UNCLASSIFIED

Regional Rail Systems Support Project

690-0247

Swaziland Component

August 1988

UNCLASSIFIED

SOUTHERN AFRICA REGIONAL RAIL SYSTEMS SUPPORT
SWAZILAND COMPONENT

SWAZILAND COMPONENT

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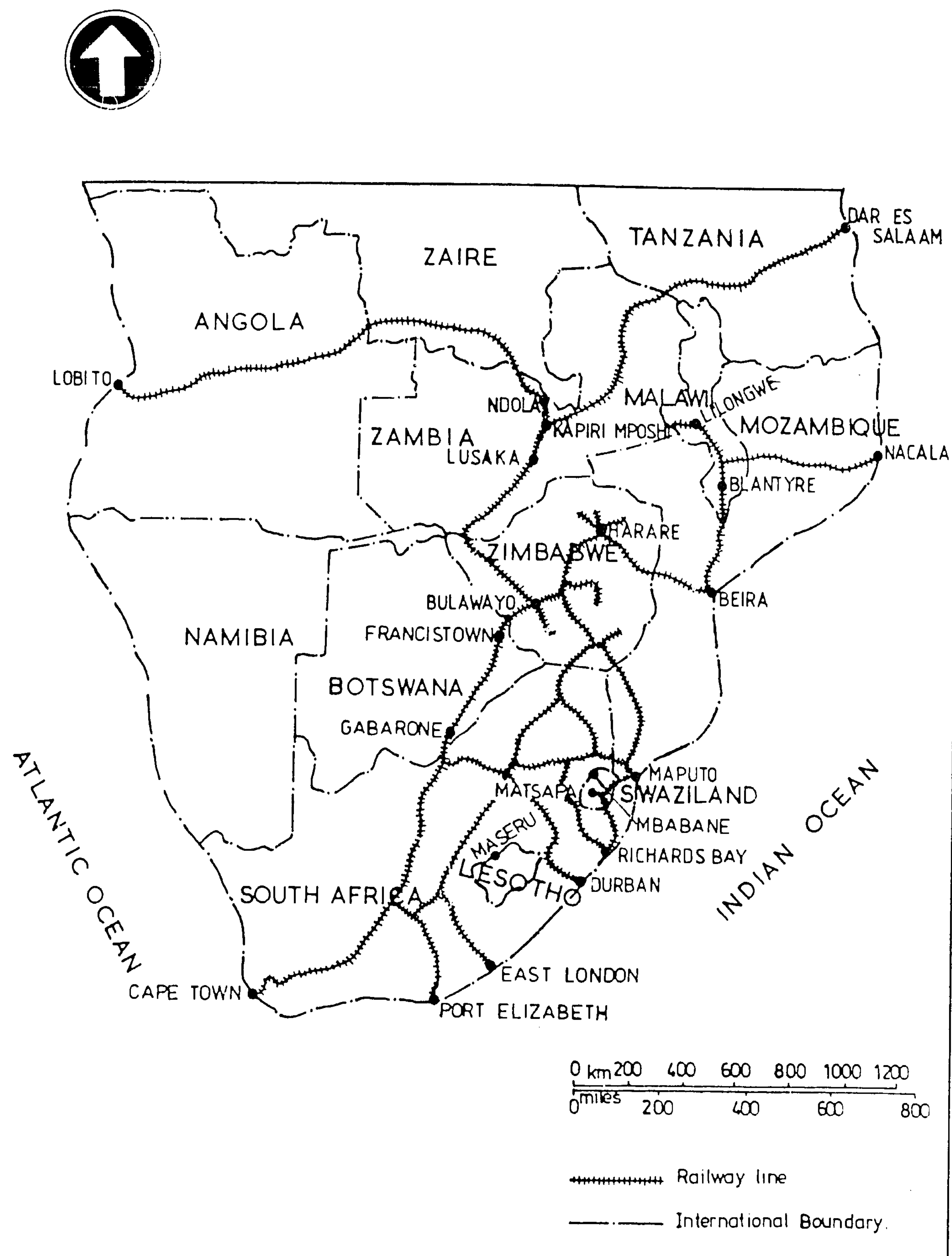
ANNEXES

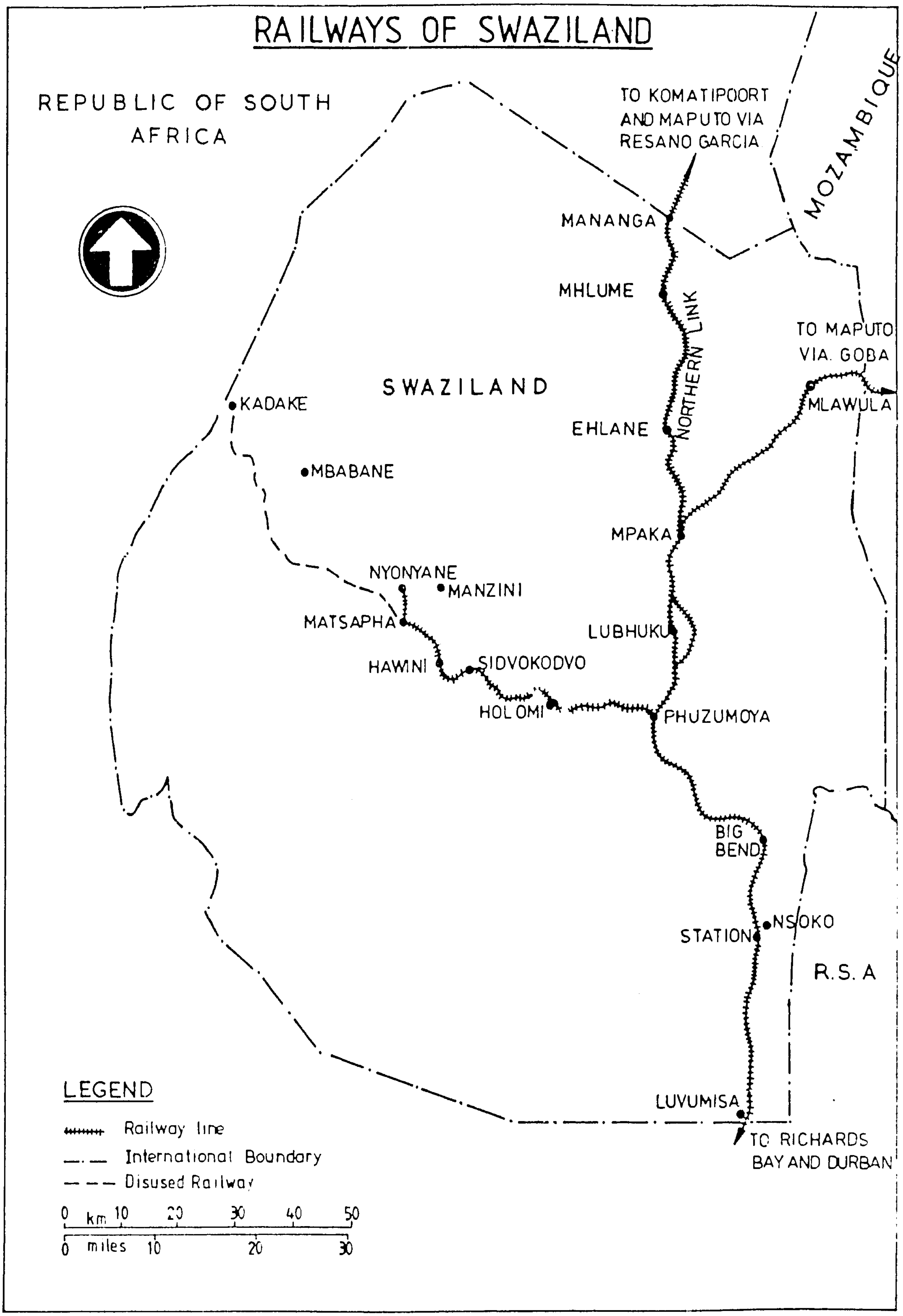
ABBREVIATIONS AND ACRONYMS

AID/W	USAID Headquarters in Washington
c/ntk	Cents (U.S.) per net ton kilometer
Cap. Expend.	Capital Expenditures
CEO	Chief Executive Officer
CFM	Caminhos de Ferro Mocambique (Mozambique Railways)
DE-Consult	Deutsche Eisenbahn Consulting Group
DHS	Deloitte, Haskins & Sells
E	emalangeni (Swazi unit of currency)
ECU	European Currency Unit
EDA	Executive Development Africa (Pvt.)
EEC	European Economic Community
Esami	Eastern and Southern Africa Manage ment Institute
FD	Financial Director
FRG	Federal Republic of Germany
FX	Foreign Exchange
FY	Fiscal Year
G & A	General and Administrative Overhead
GOS	Government of Swaziland
HHE	Household effects
HR/GDO	Human Resources/General Development Office
IDM	Institute of Development Management
inc.	increase
IQC	Indefinite Quantity Contract
LC	Local Currency
LT	Long Term
MA	Master of Arts
MBA	Master of Business Administration
MOU	Memorandum of Understanding
MOWC or MWC	Ministry of Works and Construction
MSc	Master of Science
MT	Metric Tons
NRZ	National Railways of Zimbabwe
ntk	net ton kilometer
ODA	Overseas Development Administration (UK)
Off. Equip.	Office equipment
OJT or o-j-t	On the Job Training
P & A	Personnel and Training
PACD	Project Assistance Completion Date
PIL	Project Implementation Letter
POL	Petrol, Oil and Lubricants
POV	Privately Owned Vehicle
PP	Project Paper
PSC	Personal Services Contract
PTA	Personnel and Training Advisor
PTS	Personnel Training Supervisor
R & R	Rest and Recreation
RCMO	AID Regional Commodity Management Officer
RCO	AID Regional Contracting Officer
RFP	Request for Proposal
RLA	Regional Legal Advisor

RFQ	Request for Quotations
RRSS	Regional Rail Systems Support
RSA	Republic of South Africa
SADCC	Southern Africa DEvelopment Coordination Conference
SAR	South African Railways
SARP	Southern Africa Regional Program
SATS	Southern Africa Transport System
SCOTS	Swazi College of Technology
Sec.	Secretary
SIMPA	Swaziland Institute of Management and Public Administration
SOFRERAIL	Title of Spanish Consulting Firm
SOW	Scope of Work
SR	Swaziland Railways
ST	Short Term
STC	Short-term Consultants
TA	Technical Assistance
UAB	Unaccompanied Baggage
UNISA	University of So th Africa
USAID/S	U.S. AID Mission to Swaziland
USAID/Z	U.S. AID Mission to Zimbabwe
Y/E	Year End

RAILWAYS AND PORTS OF SOUTHERN AFRICA




RAILWAYS OF SWAZILAND
REPUBLIC OF SOUTH AFRICA
TO KOMATIPOORT AND MAPUTO VIA RESANO GARCIA
MOZAMBIQUE
MANANGA
MHLUME
NORTHERN LINK
TO MAPUTO VIA. GOBA
MLAWULA
SWAZILAND
KADAKE
EHLANE
MBABANE
MPAKA
NYONYANE
MANZINI
MATSAPHA
LUBHUKU
HAWINI
SIDVOKODVO
HOLOMI
PHUZUMOYA
BIG BEND
NSOKO
STATION
R.S.A
LUVUMISA
TO RICHARDS BAY AND DURBAN
LEGEND
Railway line
International Boundary
Disused Railway
0 km 10 20 30 40 50
0 miles 10 20 30

I. BACKGROUND AND RATIONALE

1.1 Introduction

Swaziland Railway (SR) was established in 1962 and began operation in 1964 after the construction of the 225km single track, cape gauge (1067mm) main line to Maputo. The line was constructed during the early 1960s by the Japanese to take iron ore from Ngwenya on the western border to Maputo for export to Japan. The line was routed so that it could also serve sugar producing and potential coal mining areas as well as the Mbabane/Manzini region.

The 91km southern rail link, from Phuzumoya to Lavumisa was built by the Government of the Republic of South Africa (RSA) and commissioned in 1978 to provide access to the RSA ports of Richard Bay and Durban to avoid the increasing operating difficulties in Mozambique.

The final addition to the SR infrastructure was the 55km Northern Link which was opened in 1985 to provide a link to Zimbabwe at Beit Bridge via Northern Transvaal. The northern route provides a short transit link of 146km from the junction at Komatipoort on the Ressano-Garcia line in Northern Transvaal through Swaziland to connect with the Southern Africa Transport System (SATS) network at the border town of Golela.

Swaziland Railways was initially operated by Mozambique as there were no staff, locomotives or repair and maintenance facilities in Swaziland. In 1978, with the loss of Portuguese management and technical support in Mozambique, most management and operational resources were transferred to SATS. Until 1985 when Swazi management took over, former SATS personnel occupied virtually all senior management and board positions. SATS continues to provide most operational resources including locomotives, wagons and tarpaulins.

Traffic characteristics have changed significantly during the last ten years. Iron ore exports used to account for the vast majority (81% in 1972) of domestic gross tonnage which peaked at 3.3 million MT in 1972. Iron ore shipments terminated in 1981 and the western line was discontinued (see Map at front). Total tonnage steadily decreased to 860,000 MT in 1985. By developing alternate traffic to iron ore, by 1986/87 domestic tonnage had increased to 1.2 million MT, of which 60% of the volume is sugar and molasses, with wood pulp and coal accounting for 12% each. In addition to Swazi domestic and overseas traffic, the northern route conveyed 1.5 MT of RSA transit traffic. (Traffic conveyed by commodity is tabulated for 1986/87 in the Appendix to Annex 4).

The direction of Swazi regional and overseas traffic has also changed over the same period with far greater use of RSA ports than Maputo, due primarily to the curtailment of iron ore traffic and the disruption on both the Ressano-Garcia and the Goba links to Maputo due to terrorist activities.

The distribution of traffic on SR is indicated below for the year 1986/87.

	Tons (000s)	Percent (%)
Overseas trade via Maputo	473	18
Overseas trade via RSA ports	286	11
Regional trade with RSA	390	15
R.S.A. Transit	1481	56
Domestic	3	0
	2633	100

Source: Swaziland Railway Statistics

SR Traffic is dominated by RSA transit traffic and Swaziland exports. Swaziland imports tend to be transported by road because the major portion of Swaziland's imports are sourced in RSA. The modal split between road and rail was estimated in the USAID Southern Corridor Study for Swaziland's foreign trade and was found to be:

	Imports	Exports
Rail	7%	71%
Road	93%	29%

Swaziland, like many southern African countries, exports by rail and imports by road from RSA. Consequently rail transport costs cover empty backhauls. The impact of empty running and other issues relating to railway traffic costs and revenues is considered in the financial analysis. The potential for substantial discounting and more aggressive marketing in RSA, as well as Swaziland, to use the empty backhaul for imports is significant.

The financial position of SR has deteriorated dramatically during recent years due primarily to an accumulated deficit arising from high interest and loan repayments on the recent investment in infrastructure. The total accumulated debt to equity ratio for the year ending March 31, 1987 was 408%. The seriousness of SR's financial position prompted the Government to request that the World Bank review the position in 1986. The Bank concluded that SR's approach is "constructing a first class infrastructure regardless of the cost and running trains regardless of profitability". It went on to recommend that technical assistance be provided in the key areas of management, financial control and marketing. The effect of the report was to discourage further capital investment (track rehabilitation on the Goba line, acquisition of locomotives and rolling stock) until the picture improves.

The Government of Swaziland requested USAID to provide technical assistance to solve the problems identified by the Bank (see Annex 1).

1.2 Problems Faced by Swaziland Railways

Swaziland Railways has had to cope with rapid network expansion and business diversification during which virtually all expatriate assistance left. Appropriate human and other resources are simply not in place to cope with these changes. The problems are basically twofold:

a. The Government has increased its involvement and vested interest in SR but has not the resources to back it up. The most urgent problems to be solved involve the financial restructuring of SR's loans and the resolution of the agreement between Swaziland and RSA concerning the deficits of the Northern Link. SR's corporate responsibilities require clarification in order to operate on a sound commercial basis.

b. SR internal resources and systems need to be modified and improved to meet a more complex and challenging commercial environment. Management and financial controls in place are not appropriate, few compliance tests are undertaken in audits, and internal controls are considered weak. Of great importance is the lack of adequate traffic costing procedures to ensure that capital as well as operating costs are adequately covered. This latter problem is shared by Mozambique Railways and, to a lesser extent, Malawi Railways, both of which are also receiving assistance under this Project.

1.3 Government of Swaziland Actions to Resolve Problems

The Government recognizes that action needs to be taken to solve SR's problems and that the main concerns are financial viability and institutional strengthening and training. Regarding financial viability, the Ministry of Finance has been approached by the

Ministry of Works and Communications to restructure SR's loans. The process, however is being frustrated by SR's inability to provide reliable financial data. The second constraint to viability concerns the resolution of issues related to the SR-SATS "Memorandum of Understanding" which also depends on accurate financial information.

Government is taking steps to improve the institutional situation at SR. In early July 1988 a Commission of Inquiry was established to report in October 1988 on a broad range of issues concerning management competence at SR. It is likely that a limited report will issue from the Inquiry prior to October. Government welcomes the prospect of the management assistance to be provided by this Project and is making ever_ effort to ensure that it will be effective in improving SR's viability.

Overall, recognition by Government that assistance is required for SR is implicit in their letter of request of USAID.

1.4 Other Donor Assistance and Commitments

The European Economic Community (EEC) has provided support to the Swazi Railroad Training Center at Sidvokodvo since 1981 as part of its required training efforts. Germany also is supporting regional railway training efforts in Swaziland. Though SR has so far found the terms offered to be not favorable, they are continuing discussions with Italy about financing for reconstruction of the Goba line. Discussions were also initiated and are continuing with the United Kingdom about providing SR with a new Director of Finance. While such cooperation would be good for all parties concerned, it was agreed that all technical assistance team members should fall under the same contract. ODA was to explore whether or not they could provide funding through AID to finance this advisor.

During the life of this project, two other donors' railroad training programs provide a significant complement to the project training plan. The EEC program, previously described, runs through 1989. At this point it does not appear that it will be extended. However, for the remainder of 1988 and 1989, it will continue to fund the training of all lower level staff and has budgeted extensive mid- and higher-level management training at IDM, SIMPA, ESAMI and NRZ Railways School.

