertake this mandate will require two external or regional telecommunications specialists beyond the capacity of SATCC or the SADC member countries to support at present. The **Operations/Technology** specialist, which could very likely be recruited from the region, or elsewhere in Africa. The **Policy/Regulatory** specialist to be funded by the RTR project for the next few years, would most likely be

recruited from outside the continent. SATCC currently projects that a **Policy/Regulatory** specialist could be recruited from the region, and from SATCC's own funds, by the 1997/8 time frame.

Beyond additions to SATCC core staff, for telecommunication in the region to develop, the SATCC director believes that SATA must be revitalized and restructured. The SATA working groups undertake much of the decision making and dissemination work of SATCC, as discussed below.

Outside of donor financing, SATCC is supported by member country subscriptions of approximately US $90 thousand annually each, regardless of country size or ability to pay. The member countries have made it clear that they will not be able to increase their yearly contributions much above current levels.

The sustainability of SATCC beyond the life-cycle of donor support projects, therefore, is not yet clear. The director has indicated a desire to transform SATCC into a more commercially oriented entity, charging for services provided when possible. Although this change is an expressed concern of SATCC -- and of donors -- little in the way of concrete planning has been undertaken.

During the course of project development, it has been suggested that because SADC's traditional animosity to the Republic of South Africa, SATCC may not be an appropriate entity to bring the region together. In fact, SATCC has welcomed South African observers to technical meetings for some time, and this has accelerated since the formation of the Transitional Executive Committee. Given the momentum of change, some knowledgeable observers have predicted that South Africa will apply for and receive full membership in SADC by the end of August.

b. <u>SATA, the Southern African Telecommunications Administration</u>

SATA was created in 1981 as a forum for discussion of key technical issues, but has developed into a project and directive referral body to SATCC, parallel in a sense to the council of ministers. SATA actually predates SADC and SATCC. It is not a working group in the sense of those in the other sectors within SATCC, it in fact has working groups under its aegis.

One positive aspect of the telecommunications sector, internationally, is that professionals in the telecommunications sector have a strong tradition of participating in various ad hoc working groups, usually centred around developing industry standards or solving specific technological problems. In the SADC region, however, working groups in the **policy** area

have proven less effective; partially because of the lack of experience, partially because the participants of the working groups all come from the monopoly telephone company, with little or no mandate to restructure.

In particular, the SATA working group on Telecommunications Regulation has yet to organize its first meeting, despite the resolutions of the Windhoek seminar. SATCC believes that once SATA is restructured, the working group system will be much more effective in all areas, technical and policy.

Although SATCC staff and the PTT members express the belief that SATA was effective in its original function, most now believe its effectiveness has atrophied. The PTT heads or their senior representatives no longer attend. The national specialized committees (i.e., Zimbabwe for frequency management) have not done much beyond ensure that statistics for their specialty are reported to SATCC. And in that task, even, they are lacking.

SATA has no secretariat or staff. The primary expenses are the costs of the semi-annual conferences; the local costs are born by the host PTT, and travel per diem expenses are covered by conference participants. SATCC would like to see SATA evolve as SATCC intends to evolve; to move from a purely project approval mode to a policy/restructuring/build the SADC community mode, but representing the non-official side of the telecommunications sector -- operators, user groups, and other key stakeholders. To do this, SATCC believes, requires a restructuring of SATA. At its last conference, SATA passed a resolution to look at ways to restructure itself. Terms of Reference have been approved for a regional consultant to lay out a framework for the necessary changes. SATCC is looking for finance to do this, and USAID/Zimbabwe will cover part of the costs of this undertaking through Project Development and Support funds.

c. <u>The PTA-TTU, the Telecommunications and Transport Unit of the Preferential Trade Area</u>

The PTA Telecommunications and Transport Unit (PTA-TTU) aims at restoring fast, reliable, and efficient intra-PTA direct communications links, in the context of PANAFTEL and RASCOM (the two Africa-specific satellite-based regional systems). The PTA-TTU recognizes the importance of national sector restructuring for the region; "[National] Institutional reforms should be introduced in order to rationalize intra-PTA telecommunications"[2].

[2]"Transport and Communications Sector Policies in the PTA", July 1992

Aside from producing some policy position papers, however, the PTA-TTU has accomplished little. They have agreed to undertake, however, a well-conceived interconnectivity and tariff analysis which will include all PTA member states, plus Botswana, Madagascar, Zaire, and South Africa. The results of this research, expected in mid-1994, should provide a firm basis for better intra-regional connectivity within the SADC region, as well as wealth of statistical material for the SATCC data base.

There is little interaction between SATCC and the PTA-TTU in telecommunications. PTA does send representatives to the SATA meetings; in fact, theoretically, PTA has equal footing with SADC at SATA. The two telecommunications specialists at the respective organizations keep in touch, and advise each other on projects. SATCC is aware that PTA has been searching for funds for a frequency management study.

The PTA-TTU, in fact, has extended several SATA actions to other countries in the PTA which are not in SADC. They have circulated, for example, the SADC recommendations on Sender Keeps All (SKA) mechanism for settling intra-regional telecomms traffic. Many PTA administrations have as a consequence adopted SKA, which reduces the foreign exchange outflows from direct intra-regional links, and acting as a positive stimulus to intraregional communication and the use of regional infrastructure.

d. ARTC (Africa Regional Telecommunications Conference)

Originally, ARTC was the Commonwealth Telephone Organization's East and Southern Africa branch, active well before independence swept through most of the region in the sixties. Languishing as a Commonwealth institution, the ITU has helped revived ARTC, and brought in non-Commonwealth countries like Ethiopia.

ARTC meets in conference once a year, and various PTTs exchange experiences where special ad hoc committees make reports on diverse topics. Like SATA, ARTC has no executive capacity. Unlike SATA, ARTC has no resources to implement conference recommendations. SATCC staff (and PTT participants) believe that the ARTC conferences are declining in terms of the number of countries and the level of their participants.

The question of the merger of ARTC and SATA has been discussed, at least informally. The situation is analogous to the ongoing debate about the merger or harmonization of PTA and SADC. First, there is essentially the same geographical differences and overlaps; ARTC roughly covers the PTA region. Second, there is the perception that the two organizations have a different mandate, at least presently. ARTC discusses policy and technical issues and makes recommendations, while SATA has been more focused on the traditional SADC project approval process. Third, there is a similar tension due to origins; SATA is the

organization favored by donors (indirectly through SATCC). ARTC is the organization favored by the United Nations (through ITU).

e. The International Telecommunications Union (ITU)

ITU has been interested in telecommunications development in Africa for at least 30 years. They supplied technical expertise to support the development of the PANAFTEL network. They have sponsored training courses in telecommunications around the region, using their own Geneva staff as well as expert consultants. A recent example is the ITU-sponsored bi-annual PTC Training Center workshop held in October 1993 in Maputo.

ITU's major contribution on the policy front has been the development of the African Green Paper, whose main objective is to provide guidance to African countries on restructuring their telecommunications sectors. The African Green Paper, produced by four regional experts seconded from their administrations, guided by one external consultant, has been three years in the making. It was modeled on the European Community's "Green Paper on Telecommunications", issued in 1985.

The African Green Paper recommends that basic services remain a monopoly, and for the near term stay under state ownership. Competition and private investment in enhanced and value added services are recommended, and fair and open access to the backbone network is strongly encouraged.

While it stops short of recommending privatization of basic services, the Green Paper on the whole should help advance the cause of telecommunications sector restructuring by providing a thoroughly documented case for reform. Because regional advisors had considerable input into the document, it may have more legitimacy in political circles than, say, a new World Bank position paper.

The final draft of the Green Paper prepared in November, incorporating comments from all member countries, was submitted in November to the OAU and the various sub-regional bodies (PTA, SADC, ECOWAS, etc.) for their approval.

SATCC has not had extensive contact with the ITU's newly reorganized and decentralized Telecommunications Development Bureau. The African regional headquarters of BDT are located in Addis Ababa. The head of BDT in Addis, Mr. Cisse, attended the Windhoek workshop, and informal discussions were held then about continued ITU provision of a telecommunications specialist to SATCC, but there has been no subsequent discussions. ITU has a field office in Harare to support the Southern African region, with liaison responsibility to SATCC.

ITU staff in Harare and Addis Ababa have expressed a strong if still unstructured desire to participate in a formal sense with USAID's program. Only two concrete suggestions have been made to date: using ITU as an implementing agency for the long term advisors in SATCC; and for technical assistance and training for project management as part of the Tanzania Restructuring Project. Substance discussions with SATCC indicate that this is the preferred method of implementation for prioritizing advisory services to SATCC. The second proposal, while superbly documented by an ITU staffer based in Addis, does not fit with the purpose and goal of USAID/Tanzania's current vision for program assistance. ITU retains the respect of most government leaders, and perhaps more surprisingly, of many in the international telecommunications industry.

f. AFRALTI, The African Advanced Level Telecommunications Training Institute

AFRALTI was formed with UNDP funds in the late eighties to serve governments of East and Southern Africa (including all of SADC except Angola), providing advanced level training for middle and top level telecommunication managers.

AFRALTI has not achieved its goals for several reasons: first, UNDP funding was halted abruptly in 1991; two, less than half of the ESA countries actually have signed on to the AFRALTI project; third, the signatory countries have not been willing to provide the right students or, especially, to second qualified instructors.

The future of AFRALTI may be brighter. The Kenyan government has broken ground for a new permanent home for AFRALTI, with more than adequate classroom and equipment space. The AFRALTI management and governing council are increasingly cognizant of the need to become more self-sustaining and less donor-dependent, and are beginning to develop and market high level telecommunications courses to the private sector.

g. The Pan African Telecommunications Union (PATU).

Based permanently in Kinshasa, but now in Brazzaville temporarily, PATU is an organization with little in the way of resources or vision. While often mentioned, and invited to meetings, PATU is not a serious player in the region.

2. Donors

a. USAID and other USG agencies

USAID has to date made intermittent interventions in the sector in the region, almost

exclusively through the USAID/Zimbabwe mission. The February 1993 SADC Telecommunications Policy Workshop was designed and funded through USAID/Zimbabwe PD&S account. In July-December 1993, USAID/Zimbabwe supported development of a comprehensive telecommunications sector policy for the Ministry of Communications and Transport of Zambia, also funded through the PD&S account. USAID/Zimbabwe and USAID/Tanzania staff have worked closely with the World Bank in development of their telecommunications sector programs.

Nearby, REDSO/ESA is undertaking a Scoping Study of telecommunications needs in East Africa, analogous to the southern African scoping study completed by USAID/Zimbabwe. USAID/Madagascar has taken a leadership role in brokering relationships between U.S. telecommunications industry and the Madagascar.

State Department

The State Department is the USG agency responsible for international treaties and is the government's signatory, and participates in international conferences throughout the world. The State department led the delegation to Harare for "Africa Telecomms 1990", an ITU sponsored event. State department official presentations made a forceful case for private sector participation.

Trade Development Agency

The U.S. Trade and Development Agency (TDA) promotes economic development by underwriting feasibility studies done by U.S. consultants in developing countries, which also help U.S. firms get involved in projects offering significant export opportunities.

Telecommunications projects have traditionally accounted for between 10 and 15% of TDA's projects and program budget, and is an area of great interest. In 1991, TDA financed a feasibility study undertaken by the U.S. firm GTE Spacenet for Earth Station inter-connectivity between Lesotho, Zimbabwe, Swaziland, and Zambia.

United States Telecommunications Training Institute (USTTI)

The USTTI is a unique joint venture of U.S. Government organizations and a broad spectrum of the U.S. communications industry. USTTI provides telecommunications training to less developed countries, as well as others, in a wide variety of telecommunications topics; policy, managerial, and technical. USTTI has trained participants from every country in the region except Angola.

Overseas Private Investment Corporation (OPIC)

OPIC is a self-sustaining U.S. Government agency that promotes economic growth in developing countries by encouraging U.S. private investment. OPIC operates in approximately 100 developing countries, providing financing, political risk insurance, and organizing investment missions. OPIC has agreements with all of the countries in the region except Angola and Mozambique.

OPIC sponsored investment missions to Tanzania, Zambia, and Zimbabwe in 1992; and will sponsor a series of missions to South Africa in 1994 and 1995.

Department of Commerce

The Department of Commerce (DOC) encourages, serves and promotes the nation's international trade. The DOC offers assistance and information to increase the U.S. competitiveness in the world economy. Secretary Ron Brown has been an outspoken advocate of privatization of telecommunications systems throughout the world.

The USDOC Office of Telecommunications has promised to produce a Telecommunications Marketing Guide for Africa, that could provide information highly useful for potential U.S. exporters and investors, but budgetary problems and other priorities may leave this project to be shelved indefinitely.

NTIA is the executive branch telecommunications agency within the Department of Commerce, and manages the Federal Government spectrum allocation. NTIA has provided (with USAID funding) technical assistance to developing countries (e.g., NIS, Thailand, the OAU).

Federal Communications Commission

The FCC is an independent regulatory commission that shares regulation of telecommunications services with the Department of Justice and state/local utility commissions. The FCC has provided technical assistance to a number of developing countries throughout the world, usually relying on USAID financing.

Export Import Bank (Eximbank)

Eximbank is the independent U.S. Government agency that facilitates the export financing of U.S. goods and services through a variety of grant, loan, and guarantee programs. Eximbank has country agreements with all of countries in the region with the exception of

Angola, Mozambique, and Zambia. In the case of Tanzania, Eximbank will work with the private sector only.

b. Other Bilateral Donors

The overseas development programs of many bilateral donors intermingle development interests and the interests of national suppliers of equipment. For a particular country, it is often unclear to assess which interests predominate, and leads to a contradiction between domestic and international policy.

Japan and many European countries, for example, are in advanced stages of restructuring and privatization of their telecommunications sectors, but they have little hesitation in supporting unrestructured public sector telecommunications companies. One would conclude that the development interests of the recipient country are secondary to supporting their home industries.

An important assumption of success is that the disciplines being imposed on donors through the Development Assistance Committee of the OECD will be successfully enforced and hopefully strengthened, so that donor funding does not act as a disincentive to private sector led growth by "crowding out" private capital.

Australia

The Australians created a trust fund for SATCC to undertake studies and conferences, to be designed and implemented by Australian consultants, which ended in June 1993. The Australians have said if there is follow-on funding, which is still not clear, only half the levels previously will be provided (about $150 thousand/year at current exchange rates). The reason for the cutback, according to the Australian High Commission staff in Harare, is solely due to budgetary constraints.

The Australian-funded conferences and studies were of high quality, and the continued presence of Australian funding would leverage USAID's intervention considerably.

Canada (CIDA)

CIDA's support for telecommunications in Southern Africa will end early in 1993, although they continue to support telecommunications activities elsewhere in the world. CIDA has given two reasons for the cutback in Southern Africa; first, budgetary problems back home; second, a decision to focus on the transport sector, an area where they believed they had a greater comparative advantage in Southern Africa.

United Kingdom (Commonwealth Development Corporation)

CDC is actively interested in commercial or private telecommunications investments. They will invest in partnership with a parastatal, but they are not afraid to link this assistance with policy reform measures, although they do not take a leadership role in this area. They are actively exploring telecommunications projects in Tanzania and Zimbabwe.

c. Multilateral Donors

The World Bank Group

By far the most important donor in the telecommunications sector worldwide is the World Bank group. IBRD and IDA provide governments with loan finance, which is mostly on-lent to parastatal telephone entities for infrastructure and management development. But more important even than the loans themselves, is the leadership role the Bank plays in policy reform and donor coordination.

Increasingly, IBRD/IDA are insisting on fundamental sector reforms as part of the loan package. These involve separation of posts and telecommunications, separation of operating and regulating functions, and introduction of limited private sector participation. They usually fall well short of significant private sector investment or privatization. The Bank attempts to convince other bilateral and multilateral donors to link their assistance to these policy reforms, but this has had limited success; either the Bank is ignored, or the policy reforms are substantially watered down.

The Bank group also plays an instrumental role in the preparation of reform programs, and more broad research efforts. The telecommunications division, for example, is undertaking case studies of six African countries (three are in the SADC region) and comparing to worldwide experience in an attempt to find an solutions to telecommunications sector reform appropriate in the African context.

The IFC has expressed a deep interest in financing private sector telecommunications projects. They have a minority interest in a cellular telephone system in Ghana, for example, and are actively exploring possibilities in Uganda and Tanzania. The IFC rarely takes a policy leadership role.

The European Union (EU)

The EU provides loan resources to the sector through the European Investment Bank.

A major EU-funded "Integration" Study (formally known as the Regional Transport and Communications Integration Study for Southern Africa) will attempt to set policy and operational direction for SATCC in both telecommunications and transport.

On the positive side, the Integration Study should break new ground, by:

- exploring the relationships between telecommunications and transport sub-sectors,
- examining the sub-sectors in South Africa; and
- proposing a comprehensive strategy for SADC and South Africa.

The terms of reference of the Integration Study are so comprehensive and ambitious that most topics may only be covered superficially, even though over US $8 million will be expended on 250 person months of consultants have been budgeted to undertake the study over a period of 25 months. The study, moreover, is flawed by a bias towards technocratic rather than political approaches, and a bias towards transport rather than telecommunications problems and issues.

SATCC and the EU are reviewing short-lists of potential consulting teams. The current plans are for the study to begin in April 1994, and holding to a 25 month schedule would be ready by mid 1996. There have been numerous delays in the past, however, and these may continue to plague this initiative.

SATCC believes that the EU Integration Study will adequately cover the **specifications** for the telecommunications **database**; although the terms of reference for the database that USAID staff have reviewed are far less specific than what would normally be drafted for a needs assessment/specifications study.

SATCC has expressed the view that the EU should continue to take the lead for **specifications** of the database, even though there is no line item for implementation in the Integration Study budget. This may lead to a difficult situation -- it is dangerous to have one donor/contractor team make specifications for another donor/contractor team.

The African Development Bank (AFDB)

The AFDB is perhaps the largest donor in the telecommunications sector in Africa, in terms of sheer loan resources provided. They tend to take a fairly passive role in sector restructuring, preferring the World Bank to take the lead, and in fact will go ahead even without a World Bank program if the country requests.

AFDB has begun to entertain requests for technical assistance as well. SATCC has requested that AFDB fund a Training Officer (as specified in the NORAD Human Resources Assessment, see below) as well as a Telecomms specialist. SATCC did not aggressively follow through on this request, and it appears unlikely to be granted.

AFDB is financing a well conceived "Telecommunications Network Interconnectivity and Tariff Study" for the PTA, which will include all PTA member states, plus Botswana, Madagascar, Zaire, and South Africa. The results of this research, expected in mid-1994, should provide a firm basis for better intra-regional connectivity within the SADC region, as well as wealth of statistical material for the SATCC data base.

3. Public Service Providers of Telecommunications Services -- Post, Telephones and Telegraphic (PTT) entities and their Parent Ministries

With rare and recent exceptions, the public sector provides telecommunications services in the region, with a virtual monopoly. Except for Malawi, the public sector service provider is a parastatal corporation or company 100 percent owned by the state. There is a wide range in these SOEs autonomy, however. The Swaziland PTC, for example, can and does raise finance on the international capital market. TDM, the Mozambique telecommunications company, can enter freely into joint ventures with the private sector. The Zimbabwe PTC, on the other hand, is highly restrained. Detailed analyses of PTCs for countries with National Restructuring programs will be included in PAAD documentation.

4. Private Provision of Telecommunications Services/Equipment

a. Telecommunications Service Providers

<u>South Africa</u>

South Africa is the only country that currently allows private provision of services and competition (albeit limited) with the state monopoly. In addition, South Africa is the area of the most interest by private service providers, because of the size of the economy, the favorable regulatory environment, and because the telecommunications network in South Africa is the 22nd largest in the world.

In the past two years, value added services have been offered by international companies in South Africa. MCI of the USA is about to launch an international E-mail service in South Africa, providing full messaging facilities in 27 countries. The international SITA network has announced its plans to provide value added services to its clients, the airlines and travel business.[3]

Most importantly, a consortium of mostly private sector partners is providing mobile cellular telephone service in competition with a Telkoms SA/private joint venture.[4] Actually, these two groups are the top of a three-tier structure of service provision. A duopoly will provide the nationwide infrastructure -- masts, receivers, and switching centers. The next two tiers are the service providers, who in turn will appoint dealers and agents as their retail outlets. The service providers will fill the role of the traditional phone company -- with the responsibility of marketing, billing and collection, after-sales service, and technical support. Hundreds of small and medium sized private businesses will be formed in the bottom two tiers of service provision. One consortium that did not receive a license, Cellstar[5], has pursued opportunities aggressively in Bophutatswana[6] and Zambia.

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[3] BMI-TechKnowledge Telecommunications in Southern Africa, 1990. p. 7

[4] The Telkom cellular joint venture, Vodacom, consists of:

Vodafone (35%, UK private cellular phone service provider)
Rembrandt Group (15%, RSA private conglomerate)
Telkoms SA (50%, RSA parastatal)

The mostly private consortium, Mobile Telephone Networks, consists of:

M-NET (30%, RSA private media conglomerate)
Cable and Wireless (30%, UK private telecommunications firm)
FABCOS (15%, RSA private foundation, the Foundation for African Business)
Naftel (15%, RSA black owned company)
Transtel (10%, telecommunications division of Transnet, parastatal transportation conglomerate)

[5]Cellstar major shareholders are Anglovaal (a mining house) and Grinakers (an electronics manufacturer).