The Deustche Eisenbahn Consulting Group (DE-Consult) has devised a comprehensive regional training scheme to improve the efficiency of railways in SADCC. The first phase (i.e., the first three years) of the program is expected to be fully funded at the level of US$8.5 million by several donors including the FRG, U.K., Canada, and Australia. Programs are scheduled to begin in September, under the direction of a SADCC National Railroad Training Specialist assigned to SATCC. The program consists of eight elements:

1. The appointment of a railway training expert at SATCC and assistance to the SATCC working group on railway training.

2. Management Courses.

3. Instructors training.

4. Portuguese/English and English/Portuguese Language Courses.

5. Specialist Courses for Managers (e.g., marketing, traffic costing, informatics, finance).

6. Training Aids.

7. Technical Courses for Engineers.

8. Production of Handbooks and Manuals.

The proposed AID Project (also a regional project, with a 3-country focus) will be able to benefit from these programs, particularly in the areas of management, specialist and technical courses which will complement the project training plan.

1.5 AID Response

SR has very few experienced senior railway management personnel due to its history of contracting out that responsibility to Mozambicans and South Africans. No Swazi Director has been in his job for more than three years, although some have worked for SR for many years. It is not surprising that modern management administrative skills are not in place.

Despite SR's serious problems, USAID has concluded that SR can be organizationally and financially viable and certainly is worth saving. The most appropriate response after consideration of alternative forms of assistance and assistance being provided by other donors, is to provide a top management team, put in place improved information systems and provide training to senior managers. USAID also recognizes that the improvements would benefit the Swazi economy in general by increasing the opportunity to reduce the transport costs of its external trade, and would strengthen its position within the SADCC community from which it has tended to be isolated in the past.

The dependency on South Africa for both trade and transport resources can best be reduced by strengthening railway management, by improving the quality and range of information it receives, and by applying that information more expeditiously within a more aggressive commercial strategy.

II. PROJECT DESCRIPTION

2.1 Overview and Strategy

A. Overview

The necessary components of SR's physical infrastructure are excellently constructed and in place (except on the Goba line which needs some rehabilitation); the management staff which consists mainly of recently appointed Swazi nationals are eager to learn and the operational structure is relatively simple. The Swaziland component of this regional Project, therefore, responds to SR's immediate need for technical assistance in analyzing operational constraints that threaten the railway's viability. As a result of the technical assistance provided by this component of the Project, the Government of Swaziland will be better able to determine what long-term commitments should be made and what restructuring is necessary to maintain a viable railway.

The Swaziland component of the Project will: (a) enable SR to develop and implement a corporate strategy, raise performance levels and improve controls; (b) refine financial systems and procedures and provide financial management control to improve quality, range and availability of financial information to government and railway management; (c) provide commercial management expertise to expand the range and quality of products and services available to increase the Railway's share of the transport market through the implementation of a more aggressive commercial and marketing strategy; (d) raise the level of management skills and; (e) assist in the specification, design and implementation of management information procedures and systems. To achieve its target, this component of the project provides funding for three mutually supportive elements:

(1) Short-term technical assistance to review and provide interim recommendations for capitalizing the Railway; suggest possible changes to the commercial loan portfolio which might improve SR's financial viability in the short and long run; and assist in defining the role of SR as a commercial enterprise within the Swazi economy.

(2) Long-term technical assistance to provide interim management of SR for a two-year period; develop and implement corporate strategy and business plans; plan and implement improved financial and operating controls; develop revised tariffs and other means of improving revenues and reducing costs; plan and implement detailed marketing and commercial plans; and plan and implement a broad program of institutional development.

(3) Long- and short-term participant training and provision of staff development commodities.

B. Project Strategy

The strategy of the Swaziland component of the Project is to improve the overall management capability and operational efficiency in order to make the railway viable. Initially, this component of the Project will concentrate on provision of approximately 4 person-months of short-term consultancy to review and analyze the constraints prohibiting the viability of the railway, initiate dialogue on corporate strategy; identify and pursue agreement by all participants on specific recommended actions or changes necessary to assure financial viability, and restructuring of current SR debt. Subject to satisfaction of conditions precedent, the project will provide 16.5 person years of long-term technical assistance and 26 person-months of short-term technical assistance to assist SR. The assistance will enable SR to improve its financial position, set in place systems to improve performance of human and other resources through on-the-job training (OJT); provide management information systems; develop corporate strategies and establish business plans that are linked to a realistic costing and budgeting process.

2.2. Project Objectives

A. Project Goal

The Project's goal is to support the development of a stronger economic foundation for growth in Southern Africa, and the Swaziland component is a part of the larger Regional Rail System Support Project described in the RRSS Overview.

B. Project Purpose

The Project's purpose is to strengthen and expand the carrying capacity and operational efficiency of regional rail transport in SADCC countries. The purpose of the Swaziland component is to improve the management performance of SR, improve SR's overall institutional capacity, and ensure SR's continued viability.

C. End of Project Status

By the end of the five-year life of the Swaziland component of the project, the following conditions are expected to exist at SR:

1. SR's debt/equity ratio improved from 408% to 150% by 1993.

2. Swazi CEO and Department Heads adequately trained for their jobs, in place and functioning effectively;

3. SR's operating ratio (expenses divided by revenues) reduced from 146% to 68%;

4. Operations and business systems developed, accepted and being utilized; and

5. Intra-SADCC traffic on SR increased from 390,000 MT to 500,000 MT per year.

D. Project Outputs

The human and financial resources applied to this component of the project should directly achieve the following outputs:

1. SR's financial and capital structure analyzed, changes recommended, action plans adopted;

2. Loan portfolio analyzed and loans restructured;

3. A corporate strategy and on-going planning systems established. This would include development of a five-year business plan;

4. SR rights determined under the SR/SATS memorandum of understanding; changes recommended and negotiated;

5. A management Information System in place providing SR and Government with comprehensive and timely decision-oriented data on operating variable costs and revenues;

6. A revised tariff structure which has a commercial and cost-based orientation in place;

7. An improved financial management plan and system in place providing essential accounting and budgeting information on a regular basis;

8. An improved staff development plan in place providing definite career paths and training plans;

9. A marketing plan and budget developed and in place;

10. Senior staff trained and returned to SR.

11. Substantial OJT accomplished, leading to an overall improvement in the institutional capabilities of SR.

E. Project Inputs

To achieve the above outputs the Swaziland component of the project will provide the following inputs:

1. AID Contribution ($7.042 million)

a. Initial short-term technical assistance ($150,000)

Approximately four person-months of short-term technical assistance from a team consisting of a lawyer, a corporate financial analyst, a railway corporate planner and a transport economist to:

- Initiate dialogue on corporate strategy;

- Identify and pursue agreement by all participants on specific actions or changes which will be necessary to assure financial viability; and,

- Define and improve institutional relationships among SR's Board of Directors, Senior Management, Staff, Ministry of Works and Communications, Ministry of Finance and the Public Enterprise Unit (proposed).

b. Long-term technical assistance ($4,546,236). During the life of the Project, approximately 16.5 person-years of long-term technical assistance and 30 person-months of short-term technical assistance will be provided, consisting of:

Chief Executive Officer	4 years
Financial Director	4 years
Commercial/Marketing Advisor	3 years
Operations Advisor	2 years
Systems Advisor	2 years
Personnel/Training Advisor	1.5 years

c. Long- and Short-term training ($600,000).

48 person-months of long-term training in the United States for 2 participants leading to MSc degrees in Finance and Personnel Management.

ii. 90 person-months of in-country training; 60 person-months of third-country training; 48 person-months of US training and 320 person-months of OJT.

d. Commodities ($160,000).

Commodities consist of one computer system, household furniture not provided by SR and 3 project vehicles.

e. Monitoring and evaluation ($350,000).

Two scheduled evaluations, and several small scale evaluation/monitoring activities, performed under one contract for the life of project. Periodic financial reviews and audits, as well as one PSC at the mission to provide AID mission oversight and project monitoring.

f. Contingency and Inflation ($644,783).

Contingencies and annual inflation compounded have been calculated at 5% and 5% respectively.

2. Government of Swaziland Contribution ($1,587,700).

The Government will fund local staff salaries and benefits, training support equipment, vehicle operation and maintenance, office and building space, utilities and supplies.

2.3 Project Elements

The Swaziland component of the project will finance the services, training and commodities necessary to improve management, staff development and operational efficiency while enhancing the viability of SR.

The project elements to be funded by AID are:

A. Technical Assistance

A total of 228 person-months of technical assistance will be provided in two phases and in three separate contracting modes.

1. Short term technical assistance (Approximately 4 person-months). 4 person-months of short-term technical assistance from a team of four experts, consisting of a lawyer, a corporate financial analyst, a railway corporate planner, and a transport economist will be secured by AID direct contract through limited competition. The technical assistance will enable SR to analyze its financial and capital structure; examine its options vis-a-vis the SATS-SR agreements; analyze SR's loan portfolio; initiate a dialogue on corporate strategy; examine road-rail competitive position and recommend tariff and other changes; and develop specific action plans. The recommendations and action plans will be presented to the Government of Swaziland for their consideration. Upon adoption of the action plan, AID will initiate procurement action for the long-term technical assistance, training and commodities. The short-term team will report to the Minister of Works and Communications or his designee.

Because the financial situation at SR is critical and immediate cash flow modifications are required, consideration has been given to providing an "advance party" of the short-term TA team to assist SR during the period before November 1988, the target date for short-term technical assistance to start. A momentum has been established by MOWC and they expressed interest in USAID providing such advance short-term assistance.

2. Long-Term Technical Assistance

Railway Operations Management (approximately 224 person-months). Upon development and approval of the action plan mentioned above, the services of a railway operations and management firm will be provided through competitive procurement for a total of 224 person-months. This may include short-term technical assistance to support the services of the team. The larger firm may wish to sub-contract parts of these technical services to a smaller firm. The technical assistance proposed will consist of a team of six management and financial experts as follows:

a. Chief Executive Officer. The services to be provided are those of Chief Executive Officer. Four years of long-term services of a General Railway Management Specialist will be provided to SR. The expert will serve in the position of Acting Chief Executive Officer during the first two years and until such time as his counterpart is prepared to assume full operational responsibilities, and thereafter, as an advisor to the Chief Executive Officer. The expert will work to improve the overall management performance of SR by developing and implementing a corporate strategy and business plans necessary to raise performance and efficiency while enhancing controls and viability.

b. Financial Director. Four years of long-term services of a railway financial management expert will be provided to the Financial Department. The expert will serve as the Financial Director while a Swaziland candidate is studying in the U.S. and until such time as his counterpart is prepared to assume full operational responsibilities. The expert will serve in an advisory capacity thereafter. The expert will work to improve quality, range and availability of financial information to government and railway management by developing, expanding and defining systems and procedures in the finance department.

c. Commercial/Marketing Advisor. Three years of long-term services of a Railway Commercial and Marketing Advisor will be provided. Working closely with the Swazi national counterpart, the Advisor will work towards expanding the range and quality of products and services available to increase SR's share of the transport market through the implementation of a more aggressive commercial and marketing strategy to improve SR's overall commercial position.

d. Operations Advisor. Two years of long-term services of an Operations Advisor will be provided to SR. The advisor will work with his Swazi national counterpart to improve the level of resource utilization so that the production of transport capacity is both cost-effective and sufficient to meet demand.

e. Systems Advisor. Two years of long-term services of a railway management systems advisor will be provided. In performing his functions, particular attention will be paid to the development of future motive power and rolling stock policy.

The expert will also assist in the specification, design and implementation of management information procedures and systems for use by corporate and functional management to improve the quality and range of information available.

f. Personnel/Training Advisor. One-and-a-half years of long-term services of a railway Training Expert will be provided during the first two years of project implementation. The expert working with a Swazi counterpart will aim to raise the level of management skills available at the Railway through the introduction and expansion of on- and off-the- job training programs, the introduction of evaluation procedures to contrcl and improve the quality, efficiency and production of senior management counterparts and training of potential successors.

3. Other Short-Term Technical Assistance

The long-term Technical Assistance will be supplemented by approximately 26 person-months of specialized short-term assistance in such areas as strategy planning, cost-based tariff development, motive-power strategy, and financial management.

4. Project Monitoring Assistance

The technical assistance budget also includes a local hire Administrative Assistant for the team and a PSC Project Manager to be located at USAID/Swaziland. The Administrative Assistant will be hired by the long term technical assistance team. The PSC Project Manager will be recruited locally through an AID direct contract (PSC). Both will serve for the full five-year life of the project.

5. Input to Technical Assistance Element:

Approximately $5,479,736 of Project funds will be used to secure the technical assistance services indicated.

Outputs for Technical Assistance Element:

The following outputs are expected from the technical assistance element:

- Financial Capital Structure analyzed and recommended changes provided to capitalize SR.

- Loan portfolio analyzed and loans restructured.

- SATS agreement examined and recommended changes necessary to strengthen the agreement and safeguard SR's rights provided.

- A corporate strategy and ongoing planning system established and being used as basis for running SR.

- A management information system in place providing SR with comprehensive data on operating variable cost and revenue.

- A revised tariff structure which has a commercial and cost-based orientation developed and in place.

- A market plan and budget developed and in place.

- An improved financial management plan and system in place providing essential accounting and budgeting information on a regular basis.

- A staff development program developed and in place.

- An improved management team and management system together providing improved overall railway performance as measured by objective indicators.

B. Training Element

The objective of project training is to increase the effectiveness of SR senior management. During the first three months on the job, the training and personnel advisor will develop needs assessments and specific training plans for senior SR personnel. During his/her tenure of 18 months over the life of the project, the personnel advisor will monitor progress in meeting training objectives. The training plan will consist of three elements:

Long-term Training

1. Two Masters degrees will be financed, one for the person who will become the new Personnel Director and the other for the Director of Finance.

2. On-The-Job Training (OJT)

The core of the training plan for Swazi personnel will be OJT. Under the direction of the Personnel and Training Advisor and with the assistance of the other technical assistance personnel and their Swazi counterparts, specific OJT plans will be developed for each senior Swazi manager with identified objectives, activities and performance criteria. This will comprise approximately 320 person-months of training.

3. Short Courses and Work Attachments

The training plans will rely heavily on regional courses in railway management and technical training. Many of which are presently being developed and supported by other donors. In-service short courses in finance, organization specific management skills, and attachments to railways that could provide pertinent experiences (such as NRZ and Kenya Railways), will be funded by the project. A total of 60 person-months of short-term training and work attachments will be provided.

Inputs to Element:

AID contribution ($600,000)

- Technical assistance -- Personnel and Training Advisor. 18 person-months (budgeted under TA);
- OJT -- 320 person-months of OJT (no cost, cost part of TA);
- Short Courses and Work Attachments -- 60 person-months ($500,000);
- Long-Term Training -- 48 person-months for two masters Degrees ($100,000).

Swaziland Railways Contribution ($965,000):

- Salaries and benefits for the managers while in training ($960,000);
- Housing and office space for Personnel and Training Advisor (budgeted with TA);
- Office supplies ($5,000).

Outputs from Training Element:

- At least 15 SR senior managers from the seven operating divisions and the designated Swazi CEO will receive 320 person-months of OJT in basic management functions, use of management information systems, use of essential management-related economic concepts, and use of technically related management systems;
- At least 20 senior- and mid-level (in the area of finance) managers will receive approximately 60 person-months of in-service courses, short courses and work attachments;

48 person-months of long-term training received (two Masters degrees).

C. Commodities Element

The Swaziland component of the Project will fund a computer system for the SR; provide household equipment and furniture not provided by SR, and 3 project vehicles.

Inputs: $160,000

Outputs

An improved financial data management system in place providing essential accounting and budgetary information on a regular basis.

III. FINANCIAL PLAN

The Swaziland Railways component of this project is estimated at $8,629,000 over a five year period; AID will contribute $7,042,000, and the Government of Swaziland will contribute $1,588,000 representing 18 percent of this component of the Project. Uses of AID and GOS financing are summarized in Table III.1

TABLE III.1 SOURCES AND USES OF FUNDS

(in US$)

	USAID		GOVERNMENT		TOTAL
	FX	LC	FX	LC	
I. Technical Assistance	5,480,000			628,000	6,107,000
II. Training	600,000			960,000	1,560,000
III. Commodities	100,000	60,000			160,000
IV. Evaluation/Audit	150,000				150,000
V. Contingency (5%)	320,000				320,000
VI. Inflation (5%)	332,000				332,000
GRAND TOTAL	6,982,000	60,000		1,588,000	8,629,000

Approximate monthly budget for the initial and subsequent short-term technical assistance is presented in Table 2 below.

TABLE III.2 Technical Assistance Budget - Table 2
Short-term Advisor Costs

	Monthly
Salary	6,000
Fringe Benefits	1,800
Per Diem	3,000
Air Fare	4,000
Miscellaneous	200
Overhead	6,000
Total	21,000

TABLE III.3

AID EXPENDITURE BY YEAR

ELEMENTS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	TOTAL
TECHNICAL ASSISTANCE						
LT Advisors (1)	849,591	1,615,455	1,142,716	657,701	280,772	4,546,236
ST Advisors (2)	189,000	189,000	189,000	63,000		630,000
Admin Asst	7,500	16,000	18,000	20,000	12,000	73,500
Personal Svcs Contract	30,000	50,000	55,000	60,000	35,000	230,000
TRAINING						
Long-Term		50,000	50,000			100,000
Short-Term		150,000	200,000	150,000		500,000
COMMODITIES						
Computer			100,000			100,000
Vehicles	60,000					60,000
EVALUATION/AUDIT			40,000		110,000	150,000
SUB-TOTAL	1,136,091	2,070,455	1,794,716	950,701	437,772	6,389,736
CONTINGENCY (5%)	56,805	103,523	89,736	47,535	21,889	319,487
INFLATION (5%)	56,805	103,523	94,223	52,407	25,339	332,296
TOTAL	1,249,700	2,277,500	1,978,675	1,050,644	485,000	7,041,519

NOTES:

(1) See Cost Computations, Annex 7.

(2) 9 Person-Months Year 1; 9 PM Year 2; 9 PM Year 3; 3PM Year 4.

TABLE III.4 COST COMPUTATIONS FOR HOST COUNTRY AND LONG-TERM TA

GOVERNMENT OF SWAZILAND HOST COUNTRY CONTRIBUTION

ELEMENTS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	TOTAL
Advisor Support						
Housing*	36,000	72,000	54,000	30,000	12,000	204,000
Utilities	6,000	12,000	13,200	6,600	2,200	40,000
Maintenance-Veh/Housing	6,000	12,000	13,200	6,600	2,200	40,000
Furnishings	60,000	2,000	2,000	1,000		65,000
Secretarial Support*	27,000	54,000	64,800	32,400	10,800	178,200
Counterpart Staff						
Salaries/Benefits*	150,000	300,000	150,000	100,000	50,000	750,000
Other Staff Trained*		50,000	100,000	50,000	10,000	210,000
Office Space*	7,500	15,000	18,000	15,000	10,000	65,500
Supplies, Off Equip, etc	5,000	10,000	10,000	5,000	5,000	35,000
TOTAL	297,500	527,000	425,200	246,600	102,200	1,587,700

* Indicates in-kind

TABLE III.5

TECHNICAL ASSISTANCE BUDGET
LONG-TERM ADVISOR COSTS

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	TOTAL
Salary	72,000	74,000	76,000	78,000	300,000
Fringe Benefits	21,600	22,200	22,800	23,400	90,000
Housing					
Security	6,000	7,000	8,000	9,000	30,000
Radios	1,000				1,000
Maintenance/Repairs	1,500	2,000	2,000	2,000	7,500
Equipment	7,000				7,000
Travel					
Assignment/Return	8,000			8,000	16,000
Per Diem	800			800	1,600
Home Leave/R&R	14,000	14,000	14,000		42,000
HHE	15,000			15,000	30,000
UAB	3,600	7,200		3,600	14,400
Excess Baggage	1,000	2,000		1,500	4,500
POV	4,000			6,000	10,000
Education Allowance	26,000	26,000	26,000	26,000	104,000
Medical/Emergency Travel	1,000	1,000	1,000	1,000	4,000
Overhead	72,000	74,000	76,000	78,000	300,000
G & A	17,815	16,058	15,806	17,661	67,340
Fee	10,893	9,818	9,664	10,798	41,174
TOTAL	283,208	255,276	251,270	280,759	1,070,514

NOTES: Estimated costs assume that an Advisor receives maximum salary and has spouse and two children. Estimates include overhead, G&A and Fee.

Assumptions:

1. Sec Salary avg $9000 and 20% inc each year.
2. Counterpart senior staff salary/benefit average $50,000.
3. AID provided housing avgs $12000 per year util. $2000/yr.
4. SR will provide POL and housing maintenance.
5. Rented office space cost is equivalent to housing rental.
6. SR will provide all office supplies, equipment, and maintenance.

Approximately 90% of the estimated Government contribution is composed of in kind contributions. Experience to date, with AID and other donors, indicates that the Government has performed reliably on providing the required contribution.

IV. PROJECT ANALYSES

4.1 Summary of Institutional Analysis

Organizational Description

Swaziland Railway (SR) was set up in 1962 when Swaziland was declared a Kingdom separate from South Africa. The first track was laid in 1964 to transport iron ore from Swaziland (Western Highlands) to Maputo. In 1978, an extension was laid to link Swaziland to the South African ports of Richards Bay and Durban. The latest extension, called the Northern Link, was finished in 1986. The Northern Link is used primarily for transit traffic from the Eastern Transvaal to Richards Bay and Durban. Several of these lines are no longer being used. The track between Kadake and Matsapha is no longer operational due to the closure of the iron ore mine while the link to Maputo is frequently non-operational due to the security problems existing in Mozambique.

Swaziland Railway carries transit traffic from Southern Africa, Zimbabwe, and Zambia. It owns all the infrastructure noted above plus 650 wagons and operates a small maintenance facility. Swaziland Railway does not own any locomotive power, but leases it from South Africa at the rate of $600 U.S. per locomotive per day, including maintenance.

The Swaziland Railway Act of April 6, 1962 established Swaziland Railway as a semi-automonous parastatal under the Ministry of Works and Communications "to secure and promote the provision of an efficient and adequate system of public transport of goods and passengers by rail, with due regard to economy and safety of operation..."

Under the Act, SR's powers included ancillary activities including: transport by road, air and inland waterways, goods storage, hotels and other amenities, and land management.

The Act clearly delineated the memberships of the Board of Directors and specified their functions in the areas of railway policy, establishment of rates and fare structure, raisirg new capital, construction and major capital expenditure. Executive control in delegated by the Board to the Chief Executive Officer, who is empowered in matters related to: staff hiring, firing and management; operational budgeting and control of expenses; implementation of operations; maintenance, construction, and safety. The Board consists of five non-government members plus the Principal Secretaries of the Ministry of Finance and the Ministry of Works and Communications.

As shown in SR's Organizational Chart (Table IV.2), the CEO is supported by an Assistant CEO and seven Department Heads:

1. Director of Police
2. Director of Finance
3. Director of Operations
4. Director of Commercial
5. Director of Administration & Personnel
6. Chief Mechanical Engineer
7. Chief Civil Engineer

The Assistant CEO and the department head positions are each filled by a Swaziland national. The staffing structure by employee grade is shown in Table 1.

Department of Railway Police

The Director of Swaziland Railway Police is responsible for overall security on the railway's property. The police force was established in 1978 to protect both SR's own assets and the goods entrusted to SR for conveyance. In addition, the railway police assist in maintaining law and order on railway property.

At the end of Fiscal Year 1986, the Railway Police Unit consisted of 67 persons. During the year, there were no derailments, no collisions, and no fatalities in train or highway accidents. A total of 85 criminal cases were brought during the year. The most prevalent accident type involved cattle on the rail line.

Finance Department

Within the Finance Department the staff is 72 (39 in Finance and 33 in stores). However, many posts, particularly those for senior positions are not filled. The current staff complement is 20 financial and 30 in stores. The Director of Finance stated that the agreed staff was designed to meet the future demand. However, from impressions gained during the PP design, there does not appear to be any need to increase staff beyond current levels. Indeed, with rationalization, it may be possible to reduce these numbers.

Operations Department

The operations Department in SR is responsible for the following functions :

i) Train planning and scheduling;

ii) Yard and terminal operation; and

iii) Traffic control.

The organization is geographically divided into two management areas based at the main depots. An Assistant Manager is in charge of each, the largest being at Matsapha. Main Line and terminal operations, such as shunting, are managed locally, whereas train planning, scheduling etc. is managed centrally.

The present Director of Operations has 18 years railway experience, but like other Swazi managers, little in senior management. One of the main problems is that the Director is constantly involved in relatively minor day to day decision making because his scope for delegating is limited. The main effect of this situation is that important head office functions such as planning, control and development are not accomplished.

Presently there is very little management information, especially on utilization and performance. The TA advisor should be prepared to accept the relatively small scale of SR operations and, if necessary modify preconceptions accordingly. Nevertheless, the scope for more effectively utilizing the operational resources which are, in the main, leased from South Africa, remains very great.

Commercial Department

The Commercial Department has approximately 30 employees and is responsible for the following activities:

a) Revenue collection;

b) Rate setting and contract negotiation; and

c) Marketing and business development.

The organizational structure reflects these activities with over 60% of the personnel assigned to revenue collection. Marketing and business development is a very new section in the Commercial Department which is presently being resourced.

The main strength of the department is its Director and in consequence, its willingness to make changes. Because of this, TA in an advisory capacity would be most appropriate, although it will be necessary for the individual to have authority when the director is absent. The weaknesses of the division are typical of SR: rudimentary revenue collection and control systems, slack budgeting, over simple traffic costing and under resourced business development.

TABLE IV.1

SWAZILAND RAILWAY

The break down of the employees of this organisation according to their Rates of pay in each Department or Section and total number of employees are as follows:-

RATE	1	2	3	4	5	6	7	8	9	10	11	12	13	
PERWAY	159	46	39	26	12	8	4		1					= 249
WORKS	113	19	10	15	16	21	3	1	1		1			= 200
E & S	20	18	7	7	10	7			2					= 71
TRACTION	23	22	25	38	10	39	3	1	1					= 162
C & W	13	5	13	4	15	14	3	1	1					= 69
AUTOMOTIVE	5	9	7	1	12	3		3	1					= 41
OPERATING	12	7	29	54	14	3	3	2	1		1			= 126
COMMERCIAL	18	3	1	7	10	8	3	2		1	1			= 54
SECURITY	2	14	35	8	3	2	1	1			1			= 67
PERSONNEL	8	1	4	8	6	4	1		2					= 34
HQS	3	2	3	7	3	9	5	1	2	1	2	1	1	= 40
STORES	2	2	5	6	2	2	1	1	1					= 22
MEDICAL	2	2	2	1		3	2							= 12
TRAINING	3		2				1	1	1	1				= 9
	383	150	182	182	113	123	30	14	14	3	6	1	1	= 1 202

The Personnel Division

The division consists of 34 employees, headed by an experienced Personnel Director. It is responsible for the hiring, promotion, and training of Swazi Railway's 1202 employees. It maintains personnel files on all employees from initial hiring through retirement. The Railway School, Club, and clinic also fall within the Personnel Section, as do matters related to discipline and grievances. Cursory samplings indicate personnel files are accurate and up-to-date, with particular emphasis on questions of rank, retirement eligibility and grievances. However, their is little mid- and long-term manpower planning, and revisions of SR's job function descriptions and, promotion criteria and salary scale are long overdue. Reports (such as manpower needs, projections, etc) are not done with sufficient frequency as the data collection and reporting functions have not been computerized.

Another service weakness is the lack of coordination between the personnel and operating divisions in the areas of training and personnel management.

The Mechanical Engineering Department is headed by the Chief Mechanical Engineer and consists of three sections consisting of a staff of 284 people which is divided as follows:

Automotive	45
Carriage and Wagon	66
Loco/traction	173

The automotive section is responsible for the maintenance of 103 vehicles, both heavy and light, and has the capability of all maintenance except for precision crankshaft and countershaft grinding and cylinder bearing. All precision work and heavy engine repair is handled by local automotive dealers and machine shops.

The carriage and wagon section is responsible for the running maintenance of 710 wagons. This section has the capacity for body overhaul, vacuum brake refurbishment and minor superstructure and frame repairs. Major wagon body repair is limited by current shop machine capacities and availability. Any wagon requiring major frame or structure work is sidelined indefinitely.

The locomotive/traction section is responsible for minor maintenance of 8 steam locomotives, type 15AR and lubricant maintenance of 3 class 34 General Motors Diesel Electric locomotives. All steam and diesel locomotives are leased from South Africa Transport System (SATS). The steam workshop is located in Sidvokodvo. This facility is approximately 24 years old and has a modicum of machine tools including a medium lathe, shaper, drill press, power hacksaw, press and portable 50-ton jacks. Housed at the steam workshop is an emergency breakdown car equipped with jacks, re-rail gear, small tools, a power generator and lights. Since all steam locomotives are returned to SATS every 30 days for periodic maintenance, only replenishment of fuel, water and lubricants is performed at the steam workshop.

The diesel workshop, located at Mpaka, is intended to be the facility for diesel maintenance in future under SR's long-term program of dieselization. At present, all diesel locomotives are leased and exchanged with SATS every 30 days; consequently there is need only for minor lubrication at Mpaka.

<u>The Civil Engineering Department</u> is headed by the Chief Civil Engineer and consists of three sections consisting of a staff of 631 people which is divided as follows:

Permanent way	332
Works	227
Electrotechnicial	72

The permanent way section is responsible for track maintenance, railroad bridge repair and maintenance, access road maintenance located inside railway boundaries, new railway construction and drainage. The works section is responsible for all building construction and maintenance, fire prevention, water supplies and sewage treatment. The electrotechnicial section is responsible for all electrical maintenance, telecommunications and signaling.

<u>Organizational Assessment</u>

Given its very young age, security dislocation and changing traffic requirements, Swaziland Railways deserves a significant amount of credit merely for being an on-going and operational organization. Nevertheless, recent reviews of SR have agreed that SR faces several institutional problems, which are discussed in turn below. They include:

a. A lack of trained management cadre;

b. A lack of corporate objectives and strategic plans;

c. Inadequate information and information systems;

d. Inadequate financial management;

e. Broad managerial weaknesses; and

f. A poor financial and economic position.

1. Trained Management and Personnel

The incumbent Chief Executive Officer (CEO), who is responsible for running the railroad, is the only non-Swazi currently in a senior management position. He is scheduled to retire shortly. The Senior Swazi executives (i.e., the seven division chiefs and assistant CEO) generally have been with the organization from five to ten years each. However, most have only held their present position for two or three years.

Consequently, their range of management experience is limited. The three Division Chiefs with university degrees joined SR within the last three years directly from university. Two senior executives, the Director and Assistant Director of Personnel are scheduled to retire in four years.

The work force is reported to be generally well disciplined and productive. However, no productivity study has ever been undertaken and cases of drunkeness and lack of cooperation have been noted. Generally workers remain with SR throughout their working life.

Promotion is gradual but steady through the semi-skilled and artisan ranks. Literacy is required for promotion beyond Grade III and this has been a barrier for a sizeable minority of workers. The pay/benefit package is good, better than the public sector, below the private sector, and about mid-way among other parastatal organizations. Retirement benefits are no longer as generous as in the past because workers are now required to withdraw their benefits every five years, and this sum is taxed.

The vacancy rate is virtually nil. However, it is difficult to assess how many incumbents are underqualified since the establishment of job description and selection criteria has been haphazard. SATS conducted a review and revision of the salary grading structure in 1978. This should be revised and expanded to include job descriptions, and promotion and selection criteria. Morale and productivity have been adversely affected by the common perception that political influence too often affects promotion and selection procedures. There are mechanisms for a yearly bonus and salary advances for effective workers. However, these are now given as a matter of course and so are no longer motivating devices.

2. Strategy and Planning

Planning tends to be short-term and often *ad hoc*. There is no evidence of long-term corporate planning. There is no statement of corporate objectives and strategy. There is no long-range manpower plan. There is no up-to-date job description for each position, promotion criteria, or assessment of worker productivity. It is not clear whether staff size is at its proper level. However, the personnel division does not have accurate knowledge of their immediate objectives and needs.

3. Information Systems

Systems are not in place for regular and frequent reporting: for example, budgeting, utilization, inventory, etc. are done on a yearly basis rather than quarterly or monthly. Consequently, coordination between divisions is not as strong as it should be. In this regard, the computer system is under-utilized. The system, which consists of three Olivetti M24 personal computers, is only used for tracking leave, payroll claims, and a few other limited functions. It is not used for word processing or generating the bulk of reports produced. Only four clerks know how to operate computers. This lack of reporting is further complicated by poor communications between such key actors as the CEO and the Director of Finance.

4. Finance and Accounting

Finance and Accounting is a key problem area affecting the entire management of SR. This is described in detail in Annex 5. The most critical weaknesses in the Finance Division are in the areas of financial planning/decision making, accounting, costing, cash management, budgeting, and auditing.

5. Other Managerial Weaknesses

These include communications and relations. The relationship between SR and its supervisory Ministry of Works and Communications is polite but not trusting and cooperative. Relationships between the CEO and his assistant and the CEO and his Director of Finance are poor. As a result, too many people report directly to the CEO and he frequently is refused important information.

Organizational Integrity. The perception is widespread that Swaziland Railways is not given the independence to function on a cost-effective, organizationally sound basis. In operational matters such as hiring and promotion, it is perceived that there is outside interference to the detriment of the railway's efficiency and morale.

Safety. Not only is there no senior executive responsible for railway safety, but neither is it the responsibility of any of the divisions of SR. It is recommended that the Director for Police (Security) be given this responsibility and directly report to the CEO on all safety matters.

6. Financial/Economic Position

SR is in a very serious financial situation. It has consistently turned an operating deficit and its outstanding loans currently exceed E100 million. As of March 31, 1987 the debt to equity ratio was 408%. A detailed discussion of this problem is found in the Financial Analysis (Annex 3).

The proposed project seeks to address each of the institutional problems described above. Improvements in each of those areas are prerequisites to project success and to viability of Swaziland Railways.

A recent review by Deloitte, Haskins, & Sells recommended that, as a prerequisite to any technical assistance being granted to SR, a corporate strategy review be undertaken to address the overall objectives of SR as well as the steps necessary to be taken to meet these objectives. In addition, it recommended a financial viability or strategy review be undertaken to determine what changes would be necessary in order for SR to become financially and economically viable. Such a study would examine the debt and capital structure of SR, the tariff agreements with SATS and other regional countries, and make recommendations on what steps SR would need to undertake in the short run to ensure its viability and its ability to absorb additional technical assistance.