[6]Bophutatswana, a nominally independent homeland near Botswana, is still out of the jurisdiction of South Africa and Telkoms SA for telecommunications purposes. The dispensation of Bophutatswana and the other nominally independent homelands is still not

The local private sector in South Africa also provides certain categories of value added services, known as VANS (Value Added Network Services), and operates retail telephone services.

Other Southern Africa Countries

Other countries in the region are entering the picture as well.

Tanzania has awarded a license to a private cellular telecommunications operator (who incidentally will use Motorola equipment).

In Mozambique, the parastatal TDM has joint ventures with foreign companies in data communications and paging services. Neither have been very successful, apparently because of poor marketing. Other TDM joint ventures in directory publishing, consulting, and other non-core areas have been more successful.

Botswana has had a long term contract with Cable and Wireless of the United Kingdom to operate the telecommunications network, which has worked to the satisfaction of the GOB, although the cost of service provision is high compared with other countries.

Zambia is expected to allow completely private sector service provision in certain value added services in 1994, although the legislative and regulatory apparatus is not completely in place.

For the entire region, international service is increasingly being provided by private carriers in partnership with the state monopolies. PANAMSAT, a private U.S. based carrier, has signed a contract with the South African Broadcasting Corporation to deliver television programming, and may sign another contract in early 1994 with Telkoms SA to provide bulk telecommunications transmission service.

At least two private consortia (one led by AT&T and the other with a U.S. firm NYNEX as partner) are seriously considering building a fiber optic link to parts of the region, to compete with satellite service providers. The "seamless global roaming" low earth orbiting by IRIDIUM (and possibly other competitors) is yet another possibility of private sector participation in international service that may be realized in the region later in the decade. One interesting retail service that has slipped through the regulator's net in most countries in the region is the "call back" service, which exploits the large disparity between the costs of

clear when this report was written.

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an outgoing call from the region to the U.S. or Europe versus the cost of an incoming call. Savings of 20 - 200 percent are possible for calls to the United States, depending on the country of origin.

b. Equipment Suppliers and Manufacturers

In virtually all of the countries in southern Africa, the supply of Customer Premise Equipment (CPE) is open to the private sector, de facto if not de jure, although in many countries the parastatal monopoly is still a competitor. Even in the most cautious countries such as Zimbabwe, however, the direction for change is clear: in the future, the government will be involved with type approval only.

For switching and transmission equipment as well as CPE, the Japanese, French, German, Swedish (and other Nordic), and other European equipment suppliers are active in the region (see Table D-2 below). In most cases, their competitive edge is largely dependent on tied aid from their host government or from the EC.[7] Despite tied aid, and the Foreign Corrupt Practices Act, a few aggressive U.S. firms have gained a toehold (Motorola, GTE Spacenet), and a host of smaller U.S. firms have established niche presences.[8] Unfortunately, many U.S. firms are sometimes handicapped by their own inattention or arrogance, viewing the region as an unimportant market.[9]

[7]Tied aid rules are complex, but in most instances, country of origin is determined by location of manufacturing plant that adds the most value to the final product. A U.S. supplier that manufactures a tied aid funded product within the EC would very likely qualify for EC financing. See the discussion in part V. Donors, on the OECD efforts to limit the injurious impact of tied aid.

[8]The Foreign Corrupt Practices Act makes the paying of a bribe to a foreign official by a U.S. company an infringement of U.S. law. European and Japanese companies are not subject to nearly as strict regulation of their overseas activities, and are alleged to be far more comfortable with kickbacks and other forms of bribery.

[9]The USAID/Tanzania staff cite an example of a procurement of wireless communication equipment in which a highly competitive U.S. supplier would not bid based on the standards specified in the RFP, and proposed alternative standards which were not acceptable to the Tanzanian PTC.

Major Suppliers of Equipment in the Region[10]

Supplier	Corporate Headquarters
NERA	Norway
Siemens	Germany
Northern Telecomm	Canada
SRT	Canada
Ericsson	Sweden
Nokia	Finland
Motorola	U.S.
AT&T	U.S.
GTE	U.S.
Phillips	Netherlands
Mitel	U.K.
British Telecom	U.K.
GEC/Plessey	U.K.
NEC	Japan
Hitachi	Japan
Fujitsu	Japan
Alcatel	France
Telkor	South Africa
Altech	South Africa
Italtel	Italy
Telettra	Italy

Outside of South Africa, local companies do not produce for the higher end of the sector, except for very simple joint venture assembly operations. These joint ventures, usually in partnership with the PTT, are established for political or tariff protection reasons rather than economic efficiency. Low tech items can and are being efficiently and competitively supplied by local firms; examples are copper cable (ZAMEFA, a Zambian company) and telephone poles from local forestry companies (the Zimbabwean Forestry Commission, for example).

[10]This list is by no means exhaustive or complete. A detailed analyses of supplier capabilities and strengths will be undertaken in the focus countries, and a less detailed but still thorough analysis will be undertaken region-wide in the two Market Research studies (core project funded).

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The South African market is a special situation, because of the high purchasing power of Telkoms SA, the sophistication of the user community, international sanctions, the absence of donors and tied aid, and the relative sophistication of South African industry. Altech, a joint venture of Alcatel (France) and local shareholders and several other local manufacturers have a protected position through long term contracts with Telkoms SA that does not expire until 1995. With the elimination of sanctions, and the introduction of service competition, the European, Japanese, and American suppliers will inject a much greater degree of competitiveness in the South African suppliers market. Unfortunately, U.S. firms are off to a slow start, and may have trouble catching up with the competition.[11]

c. The U.S. Telecommunications Industry Involvement and Interest in Southern Africa

Major changes in the way the U.S. telecommunications industry is structured since the major changes introduced by the break-up of AT&T's monopoly in the 1980s have made overseas private sector investment more attractive. Prior to the 1980s, there was only one major telephone company in the United States. After the AT&T divestiture, the Regional Bell Operating Companies (RBOCs) -- who provide local and regional long distance service and little else -- faced a mature market and shrinking margins. The limited domestic opportunities have spurred an interest in overseas investment.

The initial results of these overseas investments in the past few years have been highly positive. Bell Southwest's strategic investment of over US $ 500 million in the newly privatized Telmex (Mexico), for example, has tripled in value.

Opportunities for overseas investment in the telecommunication sector continue to open as the trend towards competition and privatization accelerate in Europe, Asia, and Latin America. In general, these opportunities are perceived to be more immediately attractive to most U.S. firms than African opportunities. This perception is in part due to the lack of information, and in part due to regulatory and policy barriers, both of which will be addressed by ISA. Part of the perception has to do with Africa's image in general, which will take some time to catch up with realities even if there are significant changes.

[11]Sanctions is often given as a reason for the slow start by U.S. firms, but this is sometimes an excuse. The Telkoms 93 trade show in Capetown is a good example. Major U.S. manufacturers or service providers were represented by a public relations official or local agent, if at all. Ericsson (Sweden), on the other hand, had 10 employees from Sweden and their local subsidiary -- even though Sweden had **not** yet lifted sanctions, the Swedish public at least as "politically correct" as the U.S. public. Ericsson was willing to make this investment, even though it was not yet ready to sell in South Africa.

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At present, the majority of U.S. firms have little interest in Africa, unless it means a quick sale of equipment with no maintenance obligations. To this end, many firms have expressed a desire for USAID or other USG agency subsidies to make them competitive against other OECD suppliers.

Increasingly, however, industry has begun to appreciate that they could benefit from regulatory and structural changes in African countries that increase the size of the market, level the playing field so that the natural competitiveness of the U.S. firms is not undermined, and reduce the risk and increases the returns of longer term involvement in the sector.

A recent industry task force report is illustrative of this new sophistication:

> "As a matter of policy, the U.S. government has long supported privatization of state-owned telecommunications companies; *the Task Force recommends that this policy be translated into active intervention by devoting an increased portion of AID funds to assist recipient countries in privatizing their telecommunications sectors [emphasis added].*"[12]

In particular, the relative advantages of the SADC region are not well known to most potential investors. Information on the region specifically relevant to the telecommunications sector is spotty, of very poor quality, and is usually out of date. This type of information is expensive and difficult to collect, particularly for a foreign-based firm. Such a lack of information means that the private investor cannot accurately assess the risks and rewards of investments or knowledgeably propose or negotiate transactions with governments.

Lack of country specific, accurate information is reflected in the perceptions that potential investors, particularly U.S. investors, have about the region. Africa is perceived as unstable, distant, ridden with AIDS, with little commercial potential.

In fact, while acknowledging the downsides, the private sector investor in Africa has certain advantages. The first advantage is less competition. For example, a cellular bid for Bangkok is likely to attract far more competitors than a similar one for Dar Es Salaam. Therefore, an aggressive smaller firm may be able to establish itself more easily in Africa.

[12] Study of International Financing of Telecommunications, p. 87. Report by the Advisory Committee on International Communications and Information Policy, U.S. Department of State, June 1992.

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A second advantage is the availability of equity and venture capital funds -- largely mobilized through donor incentives -- that are actively seeking attractive opportunities, and the chance to invest along with a U.S. strategic partner.

Further deregulation moves in the U.S. market, however, are likely to induce the larger domestic players such as Bell Southwest to look inward again. The purchase of McCaw cellular by AT&T has broken down the bounds between local operating company and long distance carrier. The proposed purchase of national cable operator TCI by Bell Atlantic for $12 billion, if approved, will break down the traditional barriers between cable and phone companies. Many firms in traditionally separated market niches will be pre-occupied with finding strategic alliances to keep them competitive in the U.S. For the near term, these firms may be less interested in overseas investment, particularly in developing countries.

The telecommunications industry, however, is not monolithic but highly differentiated. The response of any given company to the expanded opportunities in Southern Africa that will be delivered by USAID's program will depend to a significant degree on the market niche or niches in which they operate. These are described below, with the expected investment response to changes in the enabling environment.[13]

Regional Bell Operating Companies (RBOCs), which used to have a monopoly in local and regional long distance services in their areas, are now facing increased competition in their operating areas. Until recently, they have not traditionally been allowed to invest overseas. With the relaxation of investment restrictions, however, some of the biggest U.S. investments overseas (in any sector) have been by RBOCs, such as Bell Atlantic's US$3 billion investment in Venezuela.

Expected response from the RBOCs: One or two of the RBOCs (Bell Atlantic and Southwestern Bell) would be likely to compete to take a major stake in a privatization of a national phone company in a major country (Zimbabwe, South Africa). One or two more would be actively interested in competing to take a major stake in a mobile cellular telephone enterprise.

Equipment suppliers have recognized that an equity position in a telecommunications project can ensure sales of equipment. Motorola, for example, has invested hundreds of millions of

[13] The expanded opportunities for export of goods and services of U.S. will be even greater; these will be documented in detail in the country PAADs.

U.S. dollars in the Iridium worldwide personal communications system as a sound financial investment, but also as a means to lock in the use of Motorola equipment for this new service.

Expected response from Equipment suppliers: U.S. suppliers are currently at a disadvantage because of bilateral tied aid restrictions and the Foreign Corrupt Practices Act. With a more open playing field, and private investment, it is likely that equipment suppliers like Motorola and GTE will make strategic equity investments in Africa to leverage sales.

Long Distance carriers: are constantly searching for new markets. At present, the three larger U.S. long distance carriers -- AT&T, MCI, and Sprint -- appear to want to maximize short term revenues by preserving the status quo of inflated international phone charges.[14] In developing countries, long distance companies have begun to offer a call-direct service back to the U.S. using U.S. operators direct to telephone subscribers (restricted to those who can pay in hard currency) in what appears to be competition with the local PTT. In fact, the PTTs benefit, because instead of an outflow of foreign exchange from an ordinary outgoing call, a "call-direct" outgoing call earns foreign exchange. In countries with more competitive telecommunications sectors, long distance companies offer worldwide dialing to subscribers.

Expected response from the Long Distance Carriers: It is unlikely that a developing country would open up international service alone to investment or competition, because of concerns about "cream-skimming". Opportunities in this sector will likely be limited to technology transfer, management contracts, and other sales of expertise.

Bulk Transmission ("carrier's carrier): The monopoly on modern bulk transmission services has traditionally been held by Intelsat, a quasi-governmental organization owned by nearly 120 governments. This monopoly has been broken: first by private satellite services

[14] An entire industry -- the so-called "call-back" service -- has sprung up exploiting the situation when a country's international tariffs are grossly unbalanced. In Botswana, for example, a call to the U.S. costs several times as much as a call from the U.S. to Botswana. A "call back" customer in Gaborone, for example, can call a personalized number connected to a computer in the U.S., which immediately calls back and gives the Gaborone subscriber a U.S. dial tone, which he can use to call anywhere in the United States (or the world). While inconvenient to use, heavy international callers can save thousands of dollars each month using a call-back service, if they are able to pay in hard currency.

such as PANAMSAT; and more recently, by the advent of private high capacity fiber optic links.

Expected response from Bulk Transmission carriers: Much greater and more effective use of private alternatives to Intelsat for bulk transmission. Although there are no regulatory barriers in the region to the use of private alternatives to Intelsat, profit maximizing private sector operators will be more inclined to respond to a better deal. In addition, private operators will be able to source the funds to invest in these bulk transmission facilities, as being proposed by FLAG; currently, these would have to be obtained from donors.

Smaller Independent telecommunications carriers: Some of the most aggressive and creative investors in developing countries are relatively new telecommunications companies that see profitable market niches that are too small for larger firms to exploit. The Atlantic Telephone Network (ATN), operator of the U.S. Virgin Islands network, spent over two years researching and negotiating its investment in Guyana Telephone and Telegraph (GTT) despite the minute size of the market; only 14 thousand lines. ATN is now looking at opportunities in East and Southern Africa. Other smaller companies are buying up small rural independent companies and co-operatives and are casting their eyes overseas.

Expected response from Independent telecommunications carriers: The smaller operators would be interested in taking a major equity position and management of privatizations in all of the countries in the region.

Value added service providers: (i.e., services beyond simple transmission of voice or data), which in the U.S., are almost completely deregulated. U.S. cellular telephone companies, such as Millicom, are aggressive investors in overseas markets.

Expected response from the Value Added Service Providers: Several U.S. cellular operators (Millicom, McCaw, Schelle) would compete aggressively to invest in a cellular telephone franchise, in any of the countries of the region. A myriad of specialized players in other (private and shared data services, financial transfers) will seize opportunities as they emerge in the region.

Specialized Investment Funds: A number of funds have been established to take advantage of the openings for private sector investment in telecommunications in developing countries, such as the Emerging Telecommunications Markets Fund. These are constantly scouting for opportunities. Developing countries are a particularly strong interest, as long as there is a "clear" license or mandate for a private telecommunications company, an operating securities exchange and liberal foreign exchange regulations, and a low degree of political risk. None of the publicly traded funds have equity investments in any part of sub-Saharan Africa.

Expected response from the Specialized Investment Funds: In countries with both operating stock exchanges and liberalized telecommunications sectors (potentially Zimbabwe, Zambia, Namibia, Swaziland, Botswana, and South Africa), these funds will take a passive but significant stake in pre-privatization or privatization of telephone companies or private specialized services.

5. Labor Unions

Labor unions in the region, as everywhere, are concerned with job preservation and worker conditions. Because without exception the PTTs in the region are grossly overstaffed (see Performance Indicators in Table Seven of the main text), the unions are concerned that restructuring and particularly privatization and competition will require massive layoffs. Depending on their clout, which varies from country to country, they can halt or seriously delay sector reform.[15]

Despite their natural concerns, many unions in the region have shown a marked tendency to accept the inevitability of restructuring; and have taken a keen interest in retraining, private sector opportunities, and ESOPs, to name a few ways to mitigate the pain of restructuring.

South Africa's unique history has created a different problem. There are two unions representing telecommunications workers: a skilled and artisanal workers union (until recently whites only); and an unskilled workers union (traditionally black only), associated with COSATU and the ANC. The leaders of the skilled workers union have taken a militant right wing stance, making public statements of sabotage and shut down if elections are held or a black majority government takes power. The leaders of the unskilled workers union have taken a militant stance against privatization or even significant private sector participation.

6. The Parent Ministries of PTTs

In eight out of the eleven countries, the parent Ministry also has public works and transportation in its portfolio. Only in Angola, South Africa, and Zimbabwe is the parent ministry solely focused on communications (including broadcast and postal services as well as telecommunications).

[15]In Uruguay, for example, organized labor unilaterally stopped privatization of the telecommunications.

Sector supervision and regulation is poor in most countries, with a confused division of responsibilities between the parent ministry and parastatal monopoly. Only recently, South Africa, Tanzania, Mozambique, and Namibia have established the apparatus for independent regulation; Zambia is expected to do so in the near future.

7. Other Government Ministries

The Treasury/Finance ministry officials should in theory be concerned with sector development as it impacts the economic health and growth of the country. All too often, the finance ministry officials are concerned only with the accounting or financial profit of the telecommunications parastatal; as long as the PTT is breaking even or making money, it is left alone even if it is a serious drag on the economy (and on the tax base). This narrow "balanced budget" approach to parastatal reform has unfortunately been reinforced by a similar focus by the IMF and the World Bank.

Industry and Commerce officials should be concerned with ensuring that the telecommunications sector provide adequate service to all sectors of the economy. Often, these officials are pre-occupied with the narrow and elusive goal of developing local manufacture of telecommunications equipment (with efficiency not always seen as important). More sophisticated officials recognize that **access and use** of technology is more important than **manufacture and ownership** of technology.

Defense/State Security officials have concerns in three areas:

- **Domestic surveillance:** Governments have a law enforcement interest in being able to monitor the telecommunications network, and fear this may not be possible in a private competitive environment. Although digital communications can be encrypted so that surveillance is difficult, this can be handled through appropriate mechanisms. A copy of each private encryption "key", for example, can be held by the appropriate state entity.

- **Secure government communication:** Governments are concerned with the security of certain communication channels, and fear that this would not be possible in a private competitive environment. These concerns are easily addressed; governments can continue to have their own networks and private operators of a secure government network can be screened and classified.

- **Foreign interest control of strategic infrastructure**: The national security concern over foreign control of the telecommunications network is common throughout the

world. A hostile government, working through a national company, might throw a switch to shut down a national telecommunications system. The U.S. is not immune to this fear; no major communications provider can have over 25% foreign shareholding. Nonetheless, this has been solved satisfactorily through a variety of mechanisms throughout the world, such as the "golden share" that the U.K. has in the privatized British Telecom. Equally as important, national security is severely compromised by the existence of a degraded telephone infrastructure.

Health, Education, and other Social Service ministry officials are and should be concerned about the constraint that poor telecommunications has on delivery of vital social services, but are typically very unsophisticated about developments and possibilities of telecommunications. The number of health care professionals posted in remote locations, for example, could be reduced (or service delivery improved) if phone consultations could be substituted for many house calls or lengthy treks to regional centers. Distance learning, using national "master teachers" or international experts could bring world class training sessions to the remotest area, building skills in pupil and local teacher alike.[16]

Transport ministry officials often have the telecommunications portfolio as well, and are directly concerned with the linkages between telecommunications and competitive transport services. In fact, most of the railways of the region have their own dedicated voice and data networks.

8. User Groups

a. Small and Micro-Enterprises (SMEs)

Even the smallest of formal businesses (and not an insignificant number of informal enterprises) would greatly benefit from being able to make and receive calls to customers and suppliers. A private phone for each premise is not essential. A shared phone or readily accessible phone booth could be adequate, if coupled with simple voice mail and/or paging systems. While these may seem like first world, sophisticated services, in fact the more progressive companies in some developing countries (Mexico, Brazil) have introduced these services in lower income communities with tremendous success (and profitability).

[16]USAID has a considerable experience base developing rural distance learning projects in Latin America and Asia.

b. Industry and Energy

In addition to the crucial tasks of communicating with customers and suppliers, many industrial firms now need more sophisticated communications to maintain competitivenes Financial and marketing information must be communicated instantly to and from headquarters to various branch locations. Computerized manufacturing process informati must be downloaded and fed into a computer aided manufacturing equipment at the proce sites.

Telecommunications can significantly improve efficiency and quality of power generation. By linking all sources of power on the grid, a utility can optimize coal burn rates, water draw down rates, etc. For this reason, many utilities install dedicated telecommunication networks.

c. Transport

In general, better telecommunications with customers allows the more efficient scheduling services, and the elimination of "dead-head" runs; these reduce the cost of service.

Transportation users require special communications services to track their fleet. Railway need to install dedicated private systems, because all of their traffic is along the railroad permanent way.[17] Trucking firms can rely on shared services, such as trunked mobile radi along the major routes (or preferably, a nationwide cellular phone system) to have voice communications with their fleet. Although the technology is readily available, regulatory barriers and parastatal inertia have kept these services from being offered in the region. Sophisticated satellite based services now available through Inmarsat allow low cost geo-positioning of a fleet, as well as silent alarm systems.[18]

[17]In the SADC region, many railways have fairly sophisticated private telecommunications transmission systems. These are seriously underutilized, in large part because the railways do not have the expertise or software to install necessary railcar tracking systems. The development of these Rolling Stock Information Systems, in fact, is problem to be addressed in the STEP project (690-0256).