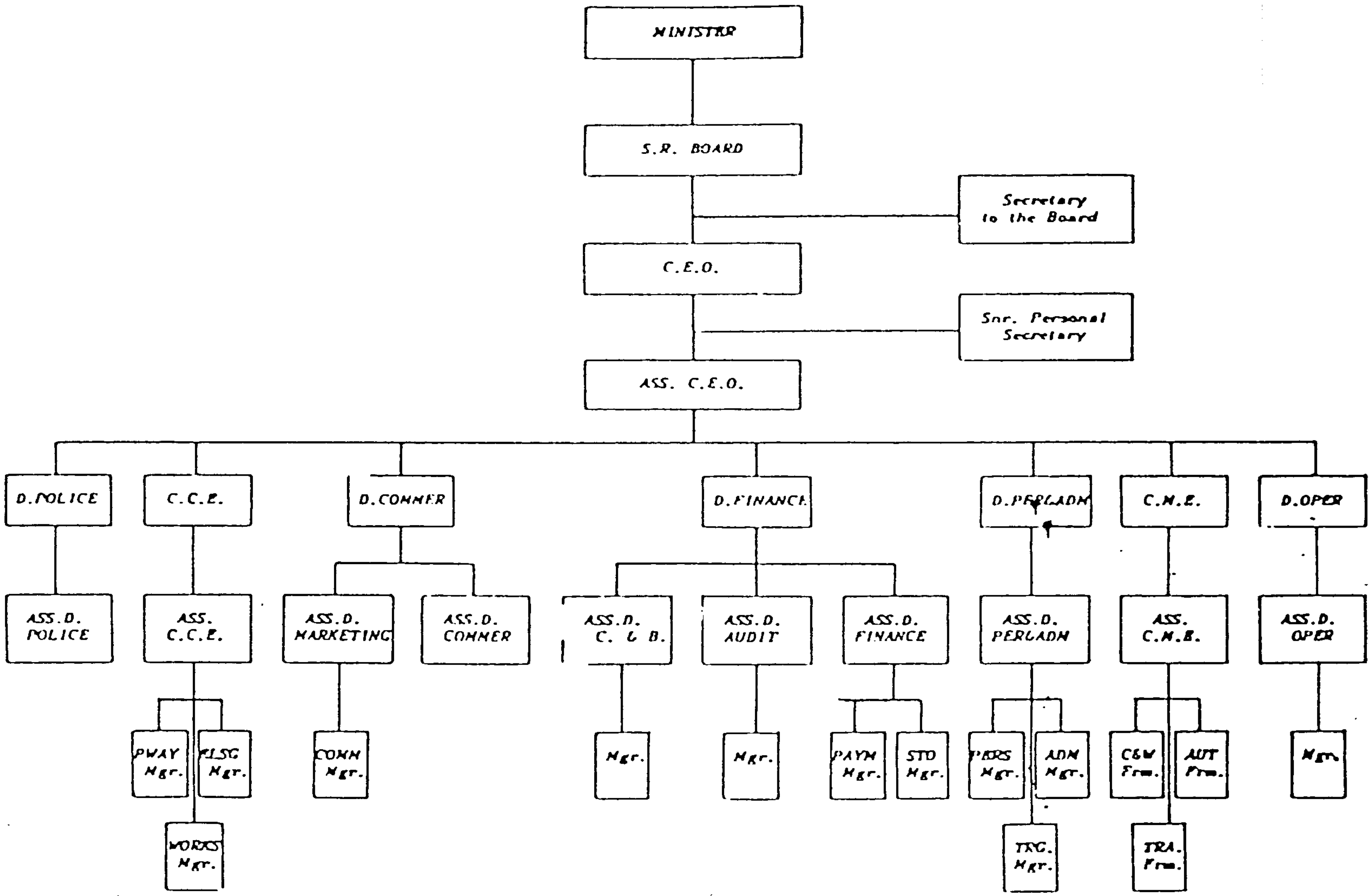
Conclusion

USAID believes that SR needs to urgently review its long- and short-range goals, develop a corporate strategy and determine what changes are necessary, financially and managerially, in order for it to continue as an institution. This project will require that progress be made along these lines prior to the provision of long-term technical assistance.

A summary of operational constraints facing SR is contained in Annex 3.

TABLE IV.2

SWAZILAND RAILWAY ORGANIZATIONAL CHART



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4.2 Summary of Training Analysis

Organization and Personnel

SR currently has approximately 1,200 employees headed by the Chief Executive Officer who is assisted by seven division chiefs.

The bulk of the employees range in skills from semi-skilled labor to first grade artisans. There are approximately 70 executives (grade 7 and above) of which 11 may be considered senior executives (grade 10 and above -- division chiefs and assistant division chiefs).

SR has relied primarily on OJT for its workforce. Supplemented with extensive short courses at the Swazi Railroad Training Center at Sikvokodvo and the Swazi College of Technology (SCOT). Since 1981 the EEC, through its Regional Railway Training Scheme, has committed over ECU 4 million for training lower- and mid- level Swazi railwaymen at the Sidvokodvo Training Center, in other Swazi institutions locally and within the region.

The Sidvokodvo Training Center was constructed in 1976. It is located approximately 30 kilometers west of Manzini on the Phuzumboya line, and shares the same facilities as the steam locomotive workshop. It was expanded in 1983 to three classrooms and boarding facilities for up to 16 students at any one time. Between January 1983 and March 1986 approximately 914 employees have been trained at Sidvokodvo comprising approximately 4400 person-weeks of training.

The primary training need for Swazi Rail is to make upper-level Swazi management (grade 10 and above) more efficient and knowledgeable about modern concepts of running a railroad, i.e., development of corporate objectives and strategy, cost factoring, budgeting, as well as efficient operations.

The Swazis who hold the posts of division directors and assistant directors appear to be competent and energetic. However, many are recent appointees. Some had no railroad experience prior to their appointment. There is room for skill development in overall railroad management as well as within each division. Some of the specific training and development needs include the following:

The Board of Directors: The development of corporate objectives and strategy, development of costing and planning procedures, management information systems and organizational discipline begins with the Board of Directors. The Board must, with the assistance of SR top executive leadership, develop and ennunciate corporate objectives and strategy. Each Board member must also understand -- and act accordingly -- in regard to the Board's proper policy setting and advisory role.

The Chief Executive Officer: A Swazi must be identified and trained for this position. It is preferable to name someone who knows railroads in a responsible capacity (e.g., one of the division directors, assistant directors, or assistant CEO). A university degree would be a marginal advantage. The CEO would have to acquire knowledge of railroad management systems with particular bias toward operations, finance and organization leadership/management.

Finance Division: The most serious operational problems exist in the area of finance. Various financial systems must be developed or strengthened. These include cash management, budgeting and forecasting, general ledger accounting, debt and revenue monitoring. (See Annex 4). The Director of Finance must understand these systems to the extent of knowing when faults arise, why, and taking corrective action. The senior staff in the Finance Division must be able to implement these systems on a day-to-day basis.

Commercial Division: The particular weakness here is in costing and tariff setting, lack of regular information and general railroad management. Other specific skills needing upgrading include marketing and logistics management (pricing of product and services), sales management, customer relations, advertising and computer usage.

Training Plan

The training strategy for SR executives is primarily OJT training under the direction of the TA team supplemented by appropriate short courses (in-service and outside) and short attachments to appropriate railways (e.g., Kenya Rail, NRZ). The goal of the training plan is to make the Swazi senior managers more effective and more knowledgeable in railroad management operations as these relate to their responsibilities.

The skills they will acquire will include, but not be limited to the following:

- Basic Management functions e.g., planning, organizing, motivating, evaluating, etc.

- Ability to use management information systems, e.g., strategic planning information, management control information, and operational information.

- Ability to use essential management-related economic concepts, e.g., cost-based tariff setting, demand, supply and cost analysis; variable, incremental and marginal cost concepts and forecasting.

- Ability to use various technically related management systems, such as inventory, utilization forecasting, costing, job assessment, manpower planning, safety systems, marketing.

The elements of the training plan consist of the following:

A. Needs Assessment and Training Plan

During the first six months of his/her incumbency the Chief of Party with the assistance of a Manpower Personnel and Training Advisor and other long-term advisors will develop criteria and a plan to assess the pool of management to identify suitable counterparts. The plan will include job rotation, performance, observation and evaluation and skills assessment. The Chief of Party and the Personnel and Training Advisor will also develop specific training plans for senior Swazi executives including timetables and benchmarks for progress. The training plan will consist of long-term, short-term and on-the-job training as well as attachments to other railroads. The following is the current estimate of training needed but subject to revision as a result of the needs assessment.

B. Long Term Training

1 M.A. program in Finance
1 M.A. program in Personnel Management and Administration

C. On-The-Job Training

Informal OJT through contact with the Technical Assistance team, as well as more structured training plans involving setting of objectives, and quarterly progress reviews.

Approximately 320 person-months of formal OJT in areas of systems management, senior management, personnel management, safety and financial and accounting systems. This will include one-on-one training and in-house short courses and seminars. OJT training plans will consist of specific objectives and periodic assignments.

D. Short-Courses and Work Attachments

Approximately 60 person-months or short-courses and attachments (e.g., attachments to Kenya and Zimbabwe rail systems, courses in railway management performance improvement, pricing and costing of transport services, transport/railroad policy issues, etc.). The need for short course and particularly railroad attachments for middle and senior executives is critical. It is anticipated that the project emphasis will be primarily attachments to railways in the region.

The Roles of the Chief of Party and the Personnel and Training Advisor

These two individuals will be the key to an effective training and staff development program. The chief of party and acting CEO will provide the leadership, guidance and OJT training through interaction with the Swazi staff. The personnel and training advisor must insure that manpower and training systems are put in place -- i.e., needs assessment, training plans, benchmarks, appropriate activities. Both individuals will have to work closely together, and obviously both will need excellent interpersonal and leadership skills.

4.3 Summary of Financial Analysis

Swaziland Railways has extended its network and diversified its business from a single-route, single-commodity dominated railway to its present regional network and range of services. The transition has been expensive and the company is now very heavily in debt as a result of the capital investments made. The physical changes that have taken place during the last 5 years, the shortfall of trained senior managers and the lack of appropriate systems and procedures have combined to make this project necessary. The main presenting problem is financial viability and the longer term need to train management and put in place systems and controls that will sustain SR in the years to come. To this end, AID concentrated very much on the financial problems of SR and possible solutions in the project design. This was done by using Deloitte, Haskins and Sells to review accounting systems and procedures in SR and the PP team to examine future viability.

The analysis concentrated on the immediate issues of loan restructuring and tariff increases on the northern link and in the medium- and long-term of restraining expenditure through improved skills, systems and procedures and increasing revenue through more aggressive marketing and tariff restructuring. A description of SR's financial problems, analysis, possible solutions and forecasts is contained in Annex 4.

The effects of providing SR with a top management team, and implementing the program successfully should present SR with the best possible opportunities for recovery. A combination of debt rescheduling, selected tariff increases, expenditure restraint and market expansion will ensure SR's future viability. From the analysis it is anticipated that the operating ratio of SR could be improved from its 1987 level of 1.35 to 0.70 by the end of the project and that by rescheduling loans and increasing revenue the debt/equity position would be improved from 408% to 150% by 1993.

4.4 Social Considerations

The direct participants and beneficiaries of this project will be the senior management and other employees of SR who receive OJT and formal training. SR is a major employer and currently is considered to be a desirable place to work from the standpoint of salary, benefits and working conditions. Nevertheless SR's serious financial and managerial problems and a declining reputation have adversely affected productivity and morale. This project will strengthen SR's overall Personal and Training Department and facilitate a more productive environment.

SR itself will benefit from a vastly improved financial situation, a corporate strategy and strengthened financial, commercial personnel and operations department. By assuming a more businesslike character SR will become a more legitimate participant in the SADCC regional transport system and more attractive to other donors. SR will also be better positioned to meet increased traffic demands with the reopening of the Goba line.

Swaziland, as a whole, will benefit by having trained and experienced Swazis in all senior management positions and by SR operating on a more commercial basis, independent of Government's financial support.

4.5 Economic Considerations

Financial viability is one important criterion which does not necessarily reflect economic benefit to Swaziland of retaining a railway. It is known that SR is in a precarious financial state. This is because of the principal and interest due on large investments in infrastructure that were made between 1978 and 1985, and in addition to the very large foreign currency conversion losses which have come from hard-currency denominated loans which were not-hedged by SR. However, finance charges arising from these investments will need to be met whether or not SR continues in business, as the Government is a guarantor. In the short run, the investment made is a sunk cost. Providing SR operations can cover marginal costs and make a contribution to fixed costs, it is worth retaining. In the longer term, provided the long run marginal cost (which includes provision for asset replacement) is lower than alternative forms of transport, then again SR will be worth retaining. The main problem is one of perception, between the measurable criteria of financial viability and the more nebulous concept of net economic benefit. One of the main tasks of the proposed Technical Assist nce through the medium of the corporate plan is to improve understanding and provide evidence that SR is of economic importance even though that may not be so obvious financially.

The project, by improving the financial viability of SR will also increase net economic benefit by firstly lowering costs through greater efficiency, secondly increasing net foreign currency earnings from transit traffic, and thirdly stimulating overseas trade by lowering total transport costs.

Through greater efficiency, cost reductions can be achieved by imposing tighter controls, procedures and introducing better systems and information. Cost reductions are to be implemented by restraining expenditure to present levels which approximates to a unit cost of 5c/net ton km. By comparison heavy road haulages costs are generally 15-30c/net ton km and are typically 2 to 4 times the cost of rail. The problem in Swaziland is that distances are relatively short and the high terminal costs associated with rail transport can only be recovered over short distances. However, taking the most conservative position, and assuming the difference in cost between road and rail is 10c/net ton km the economic benefit of diverting the traffic projected from road to rail would be about E12 million in 1990 rising to E24 million in 2000. It is also important to note that generally South African truckers are used to convey imports to Swaziland. Recapturing some of that traffic by Swaziland Railways would reduce dependence for transport on the RSA.

Swaziland Railway's traffic forecasts are reproduced in Table IV.3 from the SATCC demand forecast (February, 1988).

TABLE IV.3 Swaziland Railway Traffic Forecasts

(Tons, 000s)

Overseas Traffic

	VIA MAPUTO			VIA R.S.A.			T O T A L		
YEAR	I	E	T	I	E	T	I	E	T
1990	25	566	591	35	294	329	60	860	920
1995	30	807	837	40	419	459	70	1226	1296
2000	35	1154	1189	45	599	644	80	1753	1833

	Transit	Regional	Domestic	T O T A L
1986	1481	390	3	1874
1990	1635	474	4	2113
1995	1850	605	5	2460
2000	2092	772	6	2870
Growth	2.5%	5%	5%	

I = Imports, E = Exports T = Total

Revenue from transit traffic is potentially an important source of foreign exchange for Swaziland (as it is to many other SADCC countries). Presently it is not certain whether the revenue generated by the Northern link actually covers its costs. The TA proposed will ensure that all tariffs are sufficient to cover long run variable costs and, based on what the market can bear, make a contribution to SR's fixed costs. In the case of South African transit traffic, foreign currency earnings will be expected to increase from E39 million in 1990 to 50 million in 2000. For this to occur, clarification of the SR-SATS Memorandum of Understanding on the Northern Link is vital. (A copy of the Memorandum of Understanding is held in Annex 8).

Overseas trade is burdened by the high transport cost of using Durban instead of Maputo. The average additional cost of diverting to Durban is E45/ton. Based on increases of overseas trade, the savings in total transport cost of using rail to Maputo via the Goba Line would range from E27 million in 1990 to E53 million in 2000. The timing of this benefit is dependent on completion of Italian-funded rehabilitation on the Mozambican side by 1990 and of improvements on the Swaziland side which will probably be financed by the government since only soft loan finance is being offered by the Italians.

The total economic benefits of retaining and improving the performance of SR range from E78 million in 1990 to E127 million in 2000. Although this cannot be entirely credited to the project itself, it is certain that without the improvements that the project will bring about, the chances of achieving the benefit levels estimated would be very much reduced.

4.6 Technical Analysis

A. Introduction

SR consists of 421kms of single track rail with the exception of passing bays and at stations. However, 50kms, Kadake - Natsapha rail link has been inoperative since 1980 due to the closure of the Kadake mine. The 1,067mm railway gauge is compatible with that of the other countries in Southern Africa.

B. Track

The original SR iron ore line, single track 1,067mm gauge, 270km rail routes from the Kadake mine to Maputo via Matsapha, Sidvokodvo, Phuzumoya and Mapaka was built in 1962 to prescribed track and bridge standards of 16.5 ton axle load. This track consists of 40kg/m rails on 1,250 sleepers per km and 1,000 cubic meters/km of ballast. In 1978, this line was extended 93km South from Phozumoya to Lavumisa. This track was upgraded to 48kg/m rails on 1,400 sleepers per km and 1,200 cubic meters/km of ballast to a track and bridge standard of 18.5 ton axle load.

The newest rail line which was completed in 1986, consists of 110km (58km in Swaziland and 62km in RSA) and goes from Mapaka to Komatipoort. It was built to a track and bridge standard of 20-21 ton axle load. This track consists of 48kg/m rails on 1,540 sleepers per km and 1,400 cubic meters/km of ballast.

The ruling grade for SR is .8% - 1.24% except for the 20km Sidvokodvo - Matsapha section which consists of a 2% grade. Most of the SR track is well maintained except for the 40km Mapaka-Mlawula section which needs track, sleeper and ballast rework. Since this section is part of the Goba line which goes to Maputo, the Italians have offered to finance the repair of the 40km section providing a soft loan to SR. Since SR currently owes more than E100 million, it is not ready or able to take on any more debt. It can do the repairs of the track, sleepers and ballast with its own maintenance forces, however, it would need funding for materials. Track maintenance is manual (5 mobile gangs each of 16 men over 50km sections) equipped with mechanical aids.

C. Diesel Locomotives

The three diesel-electric locomotives, model GM 24-200 which are currently in SR's mainline fleet are leased from SATS. All periodic maintenance, 30 days and above is performed by SATS. All daily and weekly maintenance is performed by SR at their Mapaka running shed. The number of diesel locomotives leased from SATS has varied from 2 in 1986 and 1987 to 3 in 1988. The diesel locomotives have 18.85 ton axle load and cannot be used on the older line. Average availability factors, average trailing load, and average km per month usage are not available due to the relatively recent use of diesel-electric locomotives on SR.

D. Steam Locomotives

The eight steam locomotives (15AR class), which are currently in SR's fleet are leased from SATS. SR is responsible for: trip examination, on-the-run logged repairs and 21-days boiler washout. All other major repairs and intermediate overhaul schedules are performed by SATS. Locomotives are used both for shunters and mainline, especially on double header trains. The average availability factor is 79%, average trailing load is 560 tons and average haul is 3,000km/month. These locomotives have 16-ton axle loads and can be used on all lines. Steam locomotives are due to be phased out by SATS in 1992.

South African coal is used for the steam locomotives due to Swaziland having a high ash content.

E. Wagons

SR currently has approximately 700 wagons in its fleet of which all are owned by SR. Nearly 500 are low-sided open wagons used for hauling of iron ore and coal. Maintenance is limited to brake repair, bogie repair and minor structural repair at the Sidvokodvo workshop. Wheel turning must be performed by "outside" sources. A few wagons are hired from SATS.

F. Workshops

The diesel workshop is located at Mpaka. The facility is approximately two years old and has no machinery, tools or spare parts. The workshop is currently used for training diesel-electric drivers and for performing minor lubrication.

The steam workshop is located in Sidvokodvo. The facility is approximately 24 years old, and has a modicum of machine tools, including a medium lathe, shaper, drill press, power hacksaw, and portable 50-ton jacks. Housed at the steam workshop is an emergency breakdown car which is equipped with jacks, re-rail gear, small tools, power generators and lights. Since all steam locomotives are leased from SATS, and are returned every 30 days for periodic maintenance, only replenishment of fuel, water and lubricants to steam locomotives is performed at the steam workshop. The tools available at the workshop are used primarily for wagon brake repair, minor structural repairs, and temporary emergency repairs.