[18]Geopositioning can prevent drivers from "freelancing" with empty trucks after droppin off a load, and can track hijacked trucks; alarms can alert a dispatcher instantly to a robbery or hijack situation.

d. Banking and Finance

Modern finance relies on secure data communications to transfer funds to and from customers and other financial institutions. In many countries in the region, very slow funds transfer has crippled the development of business, particularly those not located in the capital city.

A few of the countries in the region offer shared data services that supply adequate transmission capacity for the task, although they are usually over-priced, and not secure enough for financial transactions. Regulatory barriers in all countries in the region prevent the creation of private data networks (the norm in most of the world for financial institutions).

e. Agriculture and other Rural Based Enterprises

Rural-based enterprises, particularly those that offer perishable goods or services, have been shown to benefit disproportionately from improvements in ordinary telephone service. For example, the best solution for a cattle farmer in a remote area who needs a quick diagnosis from a vet is through telecommunications. Similarly, in the horticultural sector, farmers need to know when a plane will be in before sending produce to the airport. Without phones, this is an uncertain proposition that can cause the loss of thousands of dollars when fresh flowers go limp waiting for a plane.

f. Tourism

The availability and quality of international links are particularly important for the tourist business in the region to reach customers and travel agents worldwide. Links from remote safari locations to the firm's headquarters are vital for visitor scheduling, medical emergencies. The existing systems of private radio networks for the latter purpose are clumsy and unreliable.

SADC Telecommunications Scoping Study

Executive Summary

Background

The world is rapidly moving toward an economic system based on the continuous and ubiquitous availability of information. Recent advances in telecommunications technology have been an important vehicle in permitting information exchange to develop as a valuable commodity. Countries and sectors equipped with the requisite telecommunications systems have been rapidly moving into post-industrial, information-based economic growth. For the developing world, a modern telecommunications infrastructure is not only essential for domestic economic growth, but a prerequisite for participation in increasingly competitive world markets and for attracting new investments. In the advanced industrial countries of Europe and North America, universal telecommunications services have penetrated every sector of society. In many developing countries the limited availability of service is constraining economic growth.

Economic development policies in the industrial countries increasingly include telecommunications as an essential component of the economic infrastructure. This realization has been initiated by industry's demand for advanced telecommunications equipment for competitive reasons. The lesser developed countries have begun to recognize that inadequate telecommunications services will be a dis-incentive to new investment and place existing industry at a competitive disadvantage. This is valid for a range of activities including improved farm production, animal husbandry, export marketing for the mining industry, bank transfers, and tourist arrangements.

The Region

The countries of the Southern Africa Development Community (SADC) and the Republic of South Africa (RSA) are among the least developed countries, both economically and in their use of telecommunications. A wide range of studies indicate that expanded telecommunications investment is essential, not only for growth, but also to remain competitive within the increasingly information-oriented global economy. Failure to develop telecommunications systems will only increase the development gap between the SADC and

RSA and the industrial countries.

The Project

The objective of this project is to help determine if USAID should participate in the telecommunications sector in SADC and RSA, and to help determine if so, the role it could play. Phase one of this scoping study is primarily research. It is designed to define the requirements for telecommunications in SADC and RSA and the scope of further work required. This report is designed to provide a framework to analyze the current and projected requirements for telecommunications services in the SADC and RSA countries and the potential impact of telecommunications investments on the region's economic development.

This report critiques and analyzes data on telecommunications services in the SADC and RSA, and estimates the evidence for, and consequences of, the inadequacy of these services. The object is to provide an overview of the current and projected shortfall in telecommunications in SADC and RSA and its effects on the economy. The report conducts a comparative analysis of telecommunications indicators, such as penetration, number of direct exchange line (DELs), and telephones per capita. It also examines the prices and revenues of telephone service in the SADC countries, and engages in some comparative analysis of the costs of providing service. The level of investment needed to bring the country's telecommunications structures to a level comparable to or better than countries of similar economic size and structure is estimated. The report identifies private and public telecommunications investment activities and surveys possible investment scenarios and incentives for private sector participation in SADC and RSA,

Methodology

The study analyzed the supply, demand and shortfall for telecommunications services in 1990 and projected to 2000. The data that supported the analysis was gathered from the telecommunications authorities in the subject countries as well as international institutions such as the International Telecommunications Union, the International Bank for Reconstruction and Development (World Bank), and the regional entities such as the Southern African Transport and Communications Commission (SATCC). Supply data was recorded from reported installations and planned development programs within the region. Projections of demand utilized directly collected data such as recorded waiting lists as well as industry standard demand projections. The findings indicate that there is a current and projected shortfall in telecommunications services, and the current programs for expansion will not meet currently recorded or projected demand.

Extensive studies from the 1960s to the present have documented a strong correlation between GDP per capita and telephone density indicators. The data for all countries generally fall within a small band along a straight line on a logarithmic chart. Recent statistical tests for the direction of causality by Hardy (1980), DRI/McGraw-Hill (1991) and Norton (1992) show that the growth of telecommunications investment or penetration is a statistically significant predictor of economic growth, and vice-versa: indicators of economic growth are significant predictors of telecommunications investment. Telecommunications is thus considered to be both a cause and a consequence of economic growth. According to Norton (1992), the data in this study are consistent with the proposition that telephones provide substantial growth- and investment-enhancing activity and thus facilitate economic growth.

The teams analysis of the date in the Southern African Countries supports this relationship. Input-output studies of the economic impact of telecommunications also show that it makes substantial contributions to the efficiency of the economy. A quantitative study of the U.S. during the years 1963-1982 estimated efficiency gains of nearly US$80 billion for the 1982 economy.

The Scoping Study consisted of desk studies of available reference data augmented with limited data gathering visits to the SADC region and the ITU. The initial Sections, 1.2 and 1.3 of Section I, are essentially data gathering tasks consisting of the obtaining of as much information on the SADC countries as possible from sources in the U.S., Washington, DC, and NYC, and in field trips to Geneva and key countries in the SADC Region. The data gathered from the these various sources was summarized and analyzed to obtain the best possible view of current demand and current supply in telecommunications services in key SADC countries, segregated by voice, data and video, rural and urban, and domestic, regional, and international wherever possible. Similarly, projected demand and supply were developed for the year 2000 in the same categories.

Conclusions and Recommendations

In promoting economic growth in SADC and RSA through investments in the telecommunications sector, Teleconsult recommends that USAID provide investment incentives to the U.S. private sector. To this end, a U.S. private sector incentive Program is proposed. This program would provide financial, technical, and legal assistance in assessing opportunities for private sector participation in telecommunications. The program would also provide financial assistance to qualified U.S. investors. Recommendations include the creation of a SADC Telecommunications Fund as part of the Program. The team proposes that Phase Two of this scoping study be used to design the details of the Program.2

ANNEX J.2

Telecommunications Sector Restructuring in SADC Countries

USAID Zimbabwe has initiated a US$75 million regional Telecommunications Restructuring Program (TRP) to assist the Southern Africa Development Community (SADC) countries in addressing those key constraints to private sector participation in the telecommunications sector.

The program has two components :

a) $60 million in non-project assistance from the Development Fund for Africa (DFA), and

b) $15 million for technical assistance from the Development Fund for Africa grant resources.

As one aspect of this program, it was decided to initiate a field research study to identify the major inhibiting factors to the reform process in four countries of concern in the SADC region, namely in :

- Mozambique,
- Tanzania,
- Zambia, and
- Zimbabwe.

OBJECTIVES

Based on the background above, and the observed need to facilitate private sector investment into this sector, through the program outlined above, it is necessary to establish the optimum mechanisms to achieve these ends. For this reason a research program was initiated by the USAID Zimbabwe office to provide answers to certain fundamental questions.

The basic question that begs an answer is this :

"What are the constraints and impediments to private sector participation in the telecommunications sector in these countries?"

A similar question then follows, which is : "What steps can USAID, or any other external party, take to facilitate the process of restructuring of this sector?"

In order to answer these questions, the following objectives were set for this program of activity.

- to provide a more thorough understanding of the information gaps, concerns and centers of resistance that are inhibiting restructuring, private sector investment and competition in the telecommunications sector,

- to provide recommendations as to the needs in each of the four countries for technical assistance and training to address the above issues, and in order to further the aims of facilitating the objectives of the program,

- to provide indications of the institutional mechanisms and proper timing for the technical assistance and training to be provided under this program.

This research report provides the findings of the investigations that were carried out in these four countries, and aims to present the recommendations of the author along the lines above.

STRUCTURE OF THE REPORT

This document is structured along the lines of individual country reports, each one providing the reader with a complete assessment of the investigations carried out in the country and the recommendations suggested for each country.

Within each country chapter, there are several sub-sections, addressing those particular telecommunications industry sectors and their positions and viewpoints on the reformation process, namely :

- the position of the Government as stated by the Ministry,

- the position of the national operator, the PTC,

- perceptions of the private sector as given by interested parties such as potential Network Operators, or Service Providers, and users,

- positions of the regulatory body, if separate from the state or Ministry,

The last section for each country summarizes the analysis, and provides for some recommendations and suggested mechanisms for implementing the process of facilitating sectoral restructuring.

CONCLUSIONS

<u>Obstacles to Sector Reform</u>

From the overall perspective gained from these four countries analyzed in this report, a number of primary observations have been made. Those factors that appear in common in these situations include:

- a lack of communication between most of the parties concerned,
- limited appreciation of the issues and processes involved in sector restructuring,
- poor process methodology within the state and parastatal organizations to be able to deal with these issues,
- lack of awareness of, and exposure to similar experience in neighboring states,
- tendencies to defend the status quo, by the PTCs in particular, where roles have not been fully understood,
- lack of technical and legal skills in department staff which inhibits their ability to draft legislation,
- an absence of a commercial attitude to business within the PTC.

Based on these observations, those priority needs within the cases presented in this report have been identified as :

- a need to establish a forum within the sector,
- access to information on similar processes in the region, in order to inform a far wider range of senior staff to similar developments in the region, especially in neighboring countries,
- a need to change the culture within the operator from a bureaucratic one to a commercially oriented one,
- a need to bring management up to date on technology developments in the sector,
- a need to expose executives to latest management practices in the commercial sphere,
- a need to expose more senior staff within the PTCs to those processes involved in sector restructuring.
- a dire need to have sector specialists and professionals available to these administrations for consultation.

Mechanisms for Participation

Having identified the major barriers to the reform process in this sector, and the needs of the present operators, it remains to formulate the appropriate mechanisms by which this restructuring can best be facilitated.

Those mechanisms that could be implemented to effect the desired objectives could be:

- Providing funds for the establishment and operating of a national telecommunications forum in each country,

- Providing funds for bringing recognized experts in this sector into the region to assist where necessary,

- Setting up a newsletter or news brief on the policy and regulatory developments in the SADC region, possibly through SATCC offices, Defining a number of management courses to address issues such as:

  - structures possible within regulatory bodies,

  - relationships between the Ministry, the regulator and the operator, and their respective roles,

  - management styles required during the restructuring phase,

  - total quality management in a competitive market place,

  - monitoring and managing efficiencies in a national network.

Possible Positioning Strategy

For USAID to position itself in a strategic economic sector that is not only growing rapidly, but is also stretching the bounds of legislative and commercial practice, would be a decisive move to entrench its influence and long-term position in a key sector. This is a major decision, and one that requires corporate policy considerations. In any event, that body or consultant that can position itself in this sector with the resources and skills to advise on, and facilitate the development of telecommunications will have enormous potential.

Some of the points suggested above as mechanisms for facilitating this process would be strategic in their implementation, in that this would place USAID in a position of high visibility, with a significant profile as a facilitator of the reform process. Since the courses and the forum would be organized by non-commercial body, there would be fewer pressures to cover costs, and no need to charge high access fees. This research project appears to have come at a very opportune

time, considering the level of activity in these countries in restructuring their operators. It is bound to take some time, as can be gauged from the time it took Mozambique to deliver final Acts and decrees. The response from these interviewees has been almost unanimous in the conclusion that:

- External assistance and technical support in this process of sector reform is vital, if valuable time is not to be wasted in covering old territory.

- The mechanism of providing an environment in which all the players can voice their fears, objections and suggestions must be independent of commercial interests.

With these statements the report concludes that a significant impact can be achieved with a selection of a few activities, to encompass the three areas of:

- availability of relevant information,

- technical assistance in the process of understanding reform, and

- a round-table forum to design custom-solutions for each country.

USAID could and should perform its role in enabling these activities to be conducted, with a modicum of control and supervision, through the agency of the SATCC offices in Maputo. On this basis, the provision of funds for these three major activities is critical, and time is of the essence, given the stage at which most of these particular countries find themselves. There is no doubt that USAID has the capabilities to be able to facilitate these activities, and the vehicles through which it can enable this to occur have been suggested above.

SURVEY REPORT

TITLE: Project Development Support -- "Development of the SADC Regional Telecommunications Restructuring Program - U.S. Technical Assistance Component."

INVESTIGATOR: Dr. Raymond U. Akwule,
Professor of International Communication,
George Mason University.

Objectives of the Study

The Southern African Development Community (SADC) is interested in establishing a solid business relationship with the U.S. private sector. In response, USAID Zimbabwe has initiated a US$75 million regional Telecommunications Restructuring Program (TRP) to assist SADC countries in addressing those key constraints to private sector participation in the telecommunications sector. Components of the program include:

a) $60 million in non-project assistance from the development fund for Africa (DFA), and

b) $15 million for technical assistance from the development fund for Africa grant resources

The focus of the study is to have a first-hand understanding of the pre-investment problems and dilemmas that have kept the companies from obtaining market/development information that is imperative to a successful business venture. The study is also aimed at identifying barriers that have prevented U.S. companies from entering into the Southern African region in the past and currently. Results of the study should help USAID to better define its role in providing the technical assistance and needed information or training to the U.S. private sector as part of the SADC Regional Telecommunications Restructuring Program. Specifically, the study seeks to determine the following:

- the perceived attractiveness of the SADC telecommunications market to American companies.
- the requirements of U.S. telecommunications companies which are current or would-be investors in the SADC region.
- the nature of the constraints to investment in the region by U.S. telecommunications companies, and
- the potential role of USAID in facilitating U.S. private sector involvement in the region's telecommunications development.

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Methodology and Scope

This section provides information about how information was obtained for this study. The report relies on information gathered during a survey that was designed for the study. In addition, the report substantially draws on the expertise of the investigator and specifically on discussions that he has had in the recent past as part of his professional duties with U.S. companies regarding their attitudes and approach to trade and investment in the SADC. A profile of his recent professional assignments is provided below to help place this study in proper perspective.

The investigator, Dr. Raymond Akwule is a Professor of International Communication at George Manson University in Fairfax Virginia and the author of *Global Telecommunications, the Technology, Administration and Policies*. He is the Publisher and Editor-in-Chief of *Africa Communications* Magazine, a U.S.-based publication which for 4 years has covered the African telecommunications, broadcasting and computers industries, and has tracked U.S telecommunications policies and private sector relationship with Africa.

He organized and was the Chairman of **AFCOM '92**: the First U.S.- Africa Telecommunications Conference, held in Washington, D.C., March 29 - April 1, 1992 and **AFCOM '93**: the Second U.S. - Africa Telecoms and Broadcasting conference held in Arlington, Virginia, September 15 - 17, 1993.

Both conferences brought Ministers and other leaders of the communications industries in Africa and the U.S. together to explore policy and trade issues of common interest and to discuss mutually beneficial technology transfer. Both conferences provided the investigator opportunity to gain further insight into the subject of this study.

The information in this report is therefore partly based on the investigator's personal knowledge of the subject but in addition it is based on a field study which used a combination of personal interviews as well as questionnaires to gain insight into the subject.

Fifteen representatives of U.S. telecommunication companies were interviewed and questionnaires were sent to 50 individuals; 25 responded to the questionnaire (see attached copies of the questionnaire). The sample for the study was chosen mainly from companies which were represented at the **AFCOM '93** conference. These companies are either currently doing business in the region or have expressed an interest in the region by their presence at the **AFCOM '93** conference. However, the questionnaire still inquired as to the nature of their interest in doing business in the SADC.

U.S. Private Sector Interest in the African/SADC Telecoms Industry

Though companies such as Motorola Corporation have been operating in Sub-Sahara Africa for almost a decade, in general U.S. private sector interest in the African telecommunications market is a very recent phenomenon and compared to other world regions the attention being paid to Africa is negligible. Nonetheless, there is momentum in U.S. private sector interest in the African telecommunications industry in general and in the SADC community in particular. How to uphold this momentum and what role the USAID should play in encouraging this interest for the SADC region is the focus of this study.

There are several ways of gauging U.S. private sector interest in Africa and in the SADC over time. One way is to review the level of attendance in relevant conferences/trade shows.

In 1990 when the International Telecommunications Union (ITU) organized Africa Telecoms '90, a conference and trade show, only 3 of the approximately 167 companies and organizations that exhibited their products and services were U.S. companies (Motorola, AT&T and Scientific Atlanta). By comparison, 5 companies were from Canada, 5 were from Japan, 10 were from the Asian countries and 63 were from Europe. The relatively weak U.S. presence at Africa Telecom '90 led to the perception among some African telecoms industry leaders that the U.S. telecoms companies in general were not interested in doing business in Africa. The absence of Ms. Janice Obuchoski, Head of NTIA, who had been invited to deliver a major speech at the conference did not help this perception. Mr. Jean Jipguep, Deputy Secretary-General of the ITU and a citizen of Cameroon, expressed his disappointment in Ms. Obuchoski's absence.

Other smaller telecommunications conferences/trade shows in Africa have generally not drawn American companies. However, the AFCOM conferences staged in the U.S in 1992 and 1993, attracted a significantly higher number of U.S. companies than any other conference of its kind. The conferences underscored the growing U.S. private sector interest in pursuing telecommunications trade and investment opportunities in Africa.

The staging of the AFCOM conference for two years in a row, based partially on governmental funding, and the fact that as many as 60 U.S. companies and organizations attended the conference in 1993 are significant indications of growing U.S. interest in the African telecoms industry. In spite of the conferences, however, U.S. private sector interest in the region is marginal relative to the manifest interest in other world regions. The AFCOM conferences are central to U.S. Africa telecoms relations because they have helped to stimulate and to reflect the growing U.S. interest in the African telecoms industry. The next section will therefore provide some background on the conferences and explain the relevance of the conferences to this study.

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AFCOM Conferences:

AFCOM '92: the First U.S. Africa Telecommunications Conference, which took place in Washington D.C. in March of 1992 was followed one year later by **AFCOM '93**: the Second U.S. Telecoms and Broadcasting Conference in Crystal City, Virginia. Both conferences were based on the premise that U.S. businesses have an opportunity to play a significant role in Africa's social and economic development through partnerships for the expansion of telecommunications facilities and services and for the development of human resources. The conferences were funded by grants and financial inputs from government and private sector sources.

Specific goals and objectives of the conferences as stated by the organizers include the following:

- develop linkages for information exchange, trade and investment facilitation, and technology sharing;
- identify the infrastructure and resource requirements for improving Africa's communications industry;
- provide participants with an opportunity to meet personally with leaders of the African telecommunications and broadcasting sectors;
- provide a wide variety of U.S. businesses, primarily small- and medium-sized entrepreneurs, with current information about the size and potential of the African communications market;
- facilitate transfer of American technology for the social and economic development of Africa through presentation of expert information;
- provide African participants with the opportunity to attract American investors to the African communications industry;
- disseminate information about ongoing and future communications projects and show participants how to monitor such projects on an ongoing basis;
- provide participants with information about a matrix of financial resources that can support continued interest in the African communications industry; and

- o explore the specific challenges and opportunities arising from the wave of privatization of broadcasting that is currently sweeping Africa.

An average of 250 participants attended the conferences. There were three categories of participants: high-level government officials from the African and U.S. communications sectors; U.S. and African private sector communications entrepreneurs who shared their perspectives on the private sector and strategies for effective U.S.-African private sector partnerships; communications development specialists and representatives of international financial institutions.

The conferences represented a watershed in U.S.- Africa trade by bringing Ministers of Communications and other communications industry leaders from numerous African countries to the U.S. to explore trade and investment opportunities with public and private sector leaders of the U.S. telecommunications industry. Small, medium-sized and large corporations in the U.S. had the opportunity during the conferences for prolonged discussions with key players from the African communications industry.

U.S. and SADC Telecoms Trade and Investment Relationship

As indicated in the preceding discussion, U.S.-Africa telecoms trade/investment relationship is growing but it remains marginal compared to other world regions. This study helps to characterize the status of the U.S. - SADC trade and ir vestment relationship and to identify the persistent problems therein. Finally, it provides some recommendations as to how the USAID can help to alleviate the problems.

Several U.S. companies are already doing business in the SADC region. They range from small companies such as Radiation Systems Inc., which provides satellite, microwave communications and related systems, to Motorola which provides cellular and various wireless communications systems. Indeed all the companies included in this study indicated that they are either already doing business or they are interested in doing business in the SADC. The larger companies such as AT&T and Motorola seem to have no problems establishing a business relationship in the region. By contrast, the smaller companies seem to experience greater difficulty with establishing such business links with the region. The reasons for this are several and they will be discussed in the next section.

Obstacles to trade and investment in the SADC:

This section describes barriers to entry perceived or encountered by U.S. companies wishing to do business in the SADC. The barriers can be described as Africa/SADC centered or as U.S.-Centered Obstacles and Policies.

1. African/SADC Centered Obstacles

The Africa-centered obstacles relate to the following three conditions: economic and political conditions; attitudes toward telecommunications investments; and restrictive government policies.

A. Economic and Political Conditions:

Two important considerations for corporate investment in a country are the current economic conditions and future prospects for the country. A perception of poor general economic conditions in Africa is as disinsentive to U.S. corporate investment in the continent as is the perception of political instability. The SADC like the rest of Africa suffers from this perception of fluctuating or deteriorating economic performance and of political instability especially for some of the countries.

Bell Atlantic is an example of a U.S. telecommunications company which attempted for a while to pursue business opportunities in the SADC and in Nigeria but decided partly based on the economic and perceived political conditions in the region to suspend any effort to pursue business in the continent. GTE Spacenet, in a similar vein, has not decided to invest in the region due to major strategic commitments elsewhere. It appears that projects in other major world regions are consuming the resources of these companies to the point where human resources are exhausted.

Sprint International has also made a strategic decision to limit its involvement in Sub-Sahara Africa in favor of investments in other world regions.

Several of the respondents in the survey, including AT&T, Motorola, and Hero Communications, cited "political instability or unrest" as major disincentives to investment in the region.

A related concern focuses on the speed at which business is done in the region. The slow response rate that is characteristic of the business culture in most African States was noted by several companies. One respondent talked about the inability of the countries to make decisions in an expeditious manner. In addition, it would appear that a major part of the business culture in many African countries is the reluctance to commit agreements to writing, in direct contrast to the U.S. business culture. A representative of AT&T Tridom has complained that his company has been "unable to gain written agreements and pricing so we can do a business case and have upper management approval." For U.S.
businesses which generally require quick returns on investments and which measure individual and corporate progress on a quarterly basis, the slow pace of decision making and of business in general within the continent is a distinct obstacle.

B. Attitudes towards Telecoms Investment

There is a perception in the U.S. that the SADC and other African countries are not as willing to invest in the telecommunications sector as they are in other sectors of the economy such as roads, transportation, and agriculture. This under-investment in telecommunications is of concern for many reasons, including that it restricts the ability of U.S. companies to do business in the countries. Furthermore, this lack of investment in telecommunications is seen as a lack of awareness as to the importance of telecommunications in the development process. It is therefore not surprising that when afforded the opportunity to address African telecommunications leaders U.S. government officials and corporate leaders emphasize the economic development role of telecommunications. For example, during **AFCOM '93**, Mr. Michael Fitch, Deputy U.S. Coordinator, CIP Bureau, Department of State, spoke at length about the importance of installing a high quality telecommunications system in Africa. Fitch's observation is very pertinent to this study because as spokesperson for CIP, Fitch was voicing the collective concerns of the U.S. Government and businesses. In his speech, he focused on ways in which a country's export performance may be enhanced by a developed telecommunications system. He concluded that as many countries as possible should gain access to a high quality telecommunication system in order to develop at a steady pace.

C. Restrictive Government Policies

A third but related problem cited by respondents in the survey is the restrictive policies of African nations. SADC countries typically exercise governmental monopoly control over the public telecom systems including the public switched networks, cellular, paging, etc. This generally leads to a crises of confidence on the part of the U.S. corporations based on the perception that government run monopolies are not usually efficient.

Government reluctance to involve the private sector in the operation and maintenance of telecoms sector virtually eliminates or severely limits opportunities for U.S. investment, according to some survey respondents. One respondent observed that "PTTs negative attitude to private sector value-added telecomms services" limits opportunities for investment.

A representative of Exxon Corporation explained that because of the poor telecommunications network, his company spends a considerable amount of effort setting up private communications networks to facilitate communication between Exxon and its partners or clients within and outside Africa. He said that unfortunately the negative attitude of PTT toward such private initiatives restricts business and often serves as a disincentive to potential new entrants or potential development projects.

Mr. Gordon Grant of Digital Communications Limited, stated that one of the dreams of his company is to link the countries of Africa through a vast telecommunications network system. "We have a dream at [Digital Communications] that one day, truckers will leave Douala for Dakar and will have full coverage of trunked radio, paging and cellular as they travel

through Lagos, Accra, Abidjan and other cities of West Africa." Mr. Grant observes that the monopolistic tendencies of many of the administrations across Africa impede the investment efforts of companies such as DCL with such grand visions.

Grant's observation is symbolic of the optimistic outlook of U.S. private industry. Michael Fitch echoed a major U.S. approach to telecoms development. "The best way to begin the process of making telecommunications available is through privatization and liberalization of the private sector," said Fitch. He added that "this requires, at a minimum:

(a) fair market access;

(b) reasonable and transparent regulation;

(c) fair, non-discriminatory treatment by monopolies or telecom organizations;

(d) unrestricted movement of information among countries and companies;

(e) effective regulatory bodies; and

(f) access to and use of telecom services."

Fitch was echoing the concerns of several U.S. private corporations included in this survey. For example, Mr. Cliff Feldman of Sprint International outlined what Sprint views as the desirable characteristics of a strategic African partner. They include:

- Operating experience
- Standards compliance
- Use of advanced and proven technology
- Vendor/manufacturer independence
- Viability of business plan to attract and promote subscriber participation

Feldman notes that many African nations find themselves at a loss when confronted with these demands, and that it is therefore in their best interest to continue efforts to privatize and liberalize service provider sectors such as telecommunications. Sprint International he says would like to collaborate with African partners to bring the telecommunications sectors up to a standard where the partners can "stand on their own."

One related observation is the fact that under the existing governmental monopolies, the main external telecoms partners are usually European. European companies are seen to have a competitive edge as a result of their colonial ties with the SADC region. The SADC is

currently dominated by European telecommunications companies. The latest evidence of this European domination is the choice by most of the countries of the SADC of the GSM cellular technology, a European based standard, over other U.S. standards. The choice of GSM automatically gives the European based cellular companies an edge in the region. U.S. companies wishing to enter such markets will first have to collaborate with European companies.

2. U.S.-Centered Obstacles

A. Some U.S. government policies are perceived as impediments to telecommunications trade and investment in the SADC. Three major policies cited include: 1) the lack of financial assistance and other governmental support for U.S. companies seeking entry into the SADC market 2) the "Foreign Corrupt Practices Act," which prohibits U.S. companies from engaging in corrupt practices such as bribery, etc., and 3) U.S. policy of not tieing aid to the purchase of U.S. products. These policies in combination are said to place U.S. companies at a competitive disadvantage against their European and other counterparts.

Schelle Communications, a U.S. cellular company, which is currently operating a cellular network in Ghana implied that it had lost competitive bids to European cellular operators on several occasions because of the combined effect of the lack of financial and other assistance from the U.S. government and aspects of the "Foreign Corrupt Practices Act." A Schelle representative explained that the business culture in most African countries encourage practices which easily violate the corrupt practices act. This he noted is in contrast European policies which actually encourage companies operating in foreign countries to adapt fully to the local business culture and practices.

"Lack of U.S. policy/financial support for U.S. Companies," is a problem, according to one company representative. "The U.S. Government does not provide financial support (e.g. in the form of subsidies, grants, loans) for U.S. telecom companies as other nations do with their telecom companies. Thus, we are at a competitive disadvantage." He added, "U.S. telecom firms have historically had very little presence in Africa. But we must compete with foreign firms who have extensive relationships with African governments."

The Information Needs of U.S. Companies

All the participants in the survey agreed that a major impediment to doing business in the SADC is the difficulty of obtaining information about telecommunications developments in the region, even for the larger well-financed companies, such as AT&T and Motorola. Respondents to this survey sought and obtained information about the SADC in a variety of ways. But before looking at the sources and techniques used for gathering information about the SADC, let us first outline the types of information generally required by the companies

interested in trade and investment in the SADC.

The types of information generally required by U.S. companies range from demographic information, including current political conditions, to specific information on types of available telecommunications equipment in the country and licensing requirements. As can be expected, the needs of the countries varied depending on the specific products or services or on size of the companies. All the companies seemed to require detailed information on national economic conditions and the growth potential for U.S. businesses. However, some companies, such as Comstar, a cellular provider, emphasized the need for specific regional demographic information.

AT&T Tridom, which installs VSAT networks, complained that it has had difficulty in some instances finding out exactly what the licensing procedures are, and even about what entity has the authority to issue licenses. Somewhat surprising is the complaint by several companies that the correct procedures for repatriating earnings from the African countries is not always clear. The survey respondents conveyed an intense sense of frustration over the inadequacy, and in some instances the contradictory nature of market intelligence. Some of the complaints about contradictory information reflect the evolutionary nature of the African countries where changing political and economic conditions result in equally fast changing policy environments.

Pointing to a problem of a slightly different nature, PanAmSat noted that it would like information about securing financing for potential customers in Africa. The company would like help in ascertaining whether specific companies are eligible for U.S. and/or international assistance and loan Guarantees. According to this survey, the issue of qualifying companies for financing purposes is a major concern for many U.S. companies, especially the small- and medium- sized companies. Keeping track of information required to make such decisions on a customer by customer basis requires a tremendous amount of effort, sometimes more than the financially strapped company can afford. Clearly, the inadequacy of information is an impediment to trade and investment in the SADC and seems to present an opportunity for USAID assistance.

The following is an outline summary of specific responses to the question: What major types of information does your company need to make an informed pre-investment decision (e.g. pre-feasibility, feasibility study, etc.) or investment decision?

<u>Outline Summary of Required Information</u>

1. - Market Potential/Feasibility studies
   - -Income demographics
   - -population information by city
   - -information on business/commercial establishments
   - Information about key decision makers for various types of services, for example VSATs
   - Changes in Structure and personnel

- Contact names for government agencies and local businesses;
- detailed sales volume on telecommunications hardware and software for individual countries;
- Reports about the investment climate for individual countries.
- Review of current telephone system
- Rules and regulations of conducting business
- Economic strength and political stability information
- Help in identifying reliable business partners
- Market analysis
- Country economic and financial news
- Regulatory structure
- Prequalification of projects studies submitted to interested parties
- Investment restrictions, operating rules, tax/tariff rules
- Existing competition and market activity
- Status of labor/management relations
- Existing infrastructure and development plans
- Government procurement relations and requirements.
- Willingness and evidence to encourage more private participation in business activities in general.

Where and How Do U.S. Companies Seek Information About the SADC?

U.S. companies generally rely on the following three sources for information about Africa: 1) U.S. Government sources, 2) Press and other secondary sources, 3) first hand information gained through in-country representatives, conferences and trade missions. The importance of each of these sources is discussed below.

U.S. Government Sources

Most U.S. companies wishing to engage in international business generally contact the Department of Commerce (DOC). While the Office of Africa of the DOC is generally helpful in providing broad background information about individual African countries, information that is specific to the telecommunications sector is generally inadequate both for the continent and for specific countries. One particular International Trade Administration office has been promising a comprehensive profile of telecommunications in Africa for slightly over two years; the document is yet to be published. The DOC by contrast is fairly well informed about telecommunications in Latin America, the Caribbean and Asia.

Another source of information for U.S. companies doing business in Africa is the Department of State (DOS) which generally provides travel advisory based on its own assessment of political situations in the country or region. Beyond such travel advisory, the State Department generally refers all other inquiries for example about economic or commercial

conditions in a country to the DOC and other agencies.

Both the Federal Communications Commission (FCC) and the National Telecommunications and Information Administration (NTIA) are also approached regularly for information about international telecoms markets. Both of these sources have relatively little information about telecommunications in Africa.

The Export Import Bank (Eximbank) is another institution from which U.S. businesses generally derive inspiration as to whether to do business in a particular country where they have spotted an opportunity. In many ways the Eximbank is more important than some of the other government sources because it guarantees loans used for the international transaction. If the Eximbank refuses to
guarantee the loan for a particular country based on its assessment of the "risk" attached to that country, then U.S. businesses generally abstain from that country.

Clearly, information about telecommunications in Africa provided by the combined government sources described above is highly inadequate for the needs of U.S. companies contemplating trade and investment in Africa. This inadequate government guidance can be partly blamed for the low level of interest in the SADC and Africa. One potential role for the USAID, therefore, is to feed information directly to the major government sources or collaborate with each of them directly to provide adequate and reliable information to American businesses wishing to do business in the SADC.

Press and Other Secondary Information sources

The major U.S. electronic and newspaper press have often been criticized for its negative coverage of Africa and for concentrating on the political and economic instability and almost never on the accomplishments. Though it is arguable the degree to which this is true, there is little doubt that the negative coverage of Africa in the major press tends to discourage U.S. businesses from venturing into Africa.

There is relatively little coverage of Africa in the telecoms press. The leading international telecoms press such as International Communications, Telephony International, Via Satellite, Satellite Communications, etc., have very minimal coverage of Africa. There are few publications which focus on the African communications industry. They include: Africa Communications Magazine (Washington D.C.-based); Communications Africa (London Based); Computers in Africa (London Based); these circulate well in Africa. Africa Communications Magazine, which was responsible for organizing the **AFCOM '92** and **AFCOM '93** conferences, seems to be the most widely read in the U.S.

Khafre International, a small business, said it relied on a variety of general interest African specialist magazines to stay informed about general political and economic information on the region but it has relied heavily on Africa Communications Magazine for information

about the telecommunications sector. Progeny Ventures observed that the magazines that focus on Africa, including Africa Communications Magazine, have been reliable but fairly inadequate. The collective press sources tend to provide fairly general information and not enough specific information about trade conditions or about the telecommunications sector in the SADC.

The lack of information has prompted International Technology Consultants (ITC) to consider the viability of a telecommunications market report on Africa. It has also caused AFCOM International Inc. to consider reviving its newsletter Africa Telecommunications Report.

A major problem of these media sources is that the information they provide is too general to serve the specific needs of companies venturing into the SADC. Furthermore, the information is not usually as current as the companies would like.

In-Country Representatives, Conferences, and Trade Missions.

Clearly, traditional sources for information such as the press and the governmental sources described above do not seem to provide as much information about Africa as they do for other world regions. U.S. companies which can afford the expense generally obtain their most reliable information first hand, either through their permanent in-country representatives or by travelling on a regular basis to the countries, or by attending conferences where they meet with the major players from the countries.

Motorola seems to be in a unique position among U.S. companies, because it has been involved in the Two-way and Single Side Band radio business in the SADC region for at least 20 years and boasts of its reliable and pertinent "on the ground information." GTE Spacenet, a more recent arrival to the African scene and a much less financially endowed company than Motorola, has followed Motorola's example by resorting to direct active marketing in the SADC region in order to publicize its services.

Dr. Edward Slack of Comsat Mobile Systems insists that when it comes to Africa there is no substitute for being there to gather information first hand. He says that even though he reads the relevant press and consults the government sources, he has found travelling to the country to be the most rewarding approach. Unfortunately, many small businesses cannot afford the travel budget. This he says is a big time-waster.

A representative of AfriSpace, a small business in the beginning stages, said that "Travel is far and away the best approach, but also the most costly." He added that the conferences are very helpful because they provide excellent networking opportunities, but he noted that they can become time consuming and expensive.

Exxon CSC, which operates an extensive telecommunications operation in Africa has devised its own information gathering plan. According to a spokesperson for the company, "Typically, we do not rely on a single point of contact, but rather form a composite analysis

before discussions with the responsible regulatory entities in the host nation." He said that this approach has the advantage of generating a wide range of contacts and access to current information. The downside to the approach is that the sources belong to a specific interest group, and their input will be biased by their own business conditions.

Exxon's concern about bias was echoed by a representative of Schelle Cellular: "People who bring you opportunities always want something and may be biased."

Trade Missions

From the results of this survey, it is clear that U.S. Government sponsored trade missions can offer any organization an edge in the SADC region. A majority of those surveyed felt that trade missions can be beneficial and improve the outlook for investment in that region. These trips can introduce small, growing businesses to a market which may have seemed to be somewhat beyond their grasp otherwise. The visits also allow larger corporations already operating in other foreign markets to expand into regions where they do not already have a presence. Ultimately, trade missions to the SADC region give first hand information regarding this unique market which is crucial to overcoming many of the barriers that exist in the SADC region. Information on this region is scarce, and this method of information gathering is the single most productive one for the region, especially for small companies.

Opinions regarding the value of trade missions vary very little among the respondents. Most companies recognize the importance of trade missions, which enables both parties to meet without the barriers of time zones, technological inadequacies and other cultural obstacles. Smaller companies tend to view these opportunities as an excellent occasion to expose their services or products to an African market. A small export business which considers trade missions important, said, the missions can serve as an entry vehicle for gathering information. The benefits of one-on-one business contact should not be underestimated when working within the African region. PanAmSat has already participated in a mission to South America and believes that servicing a mission to Southern Africa would be "most useful." There was only one small cellular organization, COMSTAR, that did not feel that trade missions were advantageous to its business, even though this company has never participated in a trade mission.

Not unlike other regions of the globe, quality organization and advanced planning of the visit are the key ingredients of a successful trade mission to the SADC region. Long-term planning in conjunction with an understanding of the market conditions can help to maximize the benefits for all of the participants. Large and small companies both reported higher returns from trips that were conducted in this manner. "Trade missions are useful, but only if appointments with qualified distributors are made in advance," remarked one small business.

Schelle Cellular said that it has participated in trade missions sponsored by the Overseas Private Investment Corporation in Ghana, Kenya and Tanzania. Schelle Cellular is currently

working on a multi-million dollar contract in Ghana.

The long-term planning can only be effective if there is an understanding of the current market conditions and a willingness to do business is present on both sides. One smaller company, Progeny, summed up the value of trade missions as follows: "Trade missions can be useful if the host countries are serious, prepared and understand the nuts and bolts of attracting foreign direct investments. Trade missions can lead to joint ventures and strategic alliances. However, there has to be prepared entities in the host countries that are ready, willing and capable for these ventures and alliances." These pragmatic attitudes were also echoed by others in the survey. Motorola said that the conditions for investment must exist prior to the visit to the country. "We have participated, but trade missions don't accomplish much if the conditions for investment don't exist."

The larger companies which participated in this survey considered the visits to be extremely useful, and smaller companies, too, have enjoyed such successes. The larger companies, however, have a higher reported rate of participation in U.S. Government sponsored trade missions, as opposed to missions sponsored by the company or private sources. A respondent from AT&T said, "Yes [we have participated], and much was achieved by doing so...very valuable."

Smaller companies were far less likely to have participated in U.S. government sponsored trips even though most said that they had strong interest in doing so. The primary reasons smaller companies have not participated in a trade mission center around personnel shortages and the perception that "the trade missions generally consist of large multinational companies instead of smaller firms." This perception may indeed be an impediment for smaller companies.

Many smaller companies do not have the personnel to conduct a trade mission to another continent. This barrier can be overwhelming for smaller companies that see the business potential in the area. According to one small company representative, "My company typically does not participate in trade missions (outbound) because we feel we cannot spare people for long trips, but we do host inbound delegations whenever possible." The attitude of many other small businesses was similar.

International Technology Consultants, a small business, has heard from many other clients that trade missions played a fundamental role of providing access to foreign markets in general. Businesses of all sizes can benefit from U.S. Government sponsored trade missions. A respondent from one of the larger corporations, Exxon, said that while the trade missions serve an important function, they also tend to level the playing field among competitors within a given industry.

One indirect benefit of the U.S. sponsored trade missions is the positive message that members of the SADC community receive from the U.S. Government. The visits display to the countries in the region that the U.S. government is supporting these efforts to forge new

partnerships, which in turn strengthens the bond. This message is a strong one for developing African nations who are striving to establish fresh links with the global community. A small business observed that these missions, which need not always be government-sponsored, "provide access and confidence to both U.S. firms and African decision makers (both public and private)."

The following is a summary of agencies/publications mentioned as sources consulted for information on Africa:

- State Department
- Global Telecom News
- Associates--Contacts
- Conferences
- U.S. Embassy/State Dept.
- *Africa Communications* Magazine
- Kagan Newsletter on Int'l Cellular
- AT&T Global Resource Center
- Foreign Commercial Service
  - -World Trade Dev. Report
  - -Comparative Shopping Service
- Research
- U.S. Foreign and Commercial Service Desk
- Communications Daily
- Telephony
- O.P.I.C. Reports
- Trade journals
- Regional magazines
- Continuous personal travel
- Personal Experience
- Business Journals
- Trade Missions
- Contacts in region
- U.S. consultants/specialists
- Media
- U.S. Commerce Dept.
- World Bank country studies
- Infrastructure Finance
- Communications Week Int'l
- Teleconnect

Additional Information Requirements

Participants in this survey were asked what type of additional information sources should be developed.

As would be expected, the suggestions reflected the specific needs of the companies and in some cases the specific sizes of the company. However, it is obvious from the responses that the USAID can best assist U.S. companies by taking steps to help improve the amount and quality of available information about the SADC countries and also help to improve access to the information. The range of responses offered by the survey respondents provide the key to devising a strategy for such assistance.