G. Signalling and Telecommunications

These are generally adequate and operative over the whole system. Open line telecommunications links were installed in 1985 together with telex facilities at critical stations. All signals are by instrumentation and no problems of maintenance or replacement are anticipated in the near future.

H. Manpower

In 1986, the North-South route had 417 staff, North Eastern arm 59, headquarters 44, and South Western leg 588 of which 60 are posted on Matsapha and 528 at Sidvokodvo. Staff is young in age and skewed in numbers toward the traditional traffic. Salary costs and support facilities are a high proportion of expenditure.

J. Technical Assistance

An Operation Advisor will be provided under this project (2 years) and in conjunction with short-term TA will examine and provide solutions for:

1. Improved utilization of present leased diesel and steam locomotive fleet to suit present and future traffic demands.

2. Cost alternatives for leasing locomotives through NRZ or CFM vs. SATS. Consideration should be given for lease/buy of one type and manufacturer only so as to limit maintenance, skills and spare parts. Otherwise if leasing from CFm at Maputo consider diesel only. Another alternative is direct payment to CFM on a lease basis at mutually agreed costs with no maintenance requirements.

3. Procurement of new diesel locomotives as an alternative to continuance of leasing locomotives from SATS. Consider effects on workshops, skills, training, spare parts, equipment, tools. Carefully review axle loads of locomotives in relation to allowable track and bridge axle loading.

4. Conversions of steam locomotives to diesel locomotives. When required by SATS? Purchase of steam locomotives from CFM should also be considered.

5. Conversion of existing rolling stock to suit types of traffic demand. Repair of wagon fleet by force account.

6. Obtaining higher capacity of fleets and higher efficiency operational rates for present motive power and rolling stock.

7. Obtaining higher efficiency rates of skilled and unskilled labor at workshop and on track maintenance. Consider transference of staff to more appropriate work areas, otherwise decrease/increase of staff according to planned traffic demand.

V. PROJECT IMPLEMENTATION PLAN

5.1 Project Management and Coordination

The Regional Rail System Support Project is in reality a regional umbrella project which comprises three distinct country-specific railway support and maintenance projects in Mozambique, Swaziland and Malawi. Although implementation of the three components will be separate, there are important linkages. Overall responsibility for design and coordination of the project rests with the Southern Africa Regional Program of USAID/Zimbabwe.

A. A Project Executive Committee will be established to oversee project progress and to resolve policy issues. The committee will be composed of the following officials or their designees: the Minister of Works and Communications who will chair the committee, the Chief of Executive Officer of Swaziland Railways, the Chairman of the Board of Directors of Swaziland Railways, the Director of USAID/Swaziland and the Director of the Public Enterprise Unit of the Ministry of Finance.

B. Government of Swaziland

The Swaziland project will be implemented by USAID/Swaziland and the Government of Swaziland. The GOS's implementing agency will be the Ministry of Works and Communications which is the oversight agency for SR. The GOS will designate an individual in MOWC to serve as liaison with AID on project implementation matters. Engineering support for the project will be furnished by USAID/Zimbabwe.

C. USAID

USAID/Swaziland will assume primarily management responsibilities for implementing the project. The Office of Human Resources and General Development will assume management responsibility within USAID. In view of the complexity of the project the HR/GDO's Project Manager will be assisted by a Personal Services Contractor (PSC) Project Manager funded under the project. The (PSC) Project Manager will provide a continuous link with the technical assistance team. The Project Manager will assist the RCO by preparing the scope of work and position descriptions for the technical assistance Request for Proposals (RFP). Technical support will be provided as needed by the Regional Engineer in USAID/Harare. Other support will be provided by the USAID staff which will include representatives of the Controller, the RCO and the Regional Legal Office, (RLA).

Initially, the Regional Contracts Office(RCO), USAID/Swaziland will be responsible for procurement of goods and services, and the USAID Swaziland Project Office will exercise control over project funds. Technical assistance and major supply procurement will be obtained via AID-Direct contracts. Except for minor expenses, all project disbursements will initially be made by the Controller, USAID/Swaziland. The project will undergo financial reviews and audits by a certified accounting firm through a contract with USAID/Swaziland. Funding is included in the monitoring and evaluation portion of the project budget to cover the cost of external audits.

C. Reporting Requirements

1. Project Progress

The Contractor will submit progress reports on a quarterly basis to the Project Executive Committee and USAID/Swaziland. These reports are to be submitted within 15 days after the end of a calendar quarter. These reports may also be the basis of the Project Executive Committee's deliberations. The project progress reports are expected to cover inter alia:

a) major activities and general progress against the work plan;

b) problem areas requiring Project Committee and USAID assistance for resolution;

c) issues and problems that impinge on the future implementation and direction of the project;

d) SR proposed solution to the problems;

e) action to be taken during the next quarter; and

f) information on any matter which the committee and/or USAID may reasonably request.

2. Financial Reports

The Contractor will report US dollar disbursement under the project on a quarterly basis to the Project Executive Committee and USAID. Reports are to be submitted within 15 days of the end of each calendar quarter.

Financial problems requiring resolution by the Project Executive Committee and USAID shall be highlighted. Should the need arise for a particular financial report format USAID/Swaziland Controller will provide the necessary guidance in a Project Implementation Letter (PIL).

5.2 Project Implementation Schedule

A. Activity	Proposed Date	Responsible Agent(s)
Project Authorized	8/88	USAID/Z
Grant Agreement Signed	8/88	USAID/S, GOS
PSC Project Coordinator hired	9/88	USAID/S
Conditions Precedent for Disbursement met	11/88	USAID/S
Contract for short-term consultancy executed	11/88	USAID/S, SR
Initial ST-TA begins work	11/88	USAID/S, SR
Short-term ST-TA conclude work	1/89	IQC, SR
TA SOWs finalized for RFP	9/88	USAID/S, SR
RFP issued	11/88	USAID/S
Long-term TA Contractor Selected	2/89	USAID/S
Long-term TA Contract Signed	3/89	USAID/S
First three Long-term TA in place	3/89	USAID/S, Contractor
First Yearly TA Workplan	4/89	TA, SR
Candidate for long-term training selected	5/89	SR, TA
Candidate send for Long-term training	9/89	SR, USAID/S
First Semi-annual Report Due (thereafter quarterly)	10/89	SR, USAID/S
Rest of TA in place	1/90	TA, USAID/S
Second Year Workplan	4/90	TA
Third Year TA Workplan	4/91	TA
Midterm evaluation	5/91	USAID/S, USAID/Z
Candidate return from long-term training	3/92	SR, USAID/S
Fourth Yearly Workplan	4/92	TA
TA Contract ends final report due	3/93	TA
End of project evaluation	4/93	USAID/S, USAID/Z
PACD	4/93	USAID/Z, SR
Project Assistance Completion date (PACD)	6/93	

For the first months following signature of the Grant Agreement, implementation actions will focus on procuring the services of short-term consultants to perform the initial review and drafting the long-term TA scopes of work, preparing the Request for Proposal and procuring the technical assistance. USAID implementation responsibilities will be most intense during this period.

The first annual (and project-wide) workplans will be prepared by the contractor within three months of arrival and will be updated 3 monthly as part of essential periodic reporting. The workplan(s) will detail how the contractor will work with SR to achieve each of the project outputs and end of project objectives. They will identify specific actions which must take place, their projected dates, the specific individuals responsible and the amounts and sources of financial or personnel resources required.

5.3 Contracting Methods and Financing

The initial short-term technical assistance will be limited competition contract by AID. The long-term technical assistance will be through an AID-Direct contract awarded through the unrestricted competition process through a Request for Proposals Solicitation. Most project expenses indicating the locally hired Administrative Assistant will be incorporated into the contract and financed on a direct reimbursement basis. The local hire project manager will be hired through a USAID personal services contract.

Contracting and Financing Methods

	ELEMENT	IMPLEMENTATION METHOD	FINANCING METHOD
I.	Short-term technical assistance	Direct Contract Limited Competition	Cost Reimbursement
II.	Technical Assistance	Direct contract with a U.S. firm	Cost Reimbursement
		Personal Service Cont	Direct Payment
III.	Training	Direct contract with a U.S. firm	Cost Reimbursement
IV.	Commodities	Direct contract with a U.S. firm	Cost Reimbursement
V.	Evaluation	Director contract with a U.S. firm	Cost Reimbursement
VI.	Audit	Gray Amendment firm under an AID/W IQC	Cost Reimbursement

Long Term Technical Assistance

Following review and overall ranking by SR and USAID's RCO of the technical and cost proposals, those offerors whose offers are within the zone of consideration for award will be asked to submit Best and Final Offers. As a part of this process, they along with their proposed Chief Executive Officer and Director of Finance, will be invited to Mbabane, Swaziland for interviews, discussion of their proposals, as an integral part of selection. This condition will be made part of the Request for Proposals and expenses incurred for such will not be directly reimbursable by AID.

SR will provide furnished housing for all long-term technical assistance advisors. Furnishings provided by SR will be consistent with those provided to senior SR employees. To the extent furnishings are not available, the TA Contractor will procure the necessary furnishings to be financed through the contract. In addition, the Technical Assistance Contractor will be expected to purchase, for each long-term advisor the standard appliances provided to US direct hire employees as well as vehicles for official use. Most project procurement will be included within the Technical Assistance contract and payments made on a cost reimbursement basis.

Logistic Support

SR will provide office space, classrooms, storage facilities and boarding and transportation for in-country training.

Audit

The audit will be performed by a Gray Amendment non-federal audit firm under an AID/W IQC. Payment of all expenses for evaluation and audit will be made on a cost reimbursement basis.

5.4 Project Issues and Considerations

A. Project Issues

Primary areas of concern which will affect the success of the project are considered to be the future viability of SR, the institutional environment and regionality. These are explained more fully:

1. Future Financial Viability

SR is in a very unstable financial position which is due to the combination of in-house deficiencies which the project will address and external factors that require the concerted action of the GOS and cooperation of SATS. Without a clear indication that these external factors will be positively addressed, the future of SR, even with the assistance provided by the Project may be in doubt. These factors are:

a) In the short run SR is burdened by heavy debt servicing which must be relieved by restructuring. long-term loans from GOS and others. (Loans with possible restructuring suggestions are in Annex 4). The short-term Financial Technical Assistance will work closely with the Government in recommending and developing a realistic debt rescheduling plan. The activation of the long-term technical assistance is contingent on firm plans for restructuring of these loans which would illustrate the Government of Swaziland's commitment to the viability of SR.

b) Much of the SR's cost and revenues are generated by the Northern Link which was opened in 1986 and provides a transit route to South African traffic. A "Memorandum of Understanding" exists between the Kingdom and the RSA dated November 9, 1981, and a Business Agreement between SATS and SR of April 1982 covering the Northern Link.

Clauses in the Memorandum cover the future traffic and viability of the link. A legal intepretation of the Memorandum is required and it remains uncertain whether agreements can be reached with SATS to equitably implement the Memorandum before the TA project begins. (Relevant extracts from the Memorandum are contained in Annex 8, together with the comment by the World Bank from their review dated August 12, 1986). Short-term TA assistance will be used to review the MOU and its implications and provide recommendations to SR as to how best to resolve the uncertainties and move toward a more equitable relationship with SATS.

2. <u>The Institutional Environment</u>

If the long-term Technical Assistance team were sent in straight away, it is possible that its effectiveness would be constrained by a highly dynamic institutional environment and the serious financial situation. The MOWC has moved recently to assert greater control over SR and is supportive of the USAID Project proposed. Nevertheless, before long-term TA is fielded certain aspects require examination and reconfirmation of the recently improved institutional environment:

a) Whether the USAID-funded CEO and FD will have full executive power;

b) Whether SR Management, the SR Board, the MOWC and other Ministries will support the implementation of the project;

c) The results of the Commission of Inquiry and actions taken by government in response.

The mission will evaluate these issues again and obtain tangible evidence of progress. This should satisfy the conditions precedent allowing the long-term TA to be activated.

3. Regionality

SR is very dependent on the RSA for revenue and resources. Because of this linking, improvements to SR benefit RSA to some extent. Nonetheless, the SADCC region as a whole obtains major benefits from this Project. Aware that regionality is an issue in this Project, the Mission has considered the following positive indications.

a) SATCC acceptance of the project indicates that it meets its "regionality test."

b) A strong and well run railway in Swaziland will improve the economy of SADCC member States, by reducing dependence on the RSA ports for its overseas trade and RSA road haulers for local imports.

c) The extent to which SATS might not cooperate with the efforts of SR under the Project was also considered, and it was concluded that although an important factor, there is no basis for predicting developments at this time -- except, possibly, the results of discussions concerning the Northern Link Memorandum of Understanding, mentioned above.

4. Phased Technical Assistance

Believing that three years of TA was seldom sufficient for a lasting effect on institutional development, USAID/Zimbabwe recommended an increase to a 4-year level of effort and the Project Paper incorporated that higher level. To help facilitate early entry of the TA team, however, a phased approach to the provision of short- and long-term technical assistance has been retained. Owing to the recent developments at SR, early TA is of significant importance to keep up Project momentum.

VI. EVALUATIONS

The final criterion for success in the Swaziland component of RRSS will be the degree to which the key management and financial constraints have been removed or diminished. Evaluations will focus on observable progress in the areas now constrained.

Two major project evaluations, an interim one in May 1991, and a final evaluation in April 1993, will be held. In addition, it is anticipated that up to four smaller scale evaluation/monitoring activities will occur to more closely track and assess project progress towards institutional strengthening. The project budget includes $150,000 for evaluations. This amount also covers project audits.

For the interim evaluation, the team will include one railway operations expert, one transport economist, one financial and accounting specialist, and one human resources development officer and a project development officer. In addition, SR will provide the services of appropriate personnel to serve on the evaluation team. The Project Executive Committee and the USAID/Swaziland Project Manager will provide all necessary documentation and data required by the team.

Assuming 1988 as the baseline year, the 1991 interim evaluation will focus on progress made in the areas of general management, finance, personnel training, operations and systems. The extent to movement towards a revised tariff structure with a more commercial and cost-based orientation will be measured.

Progress toward attaining the outputs established for the Project will be examined. Particular attention will be given to an assessment of increased staff capabilities provided under the Project. The extent of the establishment of a staff development system, as well as changes in staffing levels achieved by SR, will be investigated. The evaluation will in addition assess attainment of anticipated project outputs such as:

a) corporate strategy and planning systems;

b) marketing plan and budget;

c) five year development plan; and,

d) management information system able to provide timely, comprehensive data on operations, variable costs and revenues to SR's management and the Ministries.

The interim evaluation will also cover implementation matters such as the quality of technical assistance and training and the timeliness of deliveries of project commodities and AID oversight and monitoring of project.

To the extent possible, objective project performance indicators such as yearly workplans, semi-annual and then quarterly reports, budgets, national accounts, trade statistics and personnel evaluations will be reviewed. However, it may be only possible to observe trends at this point. The reviews will incorporate both SR data and actual observations by the evaluation team.

The final evaluation, scheduled in April 1993, will occur shortly before the Project Assistance Completion Date. This evaluation will review all aspects of the implementation and impact of the project. The team will be a comprehensive one, consisting of one railway management specialist (team leader), one marketing specialist, one staff development specialist, one financial and accounting specialist, and one transport economist. SR will also provide the services of appropriate personnel to serve on the evaluation team. As with the interim evaluation, the Project Executive Committee and the USAID/Swaziland Project Manager will provide all necessary documentation and data required by the team.

In addition to reassessing the aspects of project implementation and project outputs examined in the interim evaluation, long-term technical and training results will also be investigated at this time. To the extent possible, the final evaluation will document the impact of the project by measuring improvements in the management systems, marketing strategies and financial standing of SR.

Assessment will be made of the degree to which these and other improvements have enabled SR to be put on a viable institutional and economic footing, thereby restoring its vigorous and healthy participation in SADCC's regional transportation system.

Although parts of the evaluation may be difficult to quantify, e.g., general improvements in management, other output indicators will be directly measurable and can be used as indicators of improvement in related areas such as management and staff development. These include indicators such as:

a. improved financial performance, as exemplified by:

- effective financial restructuring;
- increased use of investment appraisal procedures;
- computerized and effective accounts reconciliation and credit control;
- thorough documentation of systems and procedures;
- comprehensive, decision-oriented data available on operations, variable costs and revenues; and,
- corporate financial strategy in place.

b. increases in traffic carried;

c. tariff restructuring; a more commercially-oriented and cost-based tariff;

d. rationalized marketing policies;

e. statement of corporate strategy, planning system; and

f. establishment of five-year development plans.

The findings and recommendations of both the interim and final evaluations will be incorporated into AID's evaluation system in order to share relevant lessons learned.

VII. CONDITIONS PRECEDENT, COVENANTS AND NEGOTIATING STATUS

7.1 Conditions Precedent

A. Prior to any disbursement under the grant, and prior to the issuance of any commitment documents under the Project Agreement, the Grantee shall furnish evidence in form and substance satisfactory to AID that:

i) Evidence that the Grantee has designated an officer in the Ministry of Works and Communications who will oversee project activities and serve as liaison with AID on project implementation matters;

ii) A statement containing the names and positions of the persons authorized to sign Project documents and communications for the Grantee together with specimen signatures of each person in such statements.

B. Prior to disbursement of funds for the long-term technical assistance or to the issuance by AID of any commitment documentation with respect thereto, the Grantee will provide evidence in form and substance satisfactory to AID that:

i) Evidence that a Project Executive Committee to oversee Project progress has been established with membership composed of the following officials, or their designees: the Minister of Works and Communications, who will chair the Committee, the Chief Executive Officer of Swaziland Railways, the Chairman of the Board of Directors of Swaziland Railways, the Director of USAID/Swaziland and the Director of the Public Enterprise Unit to be established in the Ministry of Finance;

ii) A statement providing full executive and decision-making authority to the long-term Technical Advisors serving as Chief Executive Officer and Director Finance of Swaziland Railways for a period of time not less than the first two years of their contracts and until such time as their counterparts are prepared to assume full operational responsibilities, and providing similar authority to the other long-term technical advisors, for the duration of their contracts, during the absence of their counterpart department chiefs;

iii) A statement describing the Grantee's plans for and progress in restructuring Swaziland Railways' loan in order to reduce short-term debt services;

iv) A statement describing the Grantee's plans for and progress in resolving outstanding issues associated with the Memorandum of Understanding between the Government cf Swaziland the Republic of South Africa dated November 9, 1981 and the related Business Agreement with relation to current and/or cumulative deficits in operation of the Swaziland Railway Northern Link;

v) Evidence that appropriate housing will be ready for occupancy by Project-funded long-term Technical Advisors at the time of their scheduled arrival in Swaziland.