AT&T and some of the other companies said that they would like to see the creation of more informational conferences such as the AFCOM conferences, pointing out that the conferences provide very useful information about the status of the telecommunications and other

infrastructures in various countries. The conference should be staged both in the SADC region and here in the U.S.

AT&T also suggested that a system be set up that would encourage the New York Times and the Wall Street Journal to publish relevant and detailed information about the region on a regular basis thus ensuring reliability and the widest dissemination of the information.

One small company would like to see an "Inventory of Telecoms Business in the SADC," a complete directory, with as much detail as possible on each firm. Resource Electronics pitched for an electronic version of the directory which would contain "Computerized data on individual countries."

Exxon Corporation suggested the establishment of a regional telecommunications information office to serve U.S. businesses.

Khafre Systems International said that it would like to see "the development of an electronic mail communication system which would allow us to communicate with in-country State Department or Commerce Department personnel." Khafre said that such a system would enable the companies to field requests directly and receive responses quickly. The company noted that a way to accomplish this inexpensively would be to set up Internet accounts for in-country personnel.

MTEL suggested that the personnel of the Foreign Commercial Service should be encouraged to be more efficient and professional, insisting that the role of the personnel in providing information is crucial. The company also suggested that the telecoms trade press should be encouraged to emphasize the region more than they currently do.

AfriSpace thinks that Capitol Hill/U.S. Government Agency meetings on a regular basis would help build closer relationships with, and greater investor confidence, in Africa. An AfriSpace company spokesperson said "Those of us trying to put projects together need greater support from elected and non-elected leaders to promote more sustained U.S. Government support in terms of policies, promotions, and expenditures."

CONCLUSION AND RECOMMENDATIONS

This survey reveals that there is a marginal but growing interest in telecommunications trade and investment with the SADC. While some U.S. companies are already involved in the development of the telecommunications infrastructure and services in the Community, this study has helped to characterize the major obstacles for both the U.S. companies that are already established in the region and those wishing to enter the market for the first time. The obstacles can be described as African centered or U.S. centered, but they combine to impede the willingness or ability of U.S. companies to pursue trade and investment opportunities in the

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SADC. The Africa-centered obstacles relate to the following three conditions: the economic and political conditions; the attitudes toward telecommunications investments; and the restrictive government policies.

The U.S.-centered obstacles identified relate to the following: 1) the lack of financial assistance and other governmental support for U.S. companies seeking entry into the SADC market 2) the "Foreign Corrupt Practices Act," which prohibits U.S. companies to engage in practices which might be culturally acceptable in a foreign country, and 3) the U.S. policy of not tieing aid to the purchase of U.S. products.

There is very little that the USAID can do to influence some of the persistent problems that have been highlighted in this report, however there are vast opportunities for USAID's assistance in alleviating several of the problems identified.

Based on this survey three major roles can be recommended for USAID:

1) facilitate access to information relevant to making telecommunications trade and investment decisions;

2) more financial assistance to qualified U.S. companies, especially the small to medium sized-companies, to enable them better cope with the difficulti[illegible] of establishing trade and investment links with the SADC.

3) USAID should more aggressively lobby for more U.S. Government focus on the SADC.

Specific USAID activities could include the following:

- USAID should develop a system for providing current information on the status of telecommunications in the SADC --this could include providing regular briefings and reports and using internet for disseminating telecoms information

- USAID should provide market studies that identify potential telecoms markets, projects and tenders. This would make it easier for U.S. businesses to identify the SADC markets which would be most suited for the products and or services they offer.

- The Agency should get more directly involved in helping the companies to establish business contact with the appropriate telecoms officials and in helping to identify local partners. Since this is already the function of the commercial attaches at the embassy, USAID should aggressively pursue a support role in this area. There should be USAID liaisons for this purpose both in Washington and in host countries or in a SADC regional office.

- Motorola's idea that USAID should take a more pro-active stance in introducing new technology ideas to the African nations is worthy of consideration. This can be done by funding

pilot projects that demonstrate what technology can do -e.g. Wireless local loop to alleviate waiting lists.

- The Agency should support advanced training of managers of local telecoms companies, and also financially support trade missions of U.S. companies that wish to meet SADC business partners. The advanced training would enable developing nations to study and understand the new technology and decide what products or services would best suit the needs of the nation. The trade missions are especially useful to small businesses who are often too financially strapped to pursue the business opportunities on their own.

- USAID should help educate U.S. telecoms companies about government and private agencies that can help them in the pursuit of opportunities in the SADC.

- USAID should continue to support the AFCOM conferences, which are designed specifically to foster the telecoms trade and investment relationship between the U.S. and Africa.

- USAID should establish a telecommunications program and a telecommunications center that will pro-actively encourage minority and small businesses to pursue business opportunities in the SADC. As part of this program, the agency should facilitate more loans to minority and small businesses. The program headquarters should be based in Washington D.C. and it should liaise closely with telecommunications center centrally located in the SADC. In addition to being a clearing house, the center should perform such functions as organize meetings between U.S. firms and qualified local SADC telecoms businesses.

In conclusion, a major need of U.S. companies is information -- reliable research and market analysis of the regional market. Another major need, especially for the small and medium sized companies, is financial assistance, to enable the companies to pursue the investment and trade opportunities in the SADC. There are opportunities for USAID assistance in fulfilling those major needs.

Attachment 1.

The following companies were represented in the study:

AfriSpace
AT&T
AT&T International Consumer Long Distance
AT&T Global Business Systems
AT&T Tridom VSAT Services
Automation Research Systems
COMSAT
COMSTAR
Designsat International
Digital Communications Group, Ltd.
Exxon ECSC
GTE Spacenet Corporation
HERO Communications
Iridium, Inc.
International Technology Consultants
Khafre Systems International
Lightcom International
Motorola ICID
MTEL International
PanAmSat
Progeny Ventures
Resource Electronics
Radiation Systems
Schelle Cellular Group, Inc.
Telecommunications Industries Association (TIA)

Note: Some of the companies interviewed did not send in their questionnaires. They included Mobile Telesystems Inc; Interdigital; Sidereal Corporation.

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International Telecommunications Union (ITU)

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Staff Appraisal Report. The United Republic of Tanzania. Third Telecommunications Project. April 2, 1993

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GLOSSARY

Analog: Electrical signal carrying information content. Most telecommunications equipment manufactured before 1980 were analog based.

Bypass: When a (potential) customer uses alternative means of connection to the network rather than the traditional carrier as its provider.

Consumer's Surplus: The benefit derived by a consumer from the consumption of a good or service beyond what the customer paid for it.

Cost-based Pricing: Prices that are specifically related to cost associated with the production

DEL: Direct exchange line. Refers to an installed main line subscriber telephone.

Digital: Discrete samples of an analog signal. Digital based systems are less susceptible to noise impediments than analog signals. Digitalization allows for system integration and significant increases in transmission and switching capacity resulting in a reduction of per unit costs of telecommunications systems. Most systems manufactured after 1980 are based on digital technology.

Derived Demand: Derived Demand describes business demand for productive inputs i.e., firms do not demand a good or service for their own sake, but for what it can contribute to producing a given output at least cost. Inelastic demand, whether derived or consumer demand, is demand that is not very responsive to price changes. Specifically a given percentage increase or decrease in price is accompanied by a smaller percentage decrease or increase, respectively, in quantity demanded.

Dominant Carrier: A telephone company which by itself dominates the local telecommunications market. Without proper regulation, a dominant carrier could abuse monopolistic powers.

Economics of Scale: Economics of Scale exist if proportional increases in inputs more than proportionally increases output. Mathematically, if and only

$$f(x_1, x_2, .. x_n) > Q, \text{ for } > 1$$

where x_i 's are inputs and Q is the output.

Economies of scale can arise from a number of sources. Larger capital items (e.g. machines) may be able to produce several units at a lower unit cost than the machine that would be required for low levels of production. .

Economies of Scope: When a firm is able to produce two or more products jointly at a lower unit cost than producing each separately.

Elasticity: The sensitivity of quantity to a change in the variable of interest. Thus price elasticity of demand is:

$$= (Q_i/Q_i)/(P_i/P_i) \text{ or}$$

$$= (Q_i/P_i)/(P_i/Q_i)$$

where P_i is the price of the. good or service and Q_i is the quantity.

Income elasticity, more precisely, the income elasticity of demand, is the responsiveness of demand to changes in income, that is, purchasing power.

All other elasticities are similarly defined.

Externalities: There are two externalities associated with telephone service: call and access. The call externality arises from the impact, positive or negative, upon the called party, which is in addition to the benefit received by the caller, who, by definition, must regard the benefit to be at least as great as the cost. Obviously, not all cails received are regarded as beneficial by those called, and one manifestation of this is unlisted numbers. But, on balance, the call externality is very likely positive.

The access externality arises each time an additional subscriber joins the network because there is now one more party that the previously existing community can reach. This is thought to be a benefit that continues to accrue as the network increases without limit, and it is the rationale for charging subscribers to larger exchanges more for access than subscribers to smaller exchanges. This externality more critical in developing countries where the systems have very low penetration. There are large proportions of subscribers whose access, insofar as it enables one to reach, and be reached by them, is irrelevant, except to the extent that the costs to all are reduced due to economies of scale.

Economic Profit: Profit over and above a normal return on investment. Accounting profit is greater than economic profit. Accounting costs would, generally, be below the economic costs.

Exchange: A central office area containing a telephone switching equipment and the connecting outside plant.

Fill Factor: The percentage of DELs relative to the total installed capacity of an exchange.

Flat-rate Pricing: Pricing a service at a uniform price irrespective on the volume consumed. A common pricing practice for exchange service in the United States.

GOS: Grade of Service. The percentage of calls not completed in a telephone network.

International Settlements: The payment of one county's telecommunications entity to another for the carriage of its traffic to the terminating point in the recipients county. Settlements have not been based on the costs of the transmission.

Marginal (or Incremental) Cost: The cost associated with the additional (incremental) cost of providing an additional unit of output.

Monopoly: A single supplier of a good or service. A "natural" monopoly exhibits economies of scale and scope which, if its prices are based on costs, will generally, prevent entry.

Natural Monopoly: The concept of natural monopoly is that of an industry in which there is room for only one supplier, due to something in the nature of the production process or the market. Traditionally, a declining long run marginal cost curve, i.e., economies of scale, was considered the defining characteristic of a natural monopoly. More recent research indicates that what is known as strict cost sub-additivity is the appropriate cost test. Strict cost sub-additivity means one firm can produce more cheaply than two or more firms. Necessary and/or sufficient conditions on the cost function for it to be sub-additive are investigated in Baumol.

OSP: Outside Plant. The cable network connecting a Switching Center to a subscriber.

Opportunity Cost: The cost associated with the next best alternative use of an input.

Pareto Improvement: A move toward Pareto Optimality. An improvement in the benefits for some without the loss of benefits by others.

Pareto Optimality: The optimal allocation of resources as judged by consumers valuation of the goods and services given the resources available. Even if the price is set at marginal cost, this may not be a move toward Pareto optimality, since the necessary conditions outside the industry have not been met. This has been termed in the literature the problem of "second best". See Lipsey & Lancaster.

PABX: Private Automatic Branch Exchange. A small switching equipment usually located in

a customer premise.

Penetration: The percentage of DELs per 100 inhabitants.

Plant: A term used to designate telephone equipment and cables.

Predatory Pricing: Pricing with the purpose of preventing a potential competitor from entering the market or driving a competitor out of the market. Predatory pricing may be considered evidence of predatory intent

PTT: Post, Telephone and Telegraph. A term used to refer to government owned and operated entities providing postal and telephone services.

RBOC: Regional Bell Operating Company. One of seven regional local telephone company which resulted from divestiture of AT&T in the U.S (1984).

Rate Averaging: Setting uniform rates based on an average, such as uniform rates per kilometer without regard for the individual costs of a service, product or route.

Rate Base Regulation: Regulation based on the size of the (depreciated) capital stock i.e. the amount of investment in telephone plant and equipment.

Rate Re-balancing: Changing a rate toward a cost basis. The practice usually occurs in response to threats of competition.

Regulation: A method of control of a firm or company through a series of rules and regulations.

Restructuring: Used in reference to the privatization or structural changes in the operation, ownership and control of the telephone administration or other government entity. Restructuring is used in the context of privatization.

Subscriber Access: The connection to the switched central office of the telephone company. It is, in general a fixed cost, but in most countries at least part of the fixed cost is recovered by usage charges.

Supply: As used in this Study, refers to the available DELs that can be used to provide telephone services to subscribers.

Switch: A telecommunications equipment utilized to interconnect subscriber lines and interoffice trunks.

Switching Center: A terminal office consisting of a switch and associated equipment.

Switch-hook: Available switch termination for a subscriber line.

Telephone Network: An infrastructure used to interconnect subscribers in a given geographic area. Can also be used to designate all telephone infrastructure in a country or the world.

Tariff: The formalization of the prices, conditions of service and other rules associated with the provision of an utility service offering.

Traffic Sensitive Costs: The costs associated with the usage of a service. A sub-set of what the economist refers to as variable costs.

Trunk: Refers to facilities to connect switching centers.

Universal Service: Refers to market penetration of the telephone service to as many members of the society as possible.

Usage-sensitive Pricing: Pricing of service based on the volume of service used by the customer, as opposed to flat-rate pricing (See above).

Waiting List: A list of subscribers who have ordered telephone services and have not yet been connected to the telephone network.

Intra-regional Trade and Telecommunications in the SADC region

Telecommunications between SADC member countries are expensive, of poor quality, and often not available on demand. Quantitative data of intra-regional telecommunications indicators such as call completion rates are unfortunately not collected.

Specialists at innumerable regional workshops and conferences have concluded that poor telecommunications within the region is a binding constraint to intra-regional trade and investment, ranking on an equal level with inadequately functioning transport structure and the poor policy environment.[1] Some idea of the linkage of telecommunications and intra-regional trade can be seen from Exhibit R-1 below, illustrating the number of direct circuits and volume of intra-regional trade for much of the SADC region and South Africa. There is a fairly close correlation between the number of circuits between two countries and the volume of trade (high value diamond exports from Botswana to South Africa distort this somewhat).

Interestingly, total trade within the eight countries illustrated in Exhibit R-1 is about $2,800 million. Amongst them are approximately 2,600 direct circuits. One intra-regional circuit, therefore, can be roughly correlated with approximately one million dollars worth of annual intra-regional trade.

The Legacy of Poor Telecommunications in the Region

As with the transport sector, the international telecommunications systems in the region were

[1]See for example the following SADC commissioned analyses of the constraints to intra-regional trade. SADCC Trade Study, 1988, MB Consulting, Section 5-7. SADCC Trade Facilitation Study, 1991, Norconsult/SITCD, Executive Summary. SADCC Export Development and Promotion Strategy, 1992, TISCO, section 1-4. SADCC Buyer-Seller Meeting Final Report, 1992, IMANI Development, Conclusions and Recommendations.

developed primarily to facilitate communications between colony and metropolitan power. Intraregional links were not thought necessary and were underdeveloped.

Unlike transport, however, the technology of telecommunications has for some time allowed calls to be transmitted through indirect routes. A call from Salisbury in Southern Rhodesia, for example, was routed first through London, then Lisbon, before being sent back to the recipient in Lorenco Marques in Portuguese East Africa. Because calls travel at the speed of light, even such indirect routing could offer reasonable quality, at least in theory. In practice, in the pre-digital era, where quality degrades over distance, such calls were usually not very satisfactory. Furthermore, because the national networks were so underdeveloped, such calls could usually only be made from the capital cities. Finally, because of the great distances and multiple switching sites, these calls were very expensive.

Improvements since independence

At independence, therefore, Africa as a whole, and the SADC region in particular, found itself with an intra-regional telecommunications system that was of poor quality and expensive. Since most of the cost of intra-regional calls was for external switching and transmission, these indirect calls were (and still are) a significant drain on foreign exchange, probably exceeding US $100 million[2]. As South Africa developed a modern telecommunications system in the 60s and 70s, it could offer an alternative to Europe for external switching and transmission for much of the region. This rapidly became politically unpalatable to most of the SADC countries; nonetheless, South Africa dominates direct regional connectivity to this day (see Table R-2, "Regional Voice Circuits in Southern Africa").

The Pan-African Telecommunications Network (PANAFTEL) was formed by the OAU, ECA, AFDB, ITU, and PATU to break the dependence of African countries on Europe and South Africa. PANAFTEL, in essence, is a series of national projects intended to provide direct microwave links between or through all international telephone switching centers in sub-Saharan Africa. Most of the PANAFTEL microwave connections have been completed,

[2]Teleconsult, Scoping Study, ibid

although until recently tariff structures discouraged their use.[3] Furthermore, the capacity and quality of these links is not completely adequate. Many of the donor-financed microwave links use obsolete and expensive technology to maintain analog equipment.

The introduction of satellite technology has introduced a major new alternative for intra-regional communications. All of the SADC countries except Namibia have earth stations capable of communicating with the Intelsat system. The problem with Intelsat, however, is that there is no dedicated satellite for Africa; countries on the continent must use either the Indian Ocean or the Atlantic ocean satellites. Thus, if one SADC country is tuned to the Indian Ocean, and another to the Atlantic Ocean, they cannot communicate directly through satellite. In response, SATCC has developed guidelines to improve inter-connectivity which have mostly been implemented. If a country has only one earth station, it should be oriented towards the Atlantic satellite; the second earth station should be oriented towards the Indian ocean satellite[4].

Even with these innovations, many of the PTTs in Africa have argued that the Intelsat service is not adequate, too expensive, and a drain on foreign exchange from the region. A dedicated Regional African Satellite Communication System (RASCOM), was proposed, to be owned by the all participating countries in Africa. Exhaustive studies, largely funded by the AFDB, showed that dedicated satellites were not cost-effective in the medium term, but that significant improvements could be made by better regional co-ordination. RASCOMM will focus initially, therefore, on more co-ordinated and efficient utilization of existing satellite transponder capacity, and to present a united African front to negotiate better terms with Intelsat. Unfortunately, it is still not clear whether RASCOM will become effective like PANAFTEL, or stagnate like PATU. It is yet to become operative, progress has been held up by a dispute between Nigeria and Cote D'Ivoire over where the RASCOM headquarters

[3]Countries in the SADC region have adopted the Sender Keep All (SKA) concept for direct intraregional traffic, minimizing the need to "ticket" outgoing calls, and the use of foreign exchange in settlements. SKA is a temporary measure in the transition to a more complete regional tariff and billing structure and use of regional clearing systems such as the PTA Clearing House.

[4]Thanks to a well-timed TDP feasibility study grant, the U.S. firm GTE Spacenet was able to win a number of contracts to reorient and reprogram earth stations in the SADC region.

will be located.[5]

Despite the potential for direct connectivity through PANAFTEL and satellite links, most countries still route most of their intra-regional traffic through Europe and South Africa, except for that traffic destined for a directly contiguous country. This is illustrated dramatically in Table R-2, which provides an overview of regional voice circuits.

The problem with PANAFTEL and Intelsat connections is that countries in the SADC region are not able to switch regional traffic. This means that if Botswana Telecommunications Corporation wants to use PANAFTEL or Intelsat to Tanzania, they must lease direct circuits at a very high fixed rate. To be cost effective, these circuits must almost always be in use. When they are not (over the so-called "thin routes"), other means are more cost effective. A call from Francistown in Botswana to Bulawayo in Zimbabwe, for example, would be sent cost effectively through the PANAFTEL. It might be cheaper, however, to bypass PANAFTEL for a call from Francistown to Dar Es Salaam, however, and trunk the call down to Gaborone, bundle it with the London traffic, and switch it back from London via satellite to Dar Es Salaam, because of the economies of scale enjoyed by British Telecom and Botswana Telecomm over heavily travelled routes.

An obvious solution to this problem is for centrally located countries such as Zambia and Zimbabwe to offer regional switching services for a fee, just as Johannesburg and London do. Although the telephone companies in both countries have adequate switching capacity, neither has established an attractive tariff structure for this service, nor installed the necessary software. More commercially minded telephone companies would have done this long ago; and indeed South Africa as it becomes politically acceptable is becoming far more aggressive a competitor.

[5]Interestingly, a consortium of South African firms was formed in 1991 to explore the possibilities of launching a privately owned dedicated satellite for Africa. The analysis showed, however, that to be financially feasible the satellite must be used to carry television broadcasting as well as telecommunications. In the region, most countries were unwilling to allow a South African managed satellite carry voice or broadcast traffic, even though the proposed rates were highly competitive, and the satellite service would offer far better coverage and quality. The South African broadcasting parastatal, SABC, has signed a long term arrangement to lease space on the Atlantic satellite of the new private sector system, PANAMSAT. If demand continues to grow, however, a private sector initiative to launch an African satellite may yet become a reality.

SATCC and PTA are working to improve effective PANAFTEL and satellite interconnectivity in the Southern Africa region. PTA is sponsoring a major telecommunications network interconnectivity and tariff study that will cover non-PTA members South Africa, Botswana, Zaire, and Madagascar that will provide much better statistical data for planning purposes, and recommendations for changes in regional co-ordination. SATCC is undertaking more specialized studies, towards the same goal of increased interconnectivity, in data communications and network management.

Recent breakthroughs are pushing fiber optic communication to the forefront of telecommunications transmission technologies, and offer new alternatives to improve the intra-regional links in Africa. Already, some of the countries in Southern Africa have fiber optic dedicated for railway communications along the permanent way. These links have substantial excess capacity, and could be linked up together with additional fiber optic cable to form a link from the Cape to Nairobi, if not to Cairo.

Another highly intriguing fiber optic possibility comes from a private venture, Fiber Link Across the Globe (or FLAG). FLAG is a private four member consortium[6] that is financing and building a fiber optic link from London to Tokyo. They are currently undertaking a feasibility study of the possibilities of constructing two spur fiber optic links: one down the West African coast from Gibraltar to Luderitz, Namibia; the second down the East African coast from Djibouti, with connecting points in Dar Es Salaam, Madagascar, and Maputo and possibly Capetown (although South Africa has already commissioned a fiber optic link from Capetown to Europe). If sufficient demand exists, and the necessary approvals can be obtained, the FLAG consortium will build and operate these African spurs.

Despite these advances in developing intra-regional transmission and switching capabilities, however, the fact remains that communications between countries in the SADC region are completely inadequate. Intra-regional communications will continue to be inadequate, and a binding constraint to trade, unless changes are made in the national networks. This will continue to be true even if projects like FLAG and RASCOM are fully implemented.

The reason is straightforward. A call from Arusha in Tanzania to Beira in Mozambique must still battle its way through two inadequate national networks to be completed. Because of this "double jeopardy" each intra-regional call must endure, telecommunications between

[6]FLAG members are NYNEX, the Regional Bell Operating Company for Northeastern United States; Marubeni, one of the larger Japanese trading companies; and two Saudi Arabian investors.

countries in the region are usually worse than communications within a SADC country, or between a SADC country and the rest of the world.

The binding constraint to effective intra-regional telecommunications, therefore, is the inadequate state of national networks. As we analyze exhaustively in the main text of the report, national networks are inadequate for a myriad of reasons. The solutions are discussed in detail elsewhere; these introduction of sector restructuring, private investment, and competition.

To achieve good intra-regional telecommunications, changes must be made at the national level. To adapt a phrase from environmental activists, we must "think regionally, but act nationally".

The regional chain is only as strong as all of its national links, however, so that regional cooperation and co-ordination of the national level changes is not only warranted but is crucial for timely and effective development of the sector.

The Future

There are newer technologies, some field proven, that could allow a partial by-pass of the degraded local/national networks. Right now, with a portable earth station, high quality voice and data communication links can be established from anywhere in Africa to anywhere else in Africa through the INMARSAT system (originally developed for maritime communications). There are two major drawbacks. First, the caller must use a portable earth station (approximately US $15,000) -- and to by-pass national systems completely would require that the recipient also have a US $15,000 earth station. Second, the cost of a call is US $10.00 a minute, above and beyond the earth station costs. Less expensive data services are available through INMARSAT, but these are limited applications; tracking truck movements, for example.

Using newly developed voice and data compression techniques, and using alternates to INMARSAT (like the GTE Spacenet system), it is possible to have high quality digital telecommunications from any point in Africa to any point in Africa (or the world), bypassing the national networks. There are substantial regulatory barriers to the introduction of these systems (not allowed anywhere in the SADC region), and these are cost effective only for large business customers private or shared private networks.

On the horizon are technological developments that promise a complete by-pass of the national networks for personal communications. One of the more interesting is the Low Earth Orbit Satellite (or LEOS) concept. Instead of one geostationary satellite deep in space covering a third or less of the globe, dozens of orbiting satellites will be in low orbit, covering nearly every square inch of the earth, and capable of communicating with each other as well as to the surface. Subscribers will have portable phones, roughly the same size as a small cellular telephone. The LEOS system could offer a service that will allow anyone on earth to talk to anyone else on earth, directly through the satellites, completely bypassing local networks (if the recipient also has a LEOS phone). In fact, a LEOS connected phone would allow one to start a call from one car in Los Angeles to train leaving Dar Es Salaam, and continue it uninterrupted wherever even if the caller drives to Seattle and the recipient travels to Kapiri Mboshi.

At present, the LEOS service that appears to be the first to be introduced is by IRIDIUM, a world-wide consortium of investors and operators led by Motorola, scheduled for commercial operation by the end of the decade.

Although the IRIDIUM service will offer a partial solution, it is far from the complete answer for intra-regional communications in Africa, for several reasons. First, telephones will be expensive, at first selling for over $1,000. Second, the cost of a call is presently planned to be $3.00 a minute, plus additional charges if the call terminates on a local network instead of another IRIDIUM phone. Third, the overall capacity of IRIDIUM is highly limited, because only a certain number of calls can originate/terminate in any given area. In the Los Angeles metropolitan area, for example, only 3000 IRIDIUM callers could be connected at any given time.

It is the last problem of capacity, however, that paradoxically may work to the Africa's advantage for intra-regional communications. Under current market projections, the IRIDIUM satellites will be full to capacity over the developed world long before they are maxed out over developing regions, particularly over Africa. To use the slack satellite capacity over Africa, tentative discussions have been held about the possibility of offering substantial discounts, for calls originating and terminating in sub-Saharan Africa. Even if discount pricing becomes a reality, IRIDIUM's capacity is unfortunately so limited that it can offer only a partial solution to the problem of intra-regional communications.

In conclusion, at least for the next decade, the problem of intra-regional telecommunications will still have to be solved by improvements in the national networks.

Ode to the PTC

Oh what a world we live in,
where all the media knows
Of everybody's business and
every wind that blows!
For each and every country
has communication squads
Of commentators, newsmen
and telephonic bods
But we in Zim are fortunate
and never want for such
For as you know the PTC is
KEEPING US IN TOUCH.

Not for us the bore of tele-
phones that ring
Not for us the chore of an-
swering anything,
We often can't make contact,
but it doesn't matter much
For our gallant PTC is KEEP-
ING US IN TOUCH.

Be you farmer, miner, trader,
doctor, lawyer, chief
It makes no matter who, 'out
of order' units are
Quite beyond belief.
It's loo absurd to contemplate,
but reality is such
And you must believe the PTC
is KEEPING US IN TOUCH.

The Herald, Mail and ZTV —
they all will tell us so
And who are we to argue —
they really ought to know?
They rake in advertising fees
— we just pay our bills
For telephonic service which
should resolve our ills
But never does, but don't for-
get we mustn't fret or fuss for
The PTC assures us, it's
KEEPING US IN TOUCH.

So now we ask the PTC —
what is the present score?
You've 'digitilised', 'remuner-
ised', 'revitalised' and more.
Please, tell us puny mortals,
who don't amount to much:
With whom are you so busy
KEEPING US IN TOUCH?

Hello There
Harare.

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Local company seeks High Court order on cellular phones

8/4/93

A LOCAL company, Retrofit, has filed an application in the High Court seeking an order for the Post and Telecommunications Corporation to issue the company with the appropriate licence and authority to operate a cellular (mobile) radio communications service at a cost of about $108 million.

In turn, the PTC, if it intends to oppose the company's plans, should file an opposing affidavit within 10 days following the application, failure of which the application would be set down for hearing in the High Court without further notice to the PTC and the matter would be dealt with as an unopposed application.

The application, dated August 30, comes in the wake of what the company says is the PTC's reluctance to accept application for the proposed cellular service.

Retrofit chief executive Strive Masiyiwa claims in the application that the PTC has said it cannot issue the licence because Section 26 of the Postal and Telecommunications Services Act confers upon it the exclusive privilege of establishing and operating telecommunication services in Zimbabwe.

Mr Masiyiwa is, however, claiming that by adopting that position, the PTC is ignoring the fact that it already licenses private services and private radio communication services.

Mr Strive Masiyiwa . . . claims "conflict of interest".

He further claims that reluctance to issue the licence is the result of a "conflict of interest" because the PTC has made provisions to build a similar network by 1996.

"Zimbabwean citizens, however, should not have to wait for the PTC," says Mr Masiyiwa in his application.

Retrofit, he claims, has already obtained financing for the project from Zimbabwean investors, the Zimbabwe Development Bank, the International Finance Corporation and Standard Chartered Merchant Bank has been retained to supervise the project financing.

"The applicant (Retrofit), is ready to establish, maintain and operate and once licensed, the service would be operational to Zimbabwean subscribers within six to nine months."

According to the application, while the PTC licenses radio communication services which are mostly used in the private sector and also assigns the frequency to each user, it does not at the moment operate such services.

"Nothing about the service (cellular mobile radio communications service), interferes technologically with the operation of the PSTN (Public Switches Telephone Network)," says Retrofit.

A cellular mobile communication service uses radio communication and can be operated without being connected to the PSTN.

Unlike the PTC's "woefully inadequate" service, the proposed service would help resolve present telecommunications blues, says the company.

It would make Zimbabwe more attractive to investors in all sectors of the economy "as investors will not put their money in a country with inadequate telecommunication services".

A mode of communication would become available to small businesses and others who in practice, are currently excluded from having access to the existing private radio alternative due to the high cost of the equipment (about $450 000)," it says.

There would also be a reduction in the present inefficiency of spectrum allocation "that would free frequencies for other purposes".

Retrofit says the system is being used in industrialised countries while in Africa countries like Benin, Burundi, Cote'd Ivoire, Congo, Cameroon, Egypt, Gabon, Ghana, Guinea, Madagascar, South Africa, Nigeria and Mali, had already established such services.

— Ziana

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"KEEPING YOU IN TOUCH"

CHAIRPERSON'S PRESS STATEMENT ON MOBILE TELEPHONE SERVICES

The six continents of the World have rapidly been converted into a global village through advances in telecommunication technology. Distances to and from Africa, America, Australia, Asia, Antarctica and Europe have been shrunk over the last few decades.

These developments continue to gather momentum and Zimbabwe is no exception. After some years of implementing projects worth billions of dollars in local currency, which in some cases tantamount to virtually replacing the old network using state-of-the-art computer controlled digital technology, efforts by PTC are beginning to bear fruit for all to see.

International Direct Dialling was introduced as far back as 1984 through the Gweru International Switching Centre, and the Mazowe Earth Satellite Station. On the domestic front, the Corporation embarked upon the digitalisation programme in 1991 which entails upgrading the telecommunication network with the installation of computer controlled exchanges and laying of fibre optic instead of copper cables. The number of lines available will increase thereby reducing congestion. The quality of speech will also improve since maintenance problems will diminish and crossed lines will be minimised. In cases where a hundred customers used to share ten lines to the exchange through a sub-satellite exchange, each individual will now be connected directly to the exchange. Four major cities are now served by digital trunk exchanges for long distance dialling, namely, Harare, Bulawayo, Masvingo and Gweru. In Masvingo customers are already benefitting from a fully digital trunk/local exchange, while a few customers in Bulawayo are connected to the digital exchange for local calls.

In Harare the digital system is being brought into use in a phased programme as the digital exchange equipment and fibre optic cables are successfully tested. Unit 7, otherwise known as the Julius Nyerere Way local transit exchange was brought into use in mid-year. This exchange provides transit connections for all the satellite exchanges in the Harare local area through an intricate network of fibre optic cable in underground cable ducts, the result of all the trenching exercise witnessed in Harare in the past few months. The exchange already offers connections for direct lines to customers in some parts of the central business district, Msasa, Eastlea, Gunhill and Southerton. The connection of new customers will begin in earnest towards the end of December 1993 when the first batch of telephone instruments is received. It is envisaged that when the order of telephone instruments is complete, the PTC will also be able to replace old sets which are incompatible with the digital technology. Avondale digital exchange was successfully commissioned on 27th November 1993. This exchange serves residents of Avondale, Mabelreign, Bluff Hill, Marlborough, Mount Pleasant, Northwood, Greencroft and Mount Hampden. In the immediate future customers in Cranborne, Borrowdale, Highlands and Mutare exchange areas will be connected to digital exchanges being installed in those areas. Glenview, Ruwadzana, Marondera and Chinhoyi will follow soon after.

Massive projects are underway to expand the nextwork and improve the quality of service in the rest of the country using digital technology. To date Murehwa is the only rural digital exchange, but most of the old manual exchanges in the rural areas have been converted to automatic exchanges.

It is impressive to note that the PTC's technical staff are mastering training in new technologies and learning curve effects are evident as they are capable of planning, installing, operating and maintaining complex digital networks to the admiration of other organisations worldwide. The same highly skilled, disciplined and innovative staff will ensure that the introduction of any new service is a success.

These phased developments now lend weight to the introduction of new services such as the Cellular Mobile Telephone Service, a wireless telephone service offering the capability of telephone conversation while in motion by using hand held or vehicle mounted sets. For those customers who visit neighbouring countries and also for visiting travellers from neighbouring countries, mobile service offers roaming facilities which enable one to use his/her mobile phone across the borders in countries where compatible services would have been implemented.

It is pertinent to mention that the PTC will solely provide Cellular Mobile Telephone Service as an integral extension of the existing public switched network. This means that mobile customers will be able to connect local, long distance and international calls as normal as a fixed wireline telephone. This offers economies of scale to this massive investment.

The Cellular Mobile Telephone Service will be targeted at major centres initially where there is high demand for such a relatively expensive service compared with the existing service for business customers. Competition among suppliers, technological advancements, and increasing worldwide demand will bring the cost of the equipment down to the extent that it will become the most expedient way of achieving the affordable universal service goal in both urban and rural areas.

There will be downstream benefits to the highly capable private sector which will be engaged to market the service through retailing of the mobile telephone handsets. The private sector has rendered tremendous support in undertaking various projects which include inter alia, trenching for underground cable installation, erecting overhead cables, construction of buildings, local manufacture of exchange equipment etc.

With the full support of the government, by implementing the Cellular Mobile Telephone Service, the PTC will be seeking growth in the rate of service penetration, revamping the network and enhancing the quality of service. Foreign funding has been secured. The service will be brought into use by mid-1996 for it to enjoy and complement the benefits of a substantially digitalised high quality fixed wireline service.

In the offing will also be paging services which will offer business customers, medical professionals etc the capability of being connected by simple alphanumeric messages while away from business premises. The future capabilities of the PTC Telecommunications network offer enormous scope for improvement to the citizens of the country.

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PASA Scope of Work

Background

The RTR program will address inadequate telecommunication services in the SADC region and its impact on expanded investment and long term sustainable economic growth. Access to dependable, efficient telecommunications services is increasingly recognized as a critical element and most often a binding constraint to attracting new investment in SADC countries currently engaged in comprehensive economic restructuring programs designed to encourage expanded investment and employment. Moreover, worldwide evidence suggests that all aspects of a business increase in productivity with improved telecommunications, but the greatest gains are shown in marketing, finance, and production control -- the areas most frequently identified as urgently needing improvement if businesses in the SADC region are to become competitive in external as well as intra-regional markets.

Telecommunications services in the SADC region are wholly inadequate to support increased investment and economic growth. Expanding current production or investing in new business operations is impossible until significant measures are taken to address the problem. As of 1991, the entire SADC region (this excludes South Africa) had only 511,000 phone lines, less than the county of Fairfax, Virginia. Officially, unmet registered demand is 330,000 lines in the region, but unregistered demand has been estimated at closer to one million lines.

The sub-Saharan region has internal disparities in the distribution of existing lines; South Africa, with five percent of the region's population, has 40 percent of its phones. Potential telephone subscribers must wait an average of 10.9 years in Tanzania and 5.3 years in Zimbabwe to have telephones installed. Even those with phones often find that their lines may be effectively out of order for up to 50 percent of the time due to equipment malfunction. In sum, the impact of this major infrastructural weakness on business operations has been devastating, severely limiting possibilities of expansion and the development of new employment opportunities.

An extensive analysis of the SADC region's telecommunications systems identified two key constraints to addressing the poor services problem: (a) inadequate and

inappropriate investment in the sector, and (b) unsustainable management practices, within an ineffective policy and regulatory framework. Although many Post and Telephone Corporation (PTC) entities have been established as public corporations with a mandate to operate on commercial terms, the lack of flexibility to operate as a private sector firm and the lack of accountability to investors serve to undermine all incentives to produce dependable services at reasonable cost.

While poor management practices reduce the range and coverage of telecommunication services, inadequate investment in infrastructure has played the major role in inhibiting the expansion and improvement of services. Factors currently affecting sector investmen include inadequate resources, insufficient knowledge of investment opportunities, and policies which restrict or impede private investment and competition.

The RTR program will provide $75 million over the life of project, and consists of two components: the **Regional Core Project** and the **National Restructuring Programs**.

The **Regional Core Project** will provide $15 million in technical assistance and training to:

- **strengthen the capacity of southern Africans to develop and manage national and regional telecommunications networks** through the timely provision of information, analysis, and technical consultations;
- **assist in solving problems** being encountered by stakeholders in the regional telecommunications network, particularly those of a legal or regulatory nature, by providing timely, expert technical assistance;
- **lay the groundwork for well-defined, appropriately-sequenced, National Restructuring Programs** (see below) by supporting start-up staff and actions; and
- **link private U.S. telecommunications service and equipment suppliers into the regional network** in an effort to generate increased levels of investment and efficiency into regional and national telecommunications systems.

The **National Restructuring Programs** will work in a more intensive fashion with up to three national governments to help them make and implement policy, regulatory, and institutional changes that will:

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- **allow private investment in telecommunications services;**
- **introduce competition**, initially in certain sub-sectors such as value added services;
- **restructure the state owned monopoly**, separating operating and regulatory functions, and introducing a bottom-line, customer-centered orientation.

In each of the three countries undertaking **National Restructuring Programs** up to $20 million in non project assistance will be available to leverage the changes by compensating for short adjustment costs and/or correcting certain market failures that make unassisted private investment infeasible.

ARTICLE I - TITLE

Regional Telecommunications Restructuring Project -- "Regional Telecommunications Program Manager"

ARTICLE II - OBJECTIVE

The Regional Telecommunications Program Manager (TPM) and his/her agency will provide services to USAID/Zimbabwe and the Southern African Regional Program (or their successor entities) as:

- RTR Program manager, supervising closely the implementation of the Regional Core Project, and oversight of the National Restructuring Programs.
- Principal telecommunications policy advisor.

These functions are described in more detail in Article III following.

ARTICLE III - DETAILED SCOPE OF WORK

The regional Telecommunications Policy Advisor will focus on advisory and project management functions, as detailed below.

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1. Program Management Functions [60% of time]

The regional TPM will be the Manager for the Regional Telecommunications Restructuring Program, responsible for oversight of all aspects of implementation of the core projects, and working with the USAIDs in the focus countries on their respective program implementation.

This will include:

i. Monitor disbursements, maintain records, prepare periodic status reports, supervise monitoring and evaluation activities, undertake project site visits, ascertain progress, identify problems, and recommend solutions to correct the problems.

ii. Develop USAID implementation documentation, which includes at present project implementation letters (PILs), project implementation orders (PIOs), waivers, semi-annual project implementation reports (PIRs), provide administrative review and recommendation for approval of vouchers, etc.

iii. Draft scopes of work, schedules, budget estimates, and other implementation documents as necessary for contractors/grantees utilized in the core project. Supervise, support, evaluate, and certify acceptable completion of work of contractors/grantees, as directed and as appropriate.

iv. Ensure that RTR program development is: consistent with regional USAID strategy; synergistic with other USAID regional and bilateral activities.

Specific activities that will be undertaken include[1]:

- **Institutional Contractor (IC) Selection.** Develop scopes of work for RFP, participate on the evaluation panel, provide technical support to negotiations with institutional contractor awarded contract.

- **Institutional Contractor Supervision.** Review, modify, and approve: annual workplans submitted by IC and key scopes of work prepared by IC; schedule

[1]Some of these activities may be partially or completely undertaken by current staff by the time the TPM is contracted and in the field.

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quarterly implementation meetings with IC.

- **SATCC Sub-Grant Administration.** This will include assisting SATCC to select candidates for the Telecommunications Policy and Database specialists.

- **Development of Baseline Statistics and Methodology for Monitoring and Evaluation.** Development of terms of reference and oversight of M&E team.

- **Assist USAIDs in development of national programs and selection of national program managers.** The TPM will assist as required the USAIDs to develop national country programs; this may include development of SOWs, supervision of design missions, selection of national program managers.

- **Development and implementation of pre-IC Buy-in(s).** Because of the need to continue momentum, one or more buy-ins to central projects will be undertaken (in addition to the M&E work described above) before the institutional contractor is staffed and operating in the field. The TPM will be responsible for developing and overseeing the work undertaken through this buy-in.

- **Schedule and Oversee Mid-Term and Final Evaluations.** This will include preparing recommendations for mid-course correction and possible extension of the core project based on the evaluations.

- **Leverage other resources** The TPM should maximize the contribution to the RTR program goals from non-USAID sources.

2. Advisory Functions [40% of time]

The regional TPM will be the principal telecommunications policy advisor to USAID/Zimbabwe and the other USAIDs in the region. She/He will work with the USAIDs as well as with the principal stakeholders in the telecommunications sector to support:

- **A better understanding of the telecommunications sector and its contribution to economic development.** This will require building relationships with the economic ministries (e.g., finance, industry, and planning) and non-governmental stakeholders (e.g., business users and unions). Participation at regional and selected international telecommunications fora will be necessary.

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- **A better understanding of the rationale and mechanisms for telecommunications sector reform.** This will require relationship building with the line ministries (e.g., communications and transport, or information posts and telegraphs) and regulatory entities concerned with telecommunications. Participation at regional and selected international telecommunications regulatory events/committees, where it promotes the interests of the region, will be required.