7.2 Covenants

Except as AID may otherwise agree in writing, the Government covenants to:

A. Provide suitable office and classroom space, basic office equipment, and all personnel required under the Project Agreement for implementation of this project in a timely manner.

B. Nominate qualified persons who will be the source from which counterparts for each technical advisor will be selected after their arrival in Swaziland. The Grantee will also provide the names of backstop technical officers to work closely with the short-term technical advisors.

C. Require that all SR employees receiving Project-funded training in excess of 6 months will pledge to continue to work for Swaziland Railways for a period of not less than two years, in a position making use of the training received, and will require each trainee to sign a written commitment to this effect prior to the commencement of training, except as the parties may otherwise agree in writing.

D. Ensure that all commodities purchased under the Project will be used exclusively for project purposes.

7.3 Negotiating Status

During PP preparation, preliminary agreement was reached with Swaziland Railways, the Ministry of Works and Communications, and the Ministry of Finance concerning the broad outlines of this project the proposed specific areas of technical assistance focus. Other topics such as host country contribution, TA scopes of work and Conditions Precedent were also discussed and agreed in general terms.

ANNEX 1

SWAZILAND GOVERNMENT

Department of Economic Planning and Statistics,
P.O. Box 602,
MBABANE.

Ref: ECO/07/2/2Vol.1/74 23rd June, 1988.

The Director,
USAID Mission to Swaziland,
P.O. Box 750,
MBABANE.

Dear Sir,

RE : REQUEST FOR TECHNICAL ASSISTANCE SWAZILAND RAILWAY

SADCC has requested US assistance in increasing access for landlocked countries to the regional ports and provision of alternative transport facilities to African Countries dependent on transport routing via Swouth Africa.

In response to this request the Southern African Region Programme USAID/Zimbabwe assessed the region's transportation systems by means of two major studies. The studies concluded that projects promoting the rail system were the best means of achieving SADCC objectives. Three projects were identified in the rail sector, one of them falling in Swaziland with the provision of technical assistance and training to Swaziland Railway.

Authorization to fund and implement this project can only be obtained from SADCC. A formal request to SADCC in Maputo has been made requesting them to include the project in the transport portfolio.

The intial estimated cost of the project is $4.7 million, of which $3.7 million constitutes grant funding from the USA Government, leaving $1.2 million to be funded by Swaziland railway in cash or in kind.

The Government of Swaziland kindly requests USAID to fund this project.

Your sympathetic consideration will be highly appreciatead.

Yours faithfully,

S. T. MOTSA
for : PRINCIPAL SECRETARY

(103) ANNEX 1 A

Works and Communications,
P. O. Box 58,
MBABANE.

30th May, 1988.

Mr Matola,
Chairman of the Co-ordinating
Committee of SATCC,
P. O. Box 2677,
MAPUTO.
Mozambique.

Dear Mr Matolo,

Please find project brief for technical Assistance and Management training to Swaziland Railways.

We request this be included in the current transport project portfolio.

With best Regards,

G. F. DHLAMINI
DEPUTY PRINCIPAL SECRETARY

Enc.

SATCC PROJECT SUBMISSION

Project Title:

Provision of technical assistance and management training to Swaziland Railways.

Estimated Total Cost:

Total: USD 4.7 million
Foreign: USD 3.5 million
Local: USD 1.2 million

Secured Funding:

Foreign: USD 3.5 million

Financing Gap:

USD 1.2 million

Executing Agency:

Swaziland Railways

Duration:

5 years

Scope:

Provision of technical assistance and management training to Swaziland Railways, forming part of a new regional rail transportation project whose ultimate aim is enhancing the efficiency and capacity of the rail system within the SADCC region.

Contents:

The project consists of provision of technical assistance for a period of three years in the areas of General Management, Marketing and Financial Management and for a period of two years in the areas of Operations and Mechanical Engineering.

A total of 1 1\2 years will be provided in the area of human resources, comprising short term training in the managerial functions identified above.

Finally, for a total period of 4 years, provision shall be made for long term training for pre - selected candidates.

Status:

The above project will be based on the recommendations of an evaluation Mission presently being undertaken by USAID.

Action:

Completion of Mission. Approval and subsequent implementation of their recommendations

LOGICAL FRAMEWORK

GOAL	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
To support the development of a stronger economic foundation for growth in Southern Africa.	SADCC countries face lower total transport costs.	National and Regional Trade Statistics.	Continued regional cooperation
	Less FX spent for transport.	National Accounts	Investments maintained by SADCC countries.
	Proportion of SADCC external trade using SADCC ports increases		Investments not destroyed by hostile action.
	Savings in FX and LC from lower transport costs are available for other priority investments.		FX and other cost savings stimulate economic growth.
PURPOSE	**END OF PROJECT STATUS**		
To strengthen and expand the capacity and operational efficiency of regional rail transport in SADCC countries.	Debt/Equity ratio reduced from 408% to 150% by 1993.	SR Financial Statements	
SUB-PURPOSE: To improve the management efficiency and capability of Swaziland Railways.	Swazi CEO & Dept. heads trained for their jobs, in place and functioning effectively.	Personnel Evaluations Quarterly/annual reports.	Rail links to Maputo restored and maintained
	Operating ratio (expenses divided by revenues) reduced from 146% to 68% by 1993.	Reports produced.	Financial and human resources sufficient to maintain system elements not available.
	Operations and business systems developed, accepted and utilized.	SR corporate plans	SR transit traffic continues at current or increased levels.
	Intra-SADCC traffic on SR increased from 390,000 mt tons to 500,000 mt tons per year.	SR transport data	SR continues to lease locos and rolling stock.

OUTPUTS	MAGNITUDE	MEANS OF VERIFICATION	ASSUMPTIONS
1. Financial Capital structure analyzed and recommended changes provided to capitalize SR.	Capitalization Recommendations provided to government	Report of Short-term consultants	
2. Loan portfolio analyzed and loans restructured.	Restructured loans being used as basis of planning.	Loans restructuring agreement.	
3. Corporate strategy and planning systems established.	Statement of corporate strategy planning system & 5 year development plan in place.	Project reports	
4. SR rights provided and safeguarded under the SR/SATS agreement.	SATS and SR memorandum of understand examined and changes necessary to strengthen the agreement implemented.	Project Evaluation	
5. Management Information System established.	Comprehensive decision-oriented data available on operations, variable costs and revenues.	Project Reports Project Evaluation	
6. Revised tariff structure developed and in place.	Tariff structure has more commercial and cost-based orientation	SR tariff schedules Project Evaluation	
7. Financial management plan and system development and in use.	Computerized accounting and budgeting system in place providing essential information on regular basis.	SR Financial Reports	
8. Personnel management system improved and in use.	Defined career paths, productivity and assessments, and training plans in place.	SR staff and Personnel Reports	
9. Marketing plan and budget developed and in use.	Market quarterly plans and budget prepared.	SR Budget	
10. Staff training completed.	Two Senior staff complete training in essential areas.	SR staff and personnel Reports	Participants can be found and made available.

INPUTS	FUNDING TARGETS	MEANS OF VERIFICATION	ASSUMPTIONS
Technical Assistance (Long-Term) CEO - 4 years Financial Director - 4 years Commercial/Mktg. Advisor - 3 years Personnel/Training Advsr - 1.5 years Operations Advisor - 2 years Systems Advisor - 2 years Administrative Assistant - 4 years USAID Project Mgr. (PSC) - 4 years	$4,849 million	Evaluation Reports Contractor Reports SR Records	Government of Swaziland commit itself to viability of SR.
Technical Assistance (Short-Term)	$0.630 million		
TRAINING 4 person years long-term 60 person-months short-term Seminars & Workshops	$0.600 million		
COMMODITIES	$ 0.160 million		
EVALUATION & AUDIT	$ 0.150 million		
INFLATION/CONTINGENCY	$ 0.650 million		
AID TOTAL	$ 7.041 million		
ROUNDED TO	$ 7.042 million		

ANNEX 3

Analysis of Operational Constraints

Problem Definition

As further described in the Institutional and Financial Analyses, and confirmed by reviews undertaken by other donors, SR faces a host of organizational and institutional problems. For ease of reference we have grouped them as follows:

1. General Management Problems

Short Term

- A policy to revise the deteriorating financial position is not apparent.
- Communications with the Ministry of Works and Communications need improving.
- Pricing policy of transit traffic is unclear.
- Current year traffic, revenue and cost projections are inaccurate.
- Corporate objectives lack clarity.
- Other GOS bodies lack confidence in SR management.

Medium Term

- Management information is inadequate.
- Internal audit procedures are weak.
- Production and performance indicators are lacking.
- Institutional linkages are weak.
- Management training is nonexistent.

Long Term

- There is no corporate plan or strategy including a 5-year business development plan.
- There is a lack of a clear commercial and marketing policy.
- There is a lack of organizational performance targets.

2. <u>Financial Management Problems</u>

<u>Short Term</u>

- Financial restructuring is needed.
- There is poor credit control.
- SATS account reconciliation checks are poor.
- Departmental budgets are not reliable.

<u>Medium Term</u>

- Internal controls are weak.
- Compliance audits are not possible.
- Management and cost accounting systems are not in place.
- Accountancy training and skills development has not been planned.
- The traffic costing basis needs improvement.
- Budgeting procedures and controls need strengthening.
- Tariff restructuring is required.
- There is infrequent financial reporting.
- There is a lack of documentation of systems and procedures.

<u>Long Term</u>

- There is no corporate financial strategy.
- There are few investment appraisal procedures.
- Financial performance indicators and targeting are lacking.

3. <u>Commercial Management Problems</u>

<u>Short Term</u>

- There are no marketing resources or advertising budgets.
- Revenue forecasts are inaccurate.
- Tariffs for transit are too low.

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Medium Term

- The department structure is not business sector oriented.
- There are inadequate revenue/commodity information systems.
- Marketing and commercial skills are lacking.
- Tariff restructuring is required.
- The accuracy of traffic costing is suspect.

Long Term

- Commercial strategy is lacking
- There is an over-reliance on a few commodities.
- SR provides a limited range of services.
- SR has no commercial representation outside Swaziland.

4. Operating Management Problems

Short Term

- There is an over-capacity in low season.
- Possible overmanning should be examined.
- SATS leasing arrangements need review.

Medium Term

- Information systems are inadequate.
- Performance indicators are nonexistent.
- Production targets are unclear.
- No computer systems are in place.
- Wagon tracking is nonexistent.
- Responses to emergencies are dependent on SATS.
- A motive power policy is required.
- Tarpaulin hire controls are weak.
- Job evaluation procedures are weak.
- Budgeting procedures are lacking.
- Interchange and marshalling productivity is low.

Long Term

- Breakdown crane is needed.
- Steam locomotives to be withdrawn (1992).
- Operating plans are necessary.
- Management accounting data is not available.

Finally overspanning the above problems are broader Government of Swaziland issues that must be addressed.

Short Term

- Financial restructuring is needed to mitigate the debt burden of SR.
- Impact of economic policies on the financial performance of SR should be examined, with particular regard to the control of transport charges on export commodities.
- Impact of inadequate road pricing should be examined.
- Communications between SR and government and support to the controlling ministry need strengthening.
- Interim tariff increases especially on transit traffic should be considered.
- A better understanding of SR's corporate and commercial objectives is needed.
- Adequacy of audit function should be strengthened.

Medium Term

- The adequacy of information flows within SR, including quality and timeliness of reporting performance (particularly financial and production) needs strengthening.

Long Term

- Further investment in infrastructure (Goba Line rehabilitation), motive power and rolling stock needs close and careful review.
- Tariff restructuring is needed.

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The above list illustrates the interdependence of the various departments within SR and the need for improved coordination and cooperation. With the exception of some of the broader GOS issues, most of the above problems can be effectively addressed through the provision of technical assistance. Improvements in the short and medium-term should be made by the end of this Project.

FINANCIAL ANALYSIS

Current Financial Situation

The present financial situation of Swaziland Railway is very serious. Its outstanding loans currently exceed E100 million and because it has consistently turned in an operating deficit which has subsequently been capitalized, the company's overall indebtedness increases annually. In fact, the financial and economic viability of the organization are contingent upon some radical changes in the policies and operations of Swaziland Railways as well as a significant restructuring of debt. The financial situation can be resolved however and it must be stated to the credit of Swaziland Railways that they have captured new traffic in recent years and that their revenues have increased accordingly. Significant improvement to the current financial situation of Swaziland Railways could be realized by the following actions:

1. Immediately reschedule and rationalize long term loans to organizations other than the Swaziland Government, with the aim of initially deferring loan redemption to allow SR's liquidity to improve.

2. Write-off or alternatively convert Swazi Government loans to equity to eliminate the burden of their redemption.

3. Introduce improvement to SR's internal controls such that expenditures can be restrained to levels which, in the short-term, could continue to generate revenues at their current levels.

4. Increase revenues, particularly for South African traffic on the Northern link, such that it fully contributes to the capital costs of providing the Northern line to Komatipoort and the Southern section to Golela.

5. Expand the base by exploiting the domestic market and utilizing empty returning capacity from Durban and Maputo.

6. Analyze fully the financial effects of the Government's economic policies to keep down transport prices for export commodities especially where conveyance is required at or near variable cost. The railway should not have to cross-subsidise this traffic in order to support the government's policies. More appropriately, the government should be fully aware of the cost and implications of its policies to stimulate exports.

7. Assess the implications of inadequately based road pricing by the government, particularly for heavy trucking. Overt subsidies to truckers through not contributing to the costs of infrastructure maintenance will almost certainly lead to a disorientation of transport provision and undermine the viability of the railways.

Notwithstanding the effects of government policies, it is clear that Swaziland Railway has a great deal to accomplish to bring its expenditures into line with its scale of operations. Evidence that expenditure has increased at a faster rate than revenue indicates that stringent measures are required to regularize the situation and to ensure that railway operations are sustained in the most cost-effective way.

Swaziland Railway's financial and cost accounting systems can best be defined as rudimentary. Existing systems lack the structure and accuracy required to formulate a tariff structure adequate to recoup operating and capital costs. Its financial structure is not designed to track receivables, establish uniform tariff policies by various stations managers, calculate commodity and route variable costs, or provide timely and accurate data upon which management could make decisions. The organization does not adequately forecast revenues and expenditures nor make adjustments based upon variations from forecasts.

Swaziland Railway's staff is capable, but lacks formal accounting training and discipline. A series of investigations of financial irregularities has further weakened confidence in SR capabilities to manage the financial operations. SR has established, to their credit, an internal audit function. This unit's potential is however weakened due to existing operating and reporting structures. The unit reports directly to the Director of Finance and does few, if any, reviews of home office operations. Insufficient information reaches the CEO.

The financial viability of the organization has suffered through its weak financial systems and controls as well as poor administrative and senior management. This is not surprising because all but 1 out of the 28 experienced South African senior managers working at SR in 1985 have departed. Despite the exodus, Swazi management has done well to recover and take advantage of the recent large investments in new routes, particularly the Northern Link line. The immediate financial problem facing SR is servicing the commercial loans raised to finance these investments. SR's current account is not healthy due to recurrent losses incurred since 1980 when the iron ore traffic ceased. The cumulative effect of six years of operating deficits and servicing loans of E 100 million ($50 m) requires the intervention and assistance of an experienced management team.

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The financial performance of SR is provided for FY 1985 and 1986 based on fully audited accounts, for 1987 based on unaudited figures and for 1988 on budgeted information. SR's forecast for 1989 is also provided.

TABLE 1 SWAZILAND RAILWAYS FINANCIAL PERFORMANCE (E 1000)

YE 3/31 Accounts Status	1985 Audited	1986 Audited	1987 Unaudited	1988 Budget	1989 Forecast
Heading					
1. Revenue	9,742	11,152	24,778	36,980	46,929
2. Op Expenditure	11,369	16,449	33,533	40,934	39,467
of which					
interest	1,092	5,133	7,369	6,850	4,800
loan repayment	0	0	7,707	10,100	7,324
3. Operating Ratio	1.17	1.47	1.35	1.10	0.84
4. Op.deficit/ surplus	-1,627	-5,297	- 8,755	-3,954	7,462
5. Cap. Expend.	1,722	495	3,293	590	5,726
6. Depreciation	2,687	3,698	5,965	6,047	6,000
7. Net Result	-6,036	-9,490	-18,013	-10,591	-4,264
8. Long-term loan	81,418	90,908	101,214	101,715	98,645
9. Debt/equity	835%	815%	408%	276%	210%

EXPLANATIONS

Sources: DHS report, Audited Accounts and SR budgets.

1. Revenue increased by 129% in FY 1987 due to Northern Link

2. Operating expenditure including interest and principal repayments; Government loans equated to 49% of total loans (in 1986) repayment of which - has been deferred.

3. Operating expenditure divided by revenue.

4. Operating deficit/surplus item less item 2.
5. Capital expenditure excludes major investments but included the extraordinary item of reconstructing the damaged Usuthu bridge in 1985.

6. Depreciation, straight line basis, mostly at 5% except plant machinery at 20%

7. Net result 4-5-6. SR include a provision item of E0.5 m per year to fund rehabilitation of Matsapha-Goba (total cost E 13m).

8. Long-term loans are assumed to be the annual accumulation of the previous year's loan, less present year loan repayment plus present year surplus/deficit.