- **Investment opportunities in the sector in the region, with a particular focus on U.S. investors.** This will require close relationships with the local investment promotion bodies as well as, OPIC, USDOC, and EX-IM.

- **Improved working relationships between donors to maximize beneficial impacts and mitigate negative impacts of donor assistance.** This will require close scrutiny of loan documents and donor agreements, close relationships with the World Bank (telecommunications division, field teams, resident office), the AFDB (telecommunications division and field teams), and the key bilateral donors (Scandinavian, Japan, Germany, Italy, Belgium, Australia, etc). It will require close liaison with the U.S. Executive Director's office at the World Bank and the AFDB. The TPM will serve as USAID's telecommunications representative to the oversight committee of the EC funded SATCC Transport and Telecommunications Integration Study.

3. Liaison Responsibilities

The TPM will liaise with relevant offices in AID/W and the field, including: the Bureau for Africa; G/PRE; the USAIDs in the SADC region including South Africa; USAIDs in other regions in Africa with an interest or programs in telecommunications.

The TPM will be USAID/Zimbabwe's principal liaison for: telecommunications policy issues with SADC, SATCC, PTA, ARTC, ITU and other relevant regional/telecommunications organizations; with bilateral donors; with host governments and non-government key telecommunications stakeholders; with other USG agencies and the private sector.

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ARTICLE IV - ADMINISTRATIVE AND REPORTING REQUIREMENTS

This project-funded PASA position is located in USAID/Zimbabwe's Trade and Private Enterprise Division (TPE) in the office of Program Development and Implementation Support (PDIS) of the USAID Southern African Regional Center[2]. The PASA will report to the Chief of the Trade and Private Enterprise Division of PDIS.

The TPM is required to submit:

1. Quarterly progress reports to the Mission Director that succinctly outline accomplishments, problems encountered, remedial action taken, proposed recommendations, and work program for next quarter. These should not overlap with the PIRs prepared for the RTR core project.

2. Annual report briefly summarizing the TPM's activities/accomplishments, and recommendations to improve program implementation.

3. Final report prior to departure from Zimbabwe detailing the TPM's experience, observations, and activities over the contract period.

ARTICLE V - PERFORMANCE PERIOD

The PASA will be for an initial period of two years, with an option to extend for up to a maximum of five years, subject to USAID and USDOC concurrence.

ARTICLE VI - TPM QUALIFICATIONS

The TPM should have the following qualifications and expertise:

- A bachelor's degree in engineering, economics, business, public policy or related areas

- A master's degree or higher in economics, business, public policy or related areas (outstanding work experience, that can clearly demonstrate the equivalent

[2]At the time this PIO/T was prepared, the USAID Southern Africa Regional Center was based at USAID/Zimbabwe, Southern African Regional Program.

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analytical capability of a higher degree, would be acceptable).

- A demonstrated command of telecommunications policy issues and worldwide trends in telecommunications policies and technologies.

- Extensive experience interacting with U.S. industry, other USG agencies, and international institutions in the arena of telecommunications technology and experience.

- Experience working as a USAID PSC (or as employee of a USAID IC or grantee), with experience in telecommunications policy, technical assistance, and training issues.

- Experience in Southern Africa, working with other donors on telecommunications policy or related issues, and privatization transactions, is a plus.

The TPM must have the presence and communications skills (in addition to the technical capability) to be able to interact convincingly and effectively at a senior level within USAID, other donors, host governments, and the private sector. At the same time, the TPM must have the ability and willingness to undertake the administrative tasks required for successful project and program management.

Because the TPM will be expected to already possess substantive expertise, and be reasonably acquainted with donor policies and procedures, little formal training should be required after recruitment. The one exception is formal training in the details of USAID project management, if necessary because of gaps in the TPM's background.

ARTICLE VII. SPECIAL PROVISIONS

1. Sub-contracting authority is included in the PASA as deemed necessary by USDOC to complete certain specific portions of the work statements.

2. The TPM will enjoy all the rights and privileges of U.S. Government personnel on assignment overseas.

Filename = "PASA.PIO"

REGIONAL TELECOMMUNICATIONS FINANCING WORKSHOP

1. Context for the Assignment

A. The southern African **Regional Telecommunications Restructuring** Program

USAID has approved the southern African Regional Telecommunications Restructuring Project (690-0278), an integral part of the Regional Telecommunications Restructuring Program.

The purpose of the Program (and Project) is to increase and broaden access within the SADC region to a more cost-effective system for information transfer. This activity is the first of two regional workshops on financing telecommunications planned under the project. The institutional contractor for the RTR project has not yet been selected. This activity, therefore, will be implemented through a buy-in to the G/PRE project, "Privatization and Development".

B. Telecommunications Financing Issues

Without exception, countries in the region are unable to finance adequate expansion of the telecommunications network. This is a widely recognized problem in the region, but the causes and solutions are poorly understood.

The financing solution that most developing countries have employed – dependence on donor grants and loans – has not proved sufficient to expand the network, or in some cases, even to keep up with population growth to maintain existing densities. In addition, dependence on donor finance leads to:

- a gross imbalance between switching, transmission, and external plant;
- a plethora of different equipment makes that are hard to integrate and maintain;
- extra costs when there is less than full competition; and
- too high degree of leverage because of debt rather than equity financing.

An important part of the solution to financing telecommunications expansion is to attract private capital and management to the sector. For many countries in the region, however, there is a lack of appreciation of:

- o the need for private capital;
- o how to select and attract the appropriate type of private capital; and

- what needs to be done in the enabling environment to protect national and investor interests.

ARTICLE I - TITLE

The title of the workshop will be - "SADC Workshop On Financing Telecommunications."

ARTICLE II - OBJECTIVE

This workshop will provide senior decision-makers in the telecommunications sector in the SADC region with the knowledge to allow them to plan for and execute financing arrangements for the expansion and modernization of their telecommunications networks.

ARTICLE III - DETAILED SCOPE OF WORK

The assignment is broken up into three phases:

PHASE 1 PREPARE FOR WORKSHOP

Task 1-1 Selection of workshop participants

Task 1-2 Assist participant preparation and prepare two case studies

Task 1-3 Prepare workshop agenda and curriculum

Task 1-4 Selection of the presenters and resource personnel

Task 1-5 Make logistical arrangements

Task 1-6 Develop evaluation plans

PHASE 2 WORKSHOP IMPLEMENTATION

PHASE 3 FOLLOW-UP ACTIVITIES

Task 3-1 Prepare and disseminate workshop proceedings

Task 3-2 Prepare and disseminate workshop evaluation

These tasks are described in more detail below.

PHASE 1 PREPARE FOR WORKSHOP

Task 1-1 Selection of workshop participants

The contractor, with input from other sources, will identify and select a team of up to five senior level decision makers from each SADC country and from South Africa to participate in the workshop. The team members' participation will be financed through this contract.

The team composition will include:

1. Chief Financial Officer (CFO) or the equivalent, or more senior official, from the **telecommunications monopoly service provider** (such as a PTC).

2. Senior Official from the **Ministry of Finance** (or its equivalent), at the undersecretary level or higher, with responsibility for allocation of funds to and from the telecommunications sector.

3. The senior telecommunications specialist, at the deputy secretary level or higher, in the line **Ministry responsible for telecommunications.**

4. An officer at the level of general manager or higher, from a **financial institution** with a demonstrably serious interest and experience/capability in financing telecommunications.

5. A **local investor** who has expressed interest in telecommunications investment, and who has the capacity to be a significant partner in such an investment.

To develop this participant list, in addition to the contractors' own sources, the contractor should use the list of attendees at the previous SADC Telecommunications Policy workshop in Windhoek, and the recent Africa-wide "Roundtable on Telecommunications Investment and Financing Strategies" sponsored by the ITU and held in Banjul Gambia in February 1994. In addition, the contractor should consult closely with SATCC, the PTA-TTU, USAID/Zimbabwe, CDITP, and other private and public stakeholders in the participating countries.

The contractor will prepare a provisional list of participants from each SADC country, with alternatives in case of last minute substitions, that should be submitted to USAID/Zimbabwe and SATCC. SATCC and USAID/Zimbabwe will provide additions and deletions to the list, which then will be finalized.

The contractor will prepare a draft letter of invitation to the workshop, under SATCC letterhead, and signed by the Director of SATCC (or Executive Secretary of SADC) and by the Director of USAID/Zimbabwe. After approval of the draft letter, the contractor will be responsible for sending the letter to the approved participants, and tracking acceptances and locating suitable alternates.

Task 1-2 Develop outline of country presentations, Assist in preparation of country presentations, and Prepare two case studies.

The contractor will provide an outline for a short presentation to be made by the CFO of the monopoly service provider from each country, on the country's telecommunications financing needs, plans, and proposed solutions. The outline will be provided to the CFO, who will work with the other team members and other knowledgable sources. The contractor will oversee and assist the CFO during the course of as necessary through telephone/fax communications.

The contractor will prepare two case studies that integrate the points made in formal and informal discussions, and allow for role playing exercises.

The first case study will be about the privatization of the Guyana Telecommunications Corporation.

The second case study will be of the experiences of an African country in obtaining finance for telecommunications from nontraditional sources.

In both instances, the case studies will vividly illustrate the problems and opportunities of financing telecommuniations in the developing country context. Principals involved in the events in both case studies should be utilized as resource persons or presenters.

Task 1-3 Prepare workshop agenda and curriculum

The workshop participants will learn from lectures, discussions, working through case studies, role playing, and working through their own problems that they have presented.

An Introductory session will provide an overview of the financing difficulties in the region, and the individual country presentations. The contractor will closely track the sessions that follow to gauge progress in participants' understandings and the changes in those understandings.

Each subsequent session will involve 1) definition of problems and issues for the session theme; 2) exploration of the key problems and issues; and 3) application of principles/lessons learned to the individual country situations.

The preliminary workshop agenda follows:

Day One

- Introductory Speech by the Minister of Communications (or equivalent)
- Workshop Formalities and Logistics
- Introductory Session (Overview and Country Presentations)
- Financial Structures and Mechanisms

Lunch Keynote Speaker

- Sources of Finance
- Discussion
- Guyana Case Study

Reception/Dinner sponsored by Investor(s)

Day Two

- Criteria used by Investors and Financiers
- Attracting Investment Finance (the Enabling Environment)
- African Case Study

- Developing a Strategy to Attract Investment Finance

- Next Steps and Evaluation

A detailed description of the sessions is provided in Annex One. The contractor is free to propose additions, deletions, and modifications to the agenda or curriculum. Approval of the final agenda and curriculum, however, has to be obtained from USAID/Zimbabwe. The workshop is expected to be carried out over two complete days.

The contractor will ensure that the presenters and the paid resource personnel are present throughout the two days of the workshop **and** a day following for break-out sessions and individual counselling.

Workshop materials will be made available to participants in hardcopy and on diskettes. The contractor should survey the country teams to determine what electronic formats will be suitable.

Task 1-4 Selection of the Presenters and Resource Personnel[1]

Each session should be presented be at least one individual with senior or preferably decision-making role within his/her own institution. Each must have good communications skills, and be willing to talk candidly about their experience.

A suggested list of presenters and resource personnel and their qualifications follow. In all cases, the individuals should have the experience/expertise specified from **developing countries relevant to the southern African context**. These should be practitioners (as opposed to academics or advisors) who are involved in the business of telecommunications financing.

- The World Bank group (IBRD/IDA and IFC);

- The AFDB group;

- Relevant sister USG agencies (OPIC, EX-IM, TDA)

- Bilateral donor/financier other than USAID (the pros and cons of donor financing, trends);

[1]A "presenter" makes a formal presentation, or facilitates a workshop session. Salary and travel expenses can be paid, if necessary for participation. A "resource personnel" makes informal interventions as relevant. Only travel and per diem expenses can be paid; and again, only if necessary.

- An investment bank or similar institution with experience and expertise in structuring telecommunications financing for developing countries, and/or firms that have invested in developing countries.

- A commercial bank or similar institution with experience and expertise in structuring telecommunications financing for developing countries, and/or firms that have invested in developing countries.

- An experienced broker of telecommunications deals in developing countries;

- An operating company that has invested in telecommunications operations in developing countries (one from a large, one from a small);

- The sales division of large equipment company (to discuss supplier credit issues);

- A law firm that has advised governments and structured telecommunications deals;

- The regulatory and policy-making body in a developing country where substantial private sector financing took place;

- One or more recently privatized operating entities; and

The contractor will develop a proposed list of presenters and resource personnel, and their assigned sessions and presentations. The list will be submitted for review and approval by USAID/Zimbabwe and SATCC. The contractor will arrange for their participation, and assist all presenters as they request in the preparation of any materials they may wish to use during the workshop.

The contractor will ensure that presenters and resource personnel from the private sector do not deviate from their assigned topics. The contractor must be vigilant to ensure that workshop time is not wasted with marketing presentations. Outside of the structured workshop sessions, of course, the presenters and resource personnel are encouraged to arrange business meetings.

Task 1-5 Make logistical arrangements

The contractor will make all travel, per diem, and hotel arrangements for the participants, presenters, and resource personnel. The contractor will coordinate closely with SATCC.

Task 1-6 Develop evaluation plans

Prior to the workshop, the contractor will develop an evaluation plan for the workshop and obtain approval from USAID/Zimbabwe. The evaluation plan should provide a capability to make mid-course corrections during the course of the workshop, and an overall evaluation at the conclusion of the workshop. The contractor will be responsible for the implementation of the evaluation plan.

The evaluation plan should also take into consideration the impact monitoring needs of the entire RTR project. The Introductory session will provide a benchmark from which change will be gauged. In the final Evaluation session participants should be asked what impact the workshop has had on their understanding of and thinking about financing telecommunications investments, and, their plans for the future.

PHASE TWO WORKSHOP IMPLEMENTATION

The contractor will be completely responsible for all details of carrying out the workshop.

Workshop participants will be provided an opportunity to learn about practical financing modalities, and to understand the conditions necessary to secure financing, in a hands-on, empirically grounded setting.

Common practice in private investment may involve new ways of thinking that may be antithetical to past political ideologies for the participants. The workshop will need to be informal and relaxed enough so that participants can comfortably change positions without losing face. Role playing may help. Formal lectures should be only part of the workshop sessions; participants should gain the understanding through socratic dialogue, peer interchange, and working through case studies.

PHASE 3 FOLLOW-UP ACTIVITIES

Task 3-1 Prepare and Disseminate Workshop Proceedings

The contractor will prepare the workshop proceedings that will include:

1. materials presented;

2. background materials; and

3. detailed but orderly and concise synopsis of questions, answers, and other comments from presenters, resource personnel, and participants.

The contractor will distribute the proceedings (in hard copy and electronic formats) to all participants, SATCC, and USAID within 30 days of the end of the workshop.

Task 3-2 **Prepare and Disseminate Workshop Evaluation Report**

The contractor will collate and analyze the workshop evaluation results. The evaluation report will be distributed to participants and USAID (in hard copy and electronic formats) within 30 days of the conclusion of the workshop.

ARTICLE IV - Reporting Requirements

A. PRE-CONFERENCE DELIVERABLES:

1. The proposed participant team composition, with back-up options in case of illness or emergency

2. Outline of presentation by CFOs.

3. Outline, goals, and objectives of both case studies.

4. Final workshop agenda.

5. List of presenters and resource personnel, and their assigned topics and sessions

6. Evaluation Plan

7. Draft letter of Invitation

Approval of all of the above must be obtained from USAID/Zimbabwe as soon as possible after the contract is signed, and well in advance of the conference.

B. POST CONFERENCE DELIVERABLES:

1. Draft workshop proceedings, two copies each to USAID/Zimbabwe and SATCC, within two weeks of the close of the conference. After receiving comments from SATCC and USAID/Zimbabwe, final copies to all participants at workshop.

2. Evaluation report to all participants at workshop (sent out simultaneously with final workshop proceedings).

ARTICLE V - Relationships and Responsibilities

For policy and administrative purposes, the contractor will report to the Chief of the Trade and Private Enterprise Division of the Project Development and Implementation Support office of USAID/Zimbabwe. Technical and day-to-day guidance will be given by the Regional Telecommunications Restructuring Program Manager (and until that individual is recruited, the Regional Trade and Investment Advisor).

For workshop logistical arrangements, the contractor will work directly with the Director and with the Telecommunications Officer of SATCC. If the SATCC Telecommunications Policy Specialist is on staff, however, he/she will be first point of contact.

ARTICLE VI - Performance Period

The contractors will provide services described herein over a period of approximately 7 months, beginning on or around 1 May 1994.

The workshop itself will take place in the second half of calendar year 1994, in the SADC region. The contractor will work out the date and venue of the workshop with SATCC as soon as possible after the contract is signed.

ARTICLE VII - Anticipated Level of Effort and Qualifications

The contractors will provide personnel for the tasks described above with the following anticipated levels of effort, responsibilities, and qualifications:

1. **Conference Manager**: Overall responsibility for the workshop;

Must have experience in designing, implementing, and evaluating telecommunications policy/financing seminars for high level developing country participants; able to attract a high caliber of presenter working within the constraints of a tight budget and AID fee structure.

Estimated Level of effort - 4 person weeks

2. **Logistics Coordinator**: Under the direction of the Conference Manager, responsible for all logistical aspects of the workshop;

Experience in all aspects of logistics of conference organization in developing countries; experience in southern Africa a plus.

Estimated Level of effort - 8 person weeks

3. **Telecommunications Analysts**: Under the direction of the Conference Manager, responsible for developing workshop materials and case studies, etc., and will assist in drafting post-workshop reports on an as needed basis.

Extensive experience in telecommunications policy/financing, particularly as per developing country context. Experience in developing case studies, preferably in telecommunications financing issues.

Estimated Level of effort - 18 person weeks
Estimated number of analysts - 2

4. **Presenters:** Under the direction of the Conference Manager, responsible for workshop implementation;

The pool of presenters must have 1) an extensive knowledge base about the specific aspects of telecommunications financing they are addressing; 2) well experienced in teaching case studies, and 3) extensive facilitating experience.

Estimated Level of effort - 9 person weeks
Estimated number of presenters - 4

5. **Resource Personnel**

The pool of resource personnel must have 1) an extensive knowledge base about the specific aspects of telecommunications financing they are addressing.

Estimated Level of effort - 8 person weeks (of travel and per diem)

Estimated number of presenters - 4 (i.e., the number that will require travel and per diem)

ARTICLE VIII - Illustrative Budget

(PIO/T budget, not attached)

Attachment Two

Description of Proposed Workshop Sessions

DAY ONE

1. Introductory Session (Overview and Country Presentations)

A presenter will provide an overview of the problems in financing telecommunications in the region, gleaned from the individual country reports and from independent sources.

Each country team leader (the CFO of the telecommunications entity) will make a short presentation on telecommunications financing needs, plans, and solutions in his/her country.

The presenter will elicit from each country presentation the key problems to be reviewed by the other workshop participants. The results of the Introductory Session would serve as a benchmark for the rest of the workshop, and will be reviewed in the final Evaluation and Next Steps Session.

2. Financing Structures and Mechanisms

Expose participants to the range of financing structures. The range of structures to be covered should include *inter alia* all relevant equity, debt, management buyouts and ESOPs, leasing, BOT/BOO, etc options for telecommunications financing. The advantages and disadvantages of each will be discussed, with a special emphasis on the needs and experiences of developing countries.

Lunch Keynote Speaker

The keynote speaker will be a principal in one of the case studies to be discussed after lunch, introducing the case and giving his/her view on the events as they unfolded.

3. Sources of Finance

Expose participants to all of the important sources of finance for telecommunications. This will include *inter alia* bilateral donors, export credit facilities, and investment corporations; multilateral development banks; private sector financial institutions; supplier credit; strategic operating partners; emerging market investment funds. The advantages and disadvantages of each source of finance will be discussed, with a special emphasis on the needs and experiences of developing countries.

Evening Reception/Dinner Sponsored by Investor Group

The reception/dinner will be open to all interested private and public investors or financiers of telecommunications. The contractor should screen out noninvestors from participation (e.g., equipment salespeople), unless they are participants or resource persons.

An after dinner speech could be presented by one of the more experienced telecommunications financing groups (possibly IFC).

DAY TWO

1. Criteria used by Investors and Financiers

Why and how investors and financiers become interested in a situation, undertake follow-up investigations, and make the investment or loan. What can be done to reduce the cost of capital.

2. Attracting Investment Finance – the Enabling Environment at home and for the outside investor

The enabling environment necessary to attract investment capital in telecommunications. Different types of capital and investor will require different types of changes (liberalization, commercialization, competition, and privatization) to the enabling environment. The session will also how to handle national concerns with changes in the enabling environment. This means developing an understanding of the concerns of unions and the security/intelligence community. It also means attacking directly other politically charged issues such as the regulation of private service providers to ensure monopoly powers are not abused, how to ensure rapid progress towards the goal of universal services; and ways and means of bringing indigenous business interests into the picture in a significant fashion.

3. Developing a Strategy to Attract Investment Finance

What needs to be done when, and by whom, to develop a strategy to increase finance available for telecommunications.

4. Next Steps and Evaluation

The country teams will present their planned next steps that should and will be taken by the country teams to obtain more finance for the sector. The contractor will review the sources of assistance (donor/private) available to undertake these next steps. For example, a detailed telecommunications financing analysis for each country has been budgeted in the RTR program. An evaluation of the workshop, and suggested follow-on actions, will be conducted.

Telecommunications Sector Strategy

The strategic thrust of the Telecommunications Restructuring Program is to increase and broaden access within southern Africa to a more cost-effective system for information transfer. This should result in increased investment for expanding business operations and contribute to broad-based sustainable economic growth in the countries of southern Africa.

Comprehensive analysis suggests that most Posts and Telecommunications Commissions (PTC's) in the region are not going to improve their performance significantly in the short-term and that there will be insufficient growth in the telecommunications sector to service unmet and growing demand if the current pace of investment and restructuring is pursued. Given the strong correlation between investment in telecommunications services and GDP growth, this will inevitably constrain the process of local and foreign business investment, job creation and economic growth of the region.

In order to create the kind of enabling environment which would encourage private sector investment and supply of telecommunications services the following must be effected: policy and regulatory reforms; minimization of Governments' apprehensions about private sector involvement in telecommunications service delivery; and a heightened level of knowledge by private domestic investors about potential investment in the sector and by foreign investors about the region's business prospects.

A regional approach to telecommunications sector reforms is being utilized to best take advantage of cross-fertilization and the demonstration effort of successful reforms to further inspire sectoral reforms throughout the region. Regional project assistance will ensure that there are adequate human resources available with the tools to manage and guide the future development of telecommunications services in all countries of the region. Non-project assistance will be used to leverage reforms in countries which are opening their economies to market forces and private investment and are ready to begin restructuring of their telecommunications systems.

It is anticipated that restructuring programs will be pursued in Tanzania, Zambia and Zimbabwe. A description of the specific strategies to be pursued and their contribution to each bilateral Mission's country program strategy is discussed below:

Tanzania:

Restructuring of the telecommunications sector focuses on managerial improvement and attracting capital as part of efforts to achieve USAID/Tanzania's strategic objective of ensuring the delivery of more effective infrastructure services.

In particular, the telecommunications program supports the Mission's target of delivery of services and utilities managed and financed on a sustainable basis. Mission initiatives in this sector are addressing a part of the overall sector that other donors in Tanzania have not yet begun to examine. It is anticipated that the Mission's emphasis on rural telecommunications will attract World Bank and other donors' interventions in rural area service delivery. PD&S funds were used to finance an early 1994 pre-feasibility study to determine the conditions under which private sector investment will find it worthwhile to invest in rural telecommunications.

This specific focus on financial and management aspects of infrastructure service delivery is predicated on the recognition that three decades of socialism have isolated Tanzania's leadership and created a need for public sector leaders and private sector entrepreneurs to be exposed and convinced of the merits of private sector provision of public services and recognize that legitimate public service companies can be managed commercially. Hence, given other donors' interest in investing in physical telecommunications infrastructure, the Mission is focusing on the capital finance and management steps required to privatize the industry and become financially sustainable.

Although the restructuring program is currently integrated into achievement of the Mission's strategic objective in improving infrastructure service delivery, it also is consistent with the Mission's second strategic thrust in promotion of the private sector.

Zimbabwe:

USAID/Zimbabwe's planned interventions in the telecommunications sector support its second strategic objective of increased black ownership and investment at all levels of Zimbabwe's economy. The need to demonstrate that blacks are in the mainstream of the economy is both an economic and political imperative in a country characterized by high levels of concentration, an uncompetitive and insular private sector dominated by whites (1% of the population controls 98% of the productive assets in the country) and an unacceptably large role of the Government in the productive sector. The hypothesis is that a de-controlled enabling environment conducive to investment required for economic growth that is participatory and equitable can only be achieved once blacks become owners as part of a new economic dispensation in Zimbabwe. The Mission's choice of

involvement in this sector was in part based on the United States' comparative technical advantage and U.S. trade interest.

In the telecommunications sector in Zimbabwe, outmoded equipment, under-serviced demand and poor quality of transmission frustrate commercial as well as residential users. Opportunities exist for sub-contracting services and exploring possible restructuring, spin-offs and privatization. The competitive aspects of these options provide an opportunity to decrease the cost and improve the quality of telecommunications services to the end user. The USAID program will promote privatization within the publicly owned PTC with special attention to blacks and introduce methods to broaden black ownership of these enterprises while increasing the efficiency and reliability of service to decrease the cost of trade and production for all users. Reforms in this sector are critical not only from trade/investment and ownership perspectives, but for their policy demonstrate impact to facilitate further sectoral reforms in the Zimbabwean economy.

The GOZ recognizes the need for improved telecommunications infrastructure both to service existing investment in Zimbabwe and as a necessary ingredient to attract further investment. Additional assistance is needed to guide the GOZ to understand the policy, financial and technical advantages of private sector participation, especially black, and subsequently to provide financial and legal support to structure transactions.

The SARP Regional Telecommunications Restructuring Program is the continuation of the dialogue with SADC member states on telecommunications restructuring, which included USAID's sponsorship of a Telecommunications Seminar for SADC members held in February 1993. Future initiatives planned include the provision of technical assistance and training to the PTC and GOZ to help them approach the regulatory, financial and technical aspects of privatization and provision of transactions support in restructuring or privatization efforts. It is hoped that this technical assistance will help guide the GOZ toward accepting greater private sector participation in the telecommunications industry. To complement this technical assistance, a policy-conditioned program is anticipated to make the telecommunications sector in Zimbabwe attractive to foreign investors, including U.S. telecommunications firms.

The Mission will be monitoring its impact in this sector by measurement of: telephone density among black-owned small and medium enterprises (SME's) and among white-owned business; number of black-owned SME's with telephones; average telephone call completion rate; black SME's without phones five minutes or fewer walk from a phone booth compared with white-owned businesses; number of black-owned firms providing sub-contract non-core services to telephone utilities; number of black-owned firms providing telecommunications services; annual sales volume of black-owned firms providing telecommunications services; and policies in place to facilitate black private

sector ownership/provision of telecommunications services in Zimbabwe.

Zambia:

USAID/Zambia's involvement in the telecommunications sector contributes to its strategic objective of removing the State from the provision of private goods and services and privatization. Together these support the Mission's first sub-goal of achieving a market-oriented economy with broad participation.

Reversing the inappropriate policies of the past and extracting the State from what should be private markets is the first step in reviving private sector investment in Zambia. Acknowledging that parastatals are a drain on the national budget and a barrier to private sector growth, the GRZ has committed to divestiture of the 170 parastatals which have dominated economic activity for 20 years in Zambia. The targeted subsidiaries are to be sold, liquidated or contracted out to private management within five years. The aim of the USAID strategy is to ensure that necessary conditions for privatization are established, firms are prepared for divestiture and deals are consummated.

This includes the establishment of the proper legal and regulatory framework. The Privatization Act was passed in mid-1992 but numerous alterations in the legal framework are required to support privatization. USAID technical assistance will complement World Bank efforts to create an enabling environment for both the privatization process and the development of post-divestiture competitive markets.

USAID will support the development of a technically sound and managerial competent Zambia Privatization Agency (ZPA) by providing technical assistance in selection of modes of divestitures, packaging firms for potential investors, evaluating bids and determining environmental impacts of firms being sold. In addition, to facilitate the sale of state-owned enterprises to Zambian investors as well as mobilize domestic capital for new capitalization, post-divestiture, significant progress must be achieved in establishing the planned stock market.

Supportive public opinion is critical if privatization is not to be derailed. In order to overcome the current suspicion of foreign investors and of some domestic minority groups buying state-owned enterprises, USAID will provide short and long-term technical assistance in the areas of publicity and international relations and the ZPA has contracted an American firm to develop an effective public relations strategy.

Measurement of progress in removing the State from the provision of private goods and

services, including telecommunications services, will focus on private sector contribution to GDP, declining employment in the parastatal sector, the sale (in number and volume of sales) of state-owned enterprises.

In summary, telecommunications activities contribute to bilateral strategies in the region as follows:

- Tanzania: delivery of more effective infrastructure services; and also promotion of the private sector

- Zimbabwe: black ownership and investment at all levels of Zimbabwe's economy

- Zambia: removing the State from the provision of private goods and services and privatization

Programs: To date, approximately $1 million of SARP funds has been utilized to support preliminary initiatives in the telecommunications sector. These include:

- development of a comprehensive telecommunications sector scoping study

- sponsorship of a Telecommunications seminar for SADC members in Windhoek, Namibia in 1993

- development of Zambia's telecommunications' sector strategy

LEGAL ISSUES IN THE REGIONAL TELECOMMUNICATIONS RESTRUCTURING PROJECT

Margaret R. Alexander, RLA

DFA Financing. The Development Fund for Africa appropriation is an authorized source of funds for this project even though it does not fit within the critical sectors designated as the primary objects of the DFA. FAA, sec. 496(h). Because it is a southern Africa regional program, the RTR is not subject to the restrictions of the critical sector analysis. Subsection (o) of the DFA allows funding of SADC-supported undertakings in a wider variety of sectors, including that of "industrial development and trade." This is an accurate sectoral category for the RTR project with its emphases on expanding trade and investment prospects through improved telecommunications and on private sector/privatization solutions to restructuring the telecommunications industry. In other respects the project is consonant with the DFA's long-term development principles of encouraging private sector initiative and promoting regional integration.

SADC Authority. It is noted that the special DFA authority to support SADC sector projects exists only "to the extent funds are provided for such purpose in the annual . . . Appropriations Act." FAA, sec.496(o). Although the Appropriations Act for FY 94 did not specifically earmark a sum for that purpose, the legislation expressly contemplates use of FY 94 funds for SADC projects. The Act specifies that "funds appropriated under this heading [the DFA] which are available for activities supported by the Southern Africa Development Community shall be made available notwithstanding Section 512 of this Act [the Brooke Amendment] and section 620(q) of the Foreign Assistance Act of 1961." H.R. 2295, page 11. This provision makes it clear that the appropriation is intended to be available for SADC projects among others. It may therefore be said that 1994 funds have been "provided for such purpose."

Encouragement of U.S. Investment. A question was raised as to the appropriateness of using development funds for activities devoted to informing U.S. telecommunications businesses about the prospects in southern Africa. After extended discussion, it was the view of the Committee that there is a primary developmental goal behind the proposal to finance such activities as exploratory missions by U.S. business representatives, investment feasibility studies and establishment of a U.S.-based office to disseminate information about southern Africa prospects to the American telecommunications industry. Such activities will indeed assist U.S. businesses and help to secure their participation in project procurement. However, the reason for the assistance is to expand American investment in Africa to the benefit of the African economies. By supplying information and connections, the project will assist in alleviating some of the constraints that currently inhibit U.S. entry into southern African markets. Information services, trade missions and the like are means to that end. It is anticipated that the African telecommunications network will be improved and

made more sustainable through American business participation. This is a classic long-term development goal within USAID's statutory mandate.

Protection of U.S. Jobs and Markets. Project activities with U.S. businesses will not foster their entry into the southern African market at the cost of U.S. jobs. In accordance with Policy Determination 20 (Jan. 3, 1994) and section 547 of the 1994 Appropriations Act, the Mission's Project Committee formally considered the possible implications for U.S. jobs. The committee determined that certain activities under the project are "directed at promoting foreign or local investment in the recipient countries," but that they cannot "reasonably be foreseen to involve the relocation of any U.S. business that would result in a reduction in the number of employees of the business in the U.S." (PD 20, sec IV.A). Based on these determinations, the Committee concluded that Section 547 does not prohibit the investment promotion elements of the project.

The determination that there is no reasonably foreseeable threat to U.S. jobs is based on the nature of the activities (which support market expansion not relocation) and on the nature of the telecommunications industry which is the object of the project.

The industry can be divided into two segments: operators/service providers, and equipment manufacturers. The investment promotion component of the RTR project (and program) will focus on U.S. **service providers**. Service providers would only be interested in expanding to an overseas market, not in substituting that market for their home base. The nature of the business is such that they cannot close down or downsize their operations in the U.S. and serve their customers from Africa. C&P's Washington DC services, for example, could not be operated from Johannesburg.

The investment promotion component will not be directed to equipment manufacturers. Even if it were, manufacture of telecommunications instruments is a capital intensive, high technology, research oriented business. Southern Africa is simply not competitive. There is no reasonable chance that members of such an industry would elect to close their U.S. offices in favor of relocation in the third world.

To make doubly certain that no prohibited activities occur, the grants and contracts under the project will contain the new standard language cautioning against any activity that might result in relocation of U.S. businesses.

It is also noted for the record that the investment promotion, feasibility studies and similar activities are directed at the telecommunications industry. There is no question of project involvement in promoting or otherwise supporting southern Africa manufacturing, agricultural or export industries in contravention of the Bumpers and Lautenberg amendments, FY 94 Approp. Act, sec. 513.

ACTION MEMORANDUM FOR THE ACTING DIRECTOR

DATE: 25 April 1994

FROM: Don Greenberg, PDIS

SUBJECT: A-76 Waiver for PASA with USDOC

Your approval is requested to permit use of a Participating Agency Service Agreement (PASA) with the United States Department of Commerce (USDOC) to provide a Program Manager based in the field for the Regional Telecommunications Restructuring Program (RTR), as well as technical backstopping services in the United States.

The National Telecommunications and Information Administration (NTIA), an agency under USDOC, is required to implement this activity in view of the unique capabilities status, and reputation of the NTIA. These include:

1) **NTIA is the lead agency for the executive branch of the USG for telecommunications policy and technical issues.**[1] NTIA represents USG interests inter-governmental fora such as INMARSAT, INTELSAT, and the WARC. NTIA develops policy, and provides advice and counsel on telecommunications issues to the White House and other USG agencies. NTIA has provided technical staff on short and long term loan to other USG agencies such as the State department. NTIA provides technical support to the State Department in the latter's role as USG liaison with the International Telecommunications Union.

Relevance to RTR: NTIA has established a reputation throughout the world as the voice of the USG in telecommunications issues. Along with the technical expertise which the Program Manager will bring to the project, the additional influence and reputation which are a result of the governmental role of NTIA are key elements in alleviating the fears and suspicions which host governments and counterpart individuals hold with regard to outside private sector firms. The credibility of a governmental agency, i.e., NTIA, is critical at this juncture in establishing an environment of acceptance by governments in the region of the potential for private sector participation. For the private sector, itself, to champion the position to host governments will be perceived as self-serving and lacking in objectivity.

[1]The Federal Communications Commission (FCC), on the other hand, is an independent regulatory agency, reporting directly to Congress.

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Furthermore, because of its depth and breadth of resources, NTIA will be able to provide a highly qualified program manager, **as well as first rate technical backstopping** capabilities in the United States. Finally, the achievement of RTR objectives will depend in part on close co-operation between USG agencies, of which NTIA has considerable experience.

2) **NTIA has a regulatory as well as policy function; it manages the Federal Government's use of the electromagnetic spectrum for telecommunications and broadcasting purposes.**

Relevance to RTR: Electromagnetic spectrum management is an important component of a modern telecommunications regulatory framework. NTIA's particular expertise in this area would be invaluable for advising governments and private sector in the region.

3) **NTIA has extensive experience in providing short and long term technical assistance in telecommunications policy and engineering areas to developed and developing countries around the world.** NTIA has advised on the development of telecommunications law, spectrum management, and private sector participation/privatization. NTIA support has been focused in the past several years on East Europe, Latin America, and the ASEAN countries (and limited short term assistance has been given to several African countries such as Namibia and Uganda).

NTIA has provided support to government ministries and regulatory agencies (in Thailand, e.g.), as well as to private sector associations such as CITEL (the trade association affiliated with the Organization of American States). NTIA has found that as a government agency, it can develop particularly close and productive relationships with other government agencies.

NTIA has also worked in close collaboration with the U.S. private sector, one example is an NTIA coordinated industry conference last July in Venezuela. NTIA uses State and USAID funding, as well as its own budget, to finance this technical assistance. The assistance has been well received, according to reports that we have received from USAID staff and host country officials.

Relevance to RTR: NTIA as an institution and individual staff have had considerable experience working in developing countries, and have acquaintance with USAID procedures and objectives. **As a fellow government agency, it is poised in particular to build relationships based on trust with host country government counterparts. We have found in many of the SADC countries that suspicion of U.S. commercial interests and motivations is usually strongest in government circles.** The government to government institutional relationship will give credibility to our interests in lessening that suspicion. At the same time, NTIA's considerable expertise working with the U.S. private sector and host country private sector associations will also be invaluable to achieve project objectives.

4) **NTIA is very interested in using its considerable technical resources in supporting USAID in this area**, through its office of International Affairs. The International Affairs staff, as well as the office of the Administrator of NTIA, have expressed interest in doing more in Africa and specifically the RTR Project.
Relevance to RTR: NTIA's depth of institutional interest in RTR is important to a long term relationship. FCC, while it has technical capabilities and is interested in supporting RTR, has stated that in writing that they wish to limit that support to hosting southern African delegations and an occasional short TDY to the field.

5) **NTIA's vision of telecommunications development in the world is congruent with RTR program objectives.** To quote the NTIA chief scientist "The notion of having a telecommunications and broadcasting infrastructure being owned and operated by a government in a monopolistic fashion is something that is really well out of date in today's modern world. The provision of services and management of the system is best done by the private sector".

Relevance to RTR: NTIA's telecommunications sector agenda is straightforward; it has no other overseas interests. An agency with different views, or an agency that has other international agenda, might prove to be a more difficult partner. By calling on the USDOC to provide program management and backstopping capability, the RTR program will obtain a package of capacities and capabilities that are not found in any other private, university, or other USG agencies. The unique capacities and capabilities of USDOC are required to obtain the most rapid and effective achievement of RTR program objectives.

Other Options Considered:

Other options were considered for this position are discussed briefly below:

1. **A USDH project manager.** The USDH option was rejected for two main reasons. Firstly, the length of time required to designate a USDH position, obtain the FTE increase to mission staffing levels, and to identify, recruit, and assign a suitably qualified individual within USAID would be such that the Project Manager's role would not be filled in a timely manner. Conservative estimates for completion of this process would be approximately 6 months. A Project Manager obtained through a PASA arrangement would be on board in approximately 3 to 4 months. Secondly, at present USAID does not possess a wide range or depth of telecommunications knowledge and expertise in-house and the use of a USDH would forego the technical and policy backstopping capability of the NTIA. The PDIS division believes that this technical backstopping will be a critical input into successful project implementation.

2. **A USPSC project manager.** A technically qualified individual could be recruited fairly rapidly through a personal services contract. The PSC option was rejected for three

main reasons. First, the current USAID policy is to reduce, not increase, the use of personal services contractors. Second, a PSC would not have **any** backstopping support from a parent institutions. For the reasons stated above that backstopping support is critical. Third, a USPSC is not able to represent the U.S. government.

3. **A project manager supplied through an institutional contractor, in particular, a small Gray Amendment/8A firm.** A technically qualified individual could be recruited through this mechanism, although perhaps not as rapidly as a PSC, and undoubtedly at considerably more expense to the USG. Technical backstopping capability, as well, could be provided by the institutional contractor, although at significantly more expense to the USG than through a PASA.

An essential ingredient that is missing from this option, however, is the reputation developed by NTIA throughout the world as the voice of the USG in telecommunications issues. Along with the technical expertise, the additional influence and reputation which are a result of the governmental role of NTIA are key elements in alleviating the fears and suspicions which host governments and counterpart individuals hold with regard to outside private sector firms. As mentioned earlier, the credibility of a governmental agency, i.e., NTIA, is critical at this juncture in establishing an environment of acceptance by governments in the region of the potential for private sector participation. For the private sector, itself, to champion the position to host governments will be perceived as self-serving and lacking in objectivity.

The primary reason the institutional contractor option was rejected, therefore, was that no institutional contractor or employee of an institutional contractor, no matter how technically qualified or experienced, can represent itself as an official arm of the USG government. This ability is essential to acheivement of project objectives.

As described in Handbook 12 Chapter 1, Section 621(a) of the Foreign Assistance Act provides for exemption from OMB Circular A-76 for USAID. As stated above, the proposed agreement is exempt from the provisions of OMB Circular A-76 because (1) it is for the provision of technical assistance (2) the facilities and resources of USDOC/NTIA are uniquely suitable for the technical assistance to be provided, (3) the services can be made available without interfering unduly with domestic programs, and (4) the services are not competitive with private enterprise.

RECOMMENDATION: The recommendation is that you sign below to indicate your approval that the proposed agreement is exempt from the provisions of OMB Circular A-76 in accordance with Section 621(a) and Handbook 12, Chapter 1 and to proceed with the provision of technical assistance, training, and procurement for the named project.

Approved: ✓	Disapproved: _____
Signed: _____ Stephen J. Spielman Acting Director	Signed: _____ Stephen J. Spielman Acting Director
Dated: 4/25/97	Dated: _____

Clearances:

Subject: A-76 Waiver for PASA with USDOC

RLA:MAlexander _____ Date _____

PDO:MStephens _____ Date _____

DIR:SSpielman _____ Date _____

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Clearances:

Subject: A-76 Waiver for PASA with USDOC

RLA:MAlexander DRAFT Date 4/21/94

PDO:MStephens Date 4/22

DIR:SSpielman Date

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