9. Debt/equity ratio is taken as long-term loan divided by revenue.

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From the analysis, it appears that SR's accounts show an improvement. However, since audited accounts for the year ending March 1987 were not available, that impression and SR's budgeting accuracy cannot be verified. SR's projections for year 1989 show a reduction in expenditures due to lower loan and interest repayments, which implicitly assumes extended government assistance. FY 1989 also shows a 27% increase in revenue of which 15% is due to proposed tariff increases; the expected 18% increase in traffic would generate variable costs in the order of E3.4 million (at 5 cents per net ton kilometer at 1987 prices) which implies a substantial 10% reduction in operating expenditures before finance changes. This is unlikely. In FY 1988, revenue for Swazi traffic was 20% less than budget and for transit 6% less than projected. Therefore, limited confidence can be placed on the 1989 figures.

Aware of the importance of financial management issues in the region's railways, USAID initiated a more detailed examination.

Improved Financial Management

USAID, through a direct contract with Deloitte, Haskins, & Sells (DHS), reviewed the financial procedures and systems at Swaziland Railway. Their conclusions were as follows:

1. Financial controls were limited.

2. SR did not prepare timely and accurate financial information for senior management or in-house reporting.

3. Cost and revenue information was insufficient to satisfy needs of functional and corporate management.

4. Financial systems in place were rudimentary with poorly documented procedures and controls inadequate to meet the needs of management and external auditors.

5. Compliance auditing was not possible due to the lack of reliability of the financial system.

6. Internal controls were inadequate to safeguard the Railway's and Government's interests.

7. Financial procedures and policy required urgent improvement in order to improve the Railway's financial viability in both the short and long-term.

The consultant briefly examined costing systems in place and found that they did not reflect actual provisional costs of the services in general and excluded the finance and capital charges arising in particular from infrastructure investments

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made since 1978. It was noted that tariffs based on the present system could not possibly generate sufficient revenue to redeem outstanding loans or the interest arising therefrom. Neither were the revenues sufficient to cover the variable costs of carrying traffic on some the routes. The Railway had not established its tariffs, in many cases, sufficiently high enough to generate revenues to meet its basic operating costs.

As a result of their studies, DHS recommended that the following actions should be taken:

1. Restructure short and long term debts to mitigate as far as possible their effect on the revenue account.

2. Overhaul accounting systems and procedures in place to provide greater accuracy in cost and management accounting information to enable corporate policy to be formulated on a more reliable basis.

3. Review current staffing of senior level financial management positions with the goal of replacing staff as necessary with skilled, professional level financial personnel. DHS reinforced the view that Swaziland Railway's present department head was not sufficiently skilled to implement necessary changes to the accounting system within his jurisdiction.

4. Improve the level of technical skills available as rapidly as possible to implement and sustain the urgently needed improvements to the accounting systems.

DHS recorded many specific accountancy procedures which in their opinion, required review and improvement to the financial operation. Among these are departmental budgeting and contracting; debtor follow-up; fixed asset registration; establishment of an independent internal audit function; restructuring or revision of tariffs and long-term debts; training of personnel; transfer of staff; SATS exchange account review; establishment of guidelines for contract rates; development of systems to track billings; and improvements in operations in order to strengthen the financial position.

DHS also endorsed recommendations of the 1986 World Bank team regarding changes required in order to bring about and restore Swaziland Railway to a viable economic and financial position.

Future Viability

The provision to SR of a top management team, advisors and training program and implementing a specific program of financial management through the proposed financial director will offer SR the best possible opportunities for recovery and future viability. The initial creation of a set of targets to be achieved by the TA team is vital, but without preempting these, to determine the future viability of SR assumptions have been made as follows:

1. Loan rescheduling. Government to redeem off shore loans to Standard Bank and th IDC (total estimated E 47 million) at 9% and 9.5% p.a. over 6 years and 20 years and convert to longer term loans with deferred redemption.

2. Swazi Government loans to be converted to an equity holding, either by government or a combination of government and private sector.

   The combined effect would be to reduce the loan and interest burden by approximately E 9.5 million, and a return on equity of about E 2.0 million in 1989 would be paid to Government.

3. Expenditure to be restrained to present levels by introducing tighter controls and procedures as specified in the scopes of work for the technical assistance.

4. Tariffs on Northern Link traffic to be increased by E 5/ton to cover ammortization and depreciation costs. An increase in tariffs would increase revenues by E 7.4 million. SR should also ratify memorandum of agreement with SATs regarding tariffs and the losses on the northern link which are to be absorbed by SATs.

5. Increase market share in imports (and domestic market if possible) as in 1983/84 to 33% or 350,000 tonnes; a 10% p.a. revenue improvement would generate E 0.75 m p.a.

Traffic Forecast

In addition to altering the financial structure, selected tariffs and increasing the present market share, traffic is expected to increase after reconstruction of the Goba line. Traffic projections for overseas trade via Maputo and RSA ports were made in the USAID funded Southern Corridor Study based on research by SATCC. Projections of transit, regional and domestic traffic for SR have been made by the PP team based on perceptions of local economic conditions. All traffic projections are presented for 1990, 1995 and 2000 in the table below.

TABLE 2 **Swaziland Railways Traffic Forecasts**

Overseas (Tons 000)

	VIA MAPUTO			VIA R.S.A.			TOTAL		
YEAR	I	E	T	I	E	T	I	E	T
1990	25	566	591	35	294	329	60	860	920
1995	30	807	837	40	419	459	70	1226	1296
2000	35	1154	1189	45	599	644	80	1753	1833

	Transit	Regional	Domestic	TOTAL
1986	1481	390	3	1874
1990	1635	474	4	2113
1995	1850	605	5	2460
2000	2092	772	6	2870
Growth	2.5%	5%	5%	

I = Imports, E = Exports T = Total

Estimate of Future Revenues and Costs

From the traffic projections, estimates of operating costs and revenues have been produced using average costs and revenues per ton. Strategies developed in this project to restrain expenditure and selectively increase tariffs have been taken into account.

TABLE 3 Estimates of Revenue and Costs
000's

Overseas		1990	1995	2000
Via Maputo	Tonnes	591	837	1189
1. x 225km	ntk	90,520	129,735	184,295
2. x 5c/ntk Cost	E	4,580	6,486	9,136
3. x 7.5c/ntk Rev	E	6,870	9,730	13,822
Via R.S.A.	Tonnes	329	459	644
3. x 156km	ntk	51,324	71,604	100,464
4. x 5c/ntk Cost	E	2,566	3,580	5,023
x 7.5c/ntk Rev	E	3,849	5,370	7,535
Transit	Tonnes	1,635	1,550	2,092
5. x 184 km	ntk	300,840	340,400	384,924
6. x 9c/ntk Cost	E	27,076	30,636	34,643
7. x 13c/ntk Rev	E	39,109	44,252	50,040
Regional via RSA	Tonnes	474	605	772
x 156km	ntk	73,944	94,380	120,432
x 5c/ntk Cost	E	3,697	4,719	6,022
x 7.5c/ntk Rev	E	5,546	7,078	9,032
Domestic	Tonnes	4	5	6
x 150km	ntk	600	750	900
x 6c/ntk Cost	E	360	450	540
x 8c/ntk Rev	E	480	600	720
Totals	Tonnes	3,033	3,756	4,703
	ntk	517,228	640,625	791,019
	Cost	38,279	45,871	55,364
	Rev	55,854	67,030	81,149
	Surplus	17,575	21,159	25,785
	Operating Ratio	0.685	0.684	0.682

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NOTES

1. Average rail distance taken for overseas traffic Matsapha-Goba.

2. From FY 1987 overall average cost per tonne km excluding loan repayments, interest, depreciation, capital investments.

3. From FY 1987 6.2c/ntk+10% p.a. increase for 1988 and 1989 then held at constant prices through forecast.

4. Rail distance Matsapha to R.S.A. border Lavumisa.

5. Rail distance Mananga (N. Transvaal Border) to Lavumisa

6. From FY 1987 9 c/ntk E13,463/1481 present revenue is insufficient to recover finance charges, interest loan repayments and depreciation which for the Northern route should equate to around 4c/ntk.

7. Net revenue 13c/ntk required to recover total costs of link.

The technical assistance to be provided by USAID is targeted specifically at the most senior management with particular emphasis on financial and corporate management where it is proposed that the TA shall have full executive responsibility. The overall effects of the project shall be to turn around the financial status of SR. Targets for the TA team assumed in the financial analysis are summarized as follows:

a) Improvement of the overall Operating Ratio from 1.46 in 1986 to 0.70 in 1992.

   Implicitly this will include:- an average increase in volume of 4.5% p.a. due to expanding Swazi overseas trade, increased transit volumes, increased market share of RSA bilateral trade, and slight increases in the domestic market

b) Output net ton km increases of 4.3% p.a.

c) Operating expenditure increasing at 3.75% p.a., reflecting a real reduction in expenditure output costs of 0.5% p.a. due to improvements in efficiency.

d) Revenue is planned to increase at 3.8% p.a. (constant prices) due to a more aggressive commercial policy.

   The targets are believed to be achievable, although it will be the responsibility of the management TA team to decide priorities and prepare a corporate plan of action.

Financial Results

The effects of the forecasts on profitability, taking into account financial restructuring proposed in Appendix 1 and depreciation at current replacement costs (not historic) is presented in the consolidated statement below.

Future Consolidated Income Statement
E 000's

Heading	**1990**	**1995**	**2000**
Revenue	55,854	67,030	81,149
Operating Expenditure	38,279	45,871	55,364
Gross Operating Profit	17,575	21,159	25,785
Depreciation (Current lost)	7,184	9,304	14,315
Net Operating Profit	10,391	11,855	11,470
Interest and Loan Repayments	567	3,936	3,936
Net Result	9,824	7,919	7,534

The future consolidated position of Swaziland Railways looks secure providing the targets proposed are adhered to. The net result would provide the Government with a satisfactory return from their equity holding, and sufficient funding for further capital investment, particularly EI5 million for the rehabilitation of the Goba line. The purchase of diesel shunting locomotives by 1992 when steam will be phased out could also be financed.

The results forecasted and their sustainability after the project are very dependent on not only the success of the program but also the cooperation between SR and the Ministries of Works and Finance. The continuance and further improvement of systems and procedures depends principally on the accumulation of skills and the transfer of technology. Given that personnel development programs will be effective, sufficient financial margin appears to exist for the continued viability of SR.

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APPENDIX 1

Swazi Railway - Possible loan restructuring.

Swazi Government		payment deferred
1.	Golela Link	E26.999m
2.	Northern Link	E 8.025m
3.	Cyclone Repairs	E 4.700m
	Total	E39.724m

4. Swazi Provident Fund

Northern link E6.0m @ 121/2% simple 15 years, start 1987.
Principal outstanding in 1990 E4.5m.

Equity Proposal

Government to take over Swaziland Provident Fund Loan and convert to equity holding together with loans for infrastructure. Total equity E44.124m. Net book value of assets as March 31 1986 E82.894.
Equity holding approximately 53%.

5. Standard Bank

Northern Link	E25.220m, Interest 9% repayments 6 start 1987.
Paid	E12.610m by 1990.
Outstanding	E12.610m.

6. Industrial Revertopment Corporation of RSA

Northern Link	E22.960m, Interest 9.5%, repayments 20, start 1986
Paid	E9.184m by 1990
Outstanding	E13.776m.

Restructuring Proposal

Governments fully redeem both Standard Bank and IDC loans by 1990 and convert to long term loan as follows:-

Loan E26,386m Interest 9%, equal repayments of E2.495m starting 1995.

7. Commonwealth Development Corporation

Loan E1.844m, Interest 9% repayments 20 start 1986.

8. Republic of South Africa Government

Loan E 6064, Interest 4% repayments 30 start 1991.

ANNEX 5

STAFF DEVELOPMENT AND TRAINING

I. HISTORY OF SWAZILAND RAILWAY

The Swaziland Railway (SR) was incorporated in 1962 by an act of Parliament as a private venture with the object. "To provide or secure and promote the provision of an efficient and adequate system of public transport of goods and passengers by rail with due regard to economy and safety of operation and to supply the needs of Swaziland for rail services to the fullest possible extent consistent with the resources of the Railway"

In September, 1964, the construction of Swaziland Railway's first line to Goba was completed. It became State owned in 1975. The line was concerned primarily with the single purpose of transporting 12 million tons of iron ore over a period of ten years from Ngwenya on the Western boarder to Maputo for shipment to Japan. This traffic ceased in June, 1980, and the line from Ngwenya to Matsapha is now closed. In previous years, due to lack of facilities on the Mozambique border for the exchange of locomotives and crews, the Mozambique Railway (CFM) agreed to operate the section from the border to Sidvokodvo using their own locomotives and crews. However in 1975, CFM ceased to provide this service.

The Canadian Government provided technical assistance in running the entire railroad from 1975 until 1978 when the South African Transport System (SATS) replaced the Canadians.

In November, 1978, a new section of line was opened connecting Phuzummoya with Lavumisa in the South of the country, with a link to the South African Transport Services at Golela. This resulted in a steady growth of traffic carried by the Swaziland Railway despite the loss of iron ore traffic.

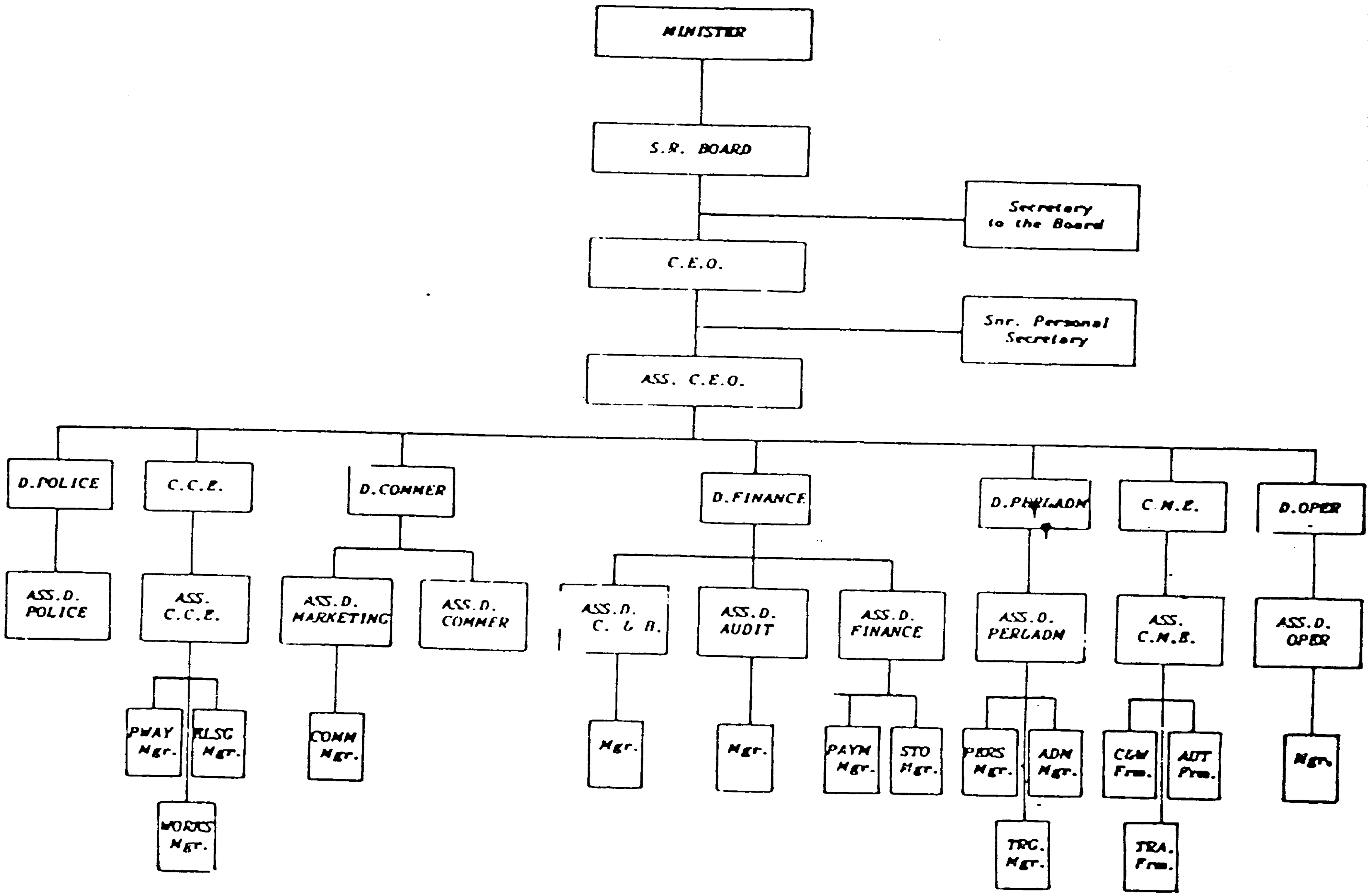
In October, 1981, the construction of an exchange yard at Siweni, 5 kilometers from the Mozambique border, was completed and became operational with the result that the Swaziland Railway now operates this section with its own crews and steam locomotives hired from South African Transport Services. Traffic is now mainly on the newly opened north-south line which offers a shorter route between Komatipoort in the Transvaal and Richards Bay. The line to Maputo still operates but carries little traffic.

II. ORGANIZATION AND PERSONNEL

Swaziland Railway currently has approximately 1,200 employees headed by the Chief Executive Officer who is assisted by seven division chiefs, i.e.

TABLE 1

SWAZILAND RAILWAY ORGANIZATIONAL CHART



Mechanical Engineering
Civil Engineering
Railway Police (Security)
Operations
Commercial
Personnel and Administration
Finance

The bulk of the employees range in skills from semi-skilled labor to first grade artisans. There are approximately 70 executives (grade 7 and above) of which 11 may be considered senior executives (grade 10 and above - division chiefs and assistant division chiefs).

Swaziland Railways is a semi-autonomous parastatal under the authority of the Ministry of Works, Power and Communication. The Minister appoints the seven member Board of Directors who are empowered to provide policy guidance and overall direction to the Railway. The Board includes ex officio, the Principal Secretaries of the Ministries of Works and Finance (See Table 2).

The incumbent Chief Executive Officer (CEO), who is responsible for running the railroad, is the only non-Swazi currently in a senior management position. He is scheduled to retire shortly. The Senior Swazi executives (i.e. the seven division chiefs and assistant CEO) generally have been with the organization from five to ten years each. However, most have only held their present position for two or three years. Consequently their range of management experience is limited. The three Division Chiefs with university degrees joined Swazi Rail within the last three years directly from the university. Two senior executives, the Director and Assistant Director of personnel are scheduled to retire in four years.

The work force is reported to be generally well disciplined and productive. However, no productivity study has ever been undertaken and cases of drunkenness and lack of cooperation have been noted. Generally, workers remain with Swazi Railway throughout their working life. Promotion is gradual but steady through the semi-skilled and artisanal ranks. Literacy is required for promotion beyond Grade III and this has been a barrier for a sizeable minority of workers.

The vacancy rate is virtually nil. However, it is difficult to assess how many incumbents are underqualified since the establishment of job-description and selection criteria has been haphazard. SATS conducted a review and revision of the salary grading structure in 1978. This should be revised and expanded to include job descriptions, promotion and selection criteria. Morale and productivity have been adversely affected by the common perception that political influence too often affects promotion and selection procedures. There are mechanisms for a yearly bonus and salary advances for effective workers. However, these are not given as a matter of course and so are not motivating devices.

III. STAFF DEVELOPMENT AND TRAINING

Swazi Railway has relied primarily on on-the-job training (o-j-t) for its workforce. Supplemented with extensive short courses at the Swazi Railroad Training Center at Sidvokodvo and the Swazi College of Technology (SCOT). The European Economic Commission, through its Regional Railway Training Scheme, has assisted in training many Swazi railwaymen at Sidvokodvo, in other Swazi institutions locally and within the region.

The Sidvokodvo Training Center was constructed in 1976. It is located approximately 30 kilometers west of Manzini on the Phuzumbya line, and shares the same facilities as the steam locomotive workshop. It was expanded in 1983 to three classrooms and boarding facilities for up to 16 students at any one time. Between January 1983 and March 1986 approximately 914 employees have been trained at Sidvokodvo comprising approximately 4400 person-weeks of training. The breakdown of training by division is shown on Table 3.

TABLE 3

Training at Sidvokodvo by Division

Division	Training
Civil	171
Mechanical	287
Operating	231
Security	38
Finance	19
Commercial	38
Personnel & Admin	130
	914

Over 50 courses have been taught at the Training Center since 1983. Courses range in length from a 2 day orientation to 18 week courses for diesel locomotive drivers. Most of the training has been for the mechanical and civil engineering staff. The size of the Center is adequate for its usage.

There are five permanent Training Center staff. The Assistant Director for Personnel, the Training Center manager, the Assistant Manager, a clerk and a typist.

Instructors are drawn from the other divisions as needed. This system does not give the instructors any time for preparation, evaluation or their own development. However, next years' budget provides for four permanent instructors to be transferred to the center from the Civil, Mechanical and Operations Divisions. Training aids at the Center include a photocopier, tape recorder, overhead projector, sound/slide projector, video equipment and a model human body for first aid courses. There are many technical pictures and diagrams available as well as several manuals written for Swaziland Railroads and models for instructional purposes. Considerable training has taken place in other Swazi institutions over the past three years, particularly the Swaziland College of Technology (SCOT). This breakdown is shown on Table 4.

TABLE 4

Training within Swaziland July 83 - March 86

Institution	Trainees	Training Weeks
S.C.O.T.	51	445
I.D.M.	25	114
S.I.M.P.A.	2	8
U.N.I.S.A.	23	38
E.D.A.*	16	26
P & T	8	16
Swazi Tech	9	9
Hydro-Diesel Workshop	2	4
	146	660

*Executive Development Africa (Pvt.)

The EEC has played a critical role in raising the quality of training for SR personnel. On March 12, 1981 and agreement was signed between the European Community, the Republic of Botswana and the Kingdom of Swaziland to develop a training program for the two railways at the technical, operational and managerial levels. The project was funded at ECU 2,000,000.

In 1984 this project was revised and extended under Lome II to include the retraining of technicians and crews from steam to diesel, and from conventional to air braking and track maintenance. The services of the training specialist was continued and National Railways of Zimbabwe was included in the program, primarily as a training center An additional sum of ECU 2,340,000 was provided.

Since the inception of the agreement for Swaziland, the EEC has funded the expansion of the Sidvokodvo Training Center, the

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provision of training aids and material, the services of a full-time training expert specializing in mechanical training, and training costs for Swazi personnel at local and regional institutions. The project also financed in 1981 a manpower study of current and future personnel needs.

IV. TRAINING, STAFF DEVELOPMENT, MANAGEMENT TECHNICAL AND OPERATIONAL NEEDS

As is indicated above Swaziland Railways with the assistance of the EEC has a rather thorough system of on-the-job and in-service training for it's technical and operational personnel. As long as SR continues to lease most of its motive power and rolling stock from neighboring countries, the existing system should be adequate. The only significant gap in this program is in the areas of training in machine tools and auto workshop training. This training is available at S.C.O.T. Another problem for many lower rank employees (grades 1 5/6) is illiteracy and inability to speak or understand English sufficiently. A program needs to be developed to identify and train employees with linguistic and literacy problems.

SR has begun shifting from steam to diesel. The EEC is assisting in the re-training required for this change, as well as a full range of other technical courses at Sidvokodvo and other institutions. It includes training for foreman and other low to mid-level supervisory staff. The EEC is also planning to finance the construction and equipment of a Diesel Training Center at Mpaka, scheduled for construction in 1989.

The gaps in technical training in the next three years are in automotive training and machine tool training where a total of 30-40 technicians need to be trained. Training facilities are available at local institutions. Another potentially more serious problem is in literacy and language. The number of railway personnel who need and want this training must be assessed and part-time programs and study groups should be developed accordingly.

It is recommended that both these problems be left with the EEC and Swazi Rail and not incorporated into this project. The EEC program is comprehensive and in place and could effectively organize the training of the automotive and machinist personnel. The problem is financing. The proposed AID project would finance some of the management training planned by EEC, thus freeing up funds for automotive and machinist personnel. At this point it is impossible to determine the need or cost for literacy training. However, typically literacy training is not an expensive exercise. It is more a matter of individual and organizational motivation. It is recommended that the AID project assess the literacy and language issues as part of its initial work force assessment.

Management and Administration

The primary training need for Swazi Rail is to make upper level Swazi management (grade 10 and above) more efficient and knowledgeable about modern concepts of running a railroad, i.e. development of corporate objectives and strategy, cost factoring, management information systems, efficient planning and budgeting, as well as efficient operations.

The Swazi's who hold the posts of division directors and assistant directors appear to be competent and energetic. However, many are recent appointees. Some had no railroad experience prior to their appointment. There is room for skill development in overall railroad management as well as within each division. Some of the specific training and development needs include the following:

The Board of Directors: The development of corporate objectives and strategy, development of costing and planning procedures, management information systems and organizational discipline begins with the Board of Directors. The Board must, with the assistance of SR top executive leadership, develop and ennunciate corporate objectives and strategy. Each Board member must also understand - and act accordingly - in regard to the Board's proper policy setting and advisory role.

The Chief Executive Officer: A Swazi must be identified and trained for this position. It is preferable to name someone who knows railroads in a responsible capacity (eg. one of the division directors, assistant directors, or assistant CEO). A university degree would be a marginal advantage. The CEO would have to acquire knowledge of railroad management systems with particular bias toward operations, finance and organization leadership/management.

For a railroad the size of Swazi Rail an assistant CEO is not necessary.

Finance Division: The most serious operational problems exist in the area of finance. Various financial systems must be developed or strengthened. These include cash management, budgeting and forecasting, general ledger accounting, debt and revenue monitoring. (See Annex 4). The Director of Finance must understand these systems to the extent of knowing when faults arise, why, and taking corrective action. The senior staff in the Finance Division must be able to implement these systems on a day-to-day basis.

Commercial Division: The particular weakness here is in costing and tariff setting, lack of regular information and general railroad management. Other specific skills needing upgrading include marketing and logistics management (pricing of product and services), sales management, customer relations, advertising and computer usage.

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Personnel Division: Two of the more senior executives direct the Personnel and Administration Division, i.e. the Director and the Assistant Director (Training Officer). However, both are scheduled for retirement in four years. It is, therefore, recommended that replacements for both be identified.

The candidate for the Director's slot should be trained up to the masters level in personnel management with emphasis on railroad manpower planning and evaluation systems. This can be done through formal masters program and attachment to an operating railroad. These skills should also be emphasized in on-the-job training.

Technical and Operational Divisions:- Operations, Mechanical, and Civil Engineering: For these divisions an important factor to keep in mind regarding training needs is that Swaziland Railway rents its locomotives. Therefore, intensive training in locomotive maintenance and repair is not only unnecessary but would probably be counterproductive. More important for the senior executives in these divisions would be training in railway and staff management as it related to their divisions, and the development and use of pertinent management information system (eg. inventory, safety, utilization forecasting).

Police (Security) Division: The key training element here is relating executive training to the need to include passenger and crew safety as a function of this division. This would include the development and monitoring of safety inspection and reporting systems.

V. TRAINING PLAN

Formal long-term academic training is not necessary to run a railroad. With the exception of the future Director of Personnel and Director of Finance, it is not proposed here. In these two positions it is desirable to have advanced formal training. However, on-the-job training will be an important component of their training as well.

The training strategy for Swazi Rail executives is on-the-job training under the direction of the T.A. team supplemented by appropriate short courses (in-service and outside) and short attachments to appropriate railways (eg. Kenya Rail, N.R.Z.). The goal of the training plan is to make the Swazi senior managers more effective and more knowledgeable in railroad management operations as these relate to their responsibilities.

The skills they will develop will include, but not be limited to the following:

- Basic management functions eg planning, organizing, motivating, evaluating, etc.

- Ability to use management information systems, e.g. strategic planning information, management control information, and operational information.

- Ability to use essential management related economic concepts eg: cost based tariff setting; demand, supply and cost analysis; variable, incremental and marginal cost concepts and forecasting.

- Ability to use various technically related management systems, such as inventory, utilization forecasting, costing, job assessment, manpower planning, safety systems,marketing.

The elements of the training plan consist of the following:

A. Needs Assessment and Training Plan

During the first six months of his/her incumbency the Chief of Party with the assistance of a Manpower Personnel and Training Advisor and the other long-term Advisors will develop criteria and a plan to assess the pool of management trainees to identify suitable counterparts. The plan will include job rotation, performance evaluation and skills assessment. He will also develop specific training plans for senior Swazi executives including timetables and benchmarks for progress. The training plan will consist of long-term, short-term and on-the-job training as well as attachments to other railroads.

The following is the current estimate of training needed but subject to revision as a result of the needs assessment.

B. Long Term Training

1.M.A. in Finance
1 M.A. in Personnel Management and Administration

C. On-The-Job Training

Informal on-the-job through contact with T.A. Team, as well as more structured training plan involving setting of objectives, and quarterly progress reviews.

Approximately 320 person-months of formal o-j-t in areas of systems management, senior management, personnel management, safety and financial and accounting systems. This will include one-on one training and in-house short courses and seminars. O-J-T training plans will consist of specific objectives and periodic assignments.

D. Short-Courses and Work Attachments

Approximately 60 person-months or short-courses and attachments (eg. attachments to Kenya and Zimbabwe rail systems, courses in railway management performance improvement, pricing and costing of transport services, transport/railroad policy issues, etc.). The need for short course and particularly railroad attachments for middle and senior executives is critical. It is anticipated that the project emphasis will be primarily attachments to railways in the region. As described in the next section, the costs of most of the short courses in the region are being supported and enhanced by other donor projects.

The Roles of the Chief of Party and the Personnel and Training Advisor

These two individuals will be the key to an effective training and staff development program. The chief of party and acting C.E.O. will provide the leadership, guidance and on-the-job training through interaction with the Swazi staff. The personnel and training advisor must insure that manpower and training systems are put in place - i.e. needs assessment, training plans, benchmarks, appropriate activities. Both individuals will have to work closely together, and obviously both will need excellent interpersonal and leadership skills.

Scope of Work for Personal and Training Advisor (PTA)

Term - 1.5 years

Qualifications

This individual should be an experienced railway personnel officer with at least three years as head of personnel and training division. Besides knowing railway personnel system, the individual must be experienced in developing structured and on-the-job training programs.

Terms of Reference

The individual should have two areas of responsibility - training and personnel/manpower systems. Tasks of developing the specific project training plan as well as manpower system will be the responsibility of the personnel and training advisor (PTA) working under the direction of the CEO and in close collaboration with the Personnel Officer, the Division Directors and other members of the T.A. team. The PTA duration of work should be between 15 and 18 months. She/he should begin work within three months after the arrival of the CEO. His/her task should include the following:

MONTH (After PTA arrival)

1-3 - Assess training needs for senior staff.
3-6 - Develop training plans with progress benchmarks.
4-12 - Arrange management/policy workshop for Board of Directors.

Hold exercise to revise personnel structure including the following:

Revised job assessments leading to new job description and salary structure.

System for recruitment, placement and evaluation of personnel.

Productivity assessments.

Revision of incentive schemes.

Improved co-ordination between the personnel and operational divisions.

Computerization of personnel/training information system to include all personnel records, reports, and projections. Revision/development of manpower plans for short, intermediate and long term.

12 PTA ends long term contract.

Remainder of work carried out on periodic visits of 1-3 months each.

18-21 Revise staff development/training plans, personnel systems arrange/provide short term and o-j-t as needed.

27-30 Same as above.
Long term trainees return.

36-39 Same as above.

VI Other Donors

During the life of this project two other donors railroad training programs are significant and compliment the project training plan.

The EEC program, previously described, runs through 1989. At this point it does not appear that it will be extended. However, for the remainder of 1988 and 1989, it will continue to Fund the training of all lower level start and has budgeted extensive mid and higher level management training at I.D.M., SIMPA, ESAMI and NRZ Railway School.

The Deutsche Eisenbahn - Consulting Group (DE-Consult) has devised a comprehensive regional training scheme to improve the efficiency of railway in SADCC. The first phase (i.e. the first three years) of the program has been fully funded at the level of 8.5 million U.S. dollars by several donors including the FRG, U.K., Canada, and Australia. Programs are scheduled to begin in September, under the direction of a SADCC National Railroad Training Specialist assigned to SATCC. The Program consists of eight elements:-

1. The appointment of a railway training expert at SATCC and assistance to the SATCC working group on railway training ($629,000).

2. Management Courses ($2,989,000).

3. Instructors' Training ($830,000).

4. Portuguese/English and English/Portuguese Language Courses ($500,000).

5. Specialist Courses for Managers (eg. marketing, traffic costing, informatics, finance) ($541,000).

6. Training Aids ($2,044,000).

7. Technical Courses for Engineers ($500,000).

8. Production of Handbooks and Manuals ($565,000).

This project will be able to benefit from these programs particularly in the areas of management, specialist and technical courses which will compliment the project training plan.

TECHNICAL ASSISTANCE, SCOPES OF WORK

A. Initial Short-Term Technical Assistance

Background

SR has been operating at a financial loss for the last five years. Some of these losses can be attributable to the financial debt it incurred in order to build new rail lines, while part of the loss has resulted from poor operating terms. USAID wishes to initiate a five-year technical assistance project with SR in which USAID would finance a team of technical assistance advisors who would be responsible for managing the railway and training Swazi nationals to assume the management roles within the organization. However, prior to arrival of the long-term technical assistance, USAID must assure itself that SR can be a financially and economically viable entity if the Railway makes changes in its method of operations. Therefore, USAID would like to contract initially with a team consisting of a senior railways operations expert, a financial expert, a lawyer, and a transport economist who will review SR's capital and operating structures, review legal commitments and make recommendations on the changes needed to revitalize the railway.

SCOPE OF WORK

Objective

Specific action will be needed to:

i) Restructure SR's loans to alleviate their short-term debt burden;

ii) Enter into legal and financial negotiations with SATS on financing the Northern Link "to improve the viability of SR";

iii) Ensure that the institutional environment is receptive to the Project and will allow the long-term technical assistance phase to be achieved.

The team will be required to perform the following tasks:

Financial

- Analyze SR's financial and capital structure. Recommend changes needed to recapitalize SR. For example, should Government of Swaziland loans be capitalized as equity and the Government given shares in Railway or should Government loans be forgiven?

Analyze SR's loan portfolio. Recommend possible changes to commercial loan portfolio which might assist or improve SR's financial viability--both in short- and long-term. For example, could loans be re-financed or payment terms renegotiated?

Examine SATS agreement with SR. Determine what changes are necessary to strengthen the agreement and safeguard SR's rights. Evaluate likelihood that SR will collect on the amount of losses it has sustained in 1987 and 1988 on the Northern Corridor. Review calculations of losses and determine if the amount calculated is reasonable and sustainable under negotiations with SATS. Evaluate, to the extent possible, the likelihood that the agreement could be renegotiated with SATS in order to safeguard SR's rights.

Prepare a series of sensitivity analyses reflecting changes to SR's financial picture if: (1) tariffs were adjusted; (2) commercial loans were refinanced; (3) SATS accepts Swaziland Railway's calculations of losses on the Northern Corridor; (4) Government of Swaziland transfers its loans to an equity share holding or forgives the debt; (5) other rail lines through Mozambique open; and (6) other possible scenarios were implemented.

Determine the amount of financing SR will need to meet its short-term creditors and continue operations. Evaluate possible sources of financing and make recommendations on what basis SR should continue.

Prepare an accurate cash forecast for SR for the next year if operations were to continue as is and evaluate the effect of proposed changes on SR's financial liquidity.

Evaluate impact of the various types of goods carried on Swaziland Railway's financial status--imports, exports, transit, etc. Determine if any goods are being carried at an operating loss, i.e., exclusive of depreciation, debt servicing, etc.

Legal

1. Provide an initial legal interpretation of the SATS Memorandum of Understanding on the operations and financing of the Northern Link.

2. Determine whether there is a prima faciae case for financial restitution or compensation for losses incurred on the link due to shortfalls in traffic since opening in 1986.

3. Provide advice on the negotiating position of SR with SATS to improve the financing of the Northern Link.

4. Prepare a brief for discussion with GOS lawyers.

5. Be prepared to support GOS and SR in negotiations to revise the agreement.

Railway Corporate Planning

1. Review the institutional relationship between the Government ministries and the SR Board and Management.

2. Obtain a thorough understanding of the problems that hinder good and effective working relationships.

3. Provide counseling to management and government officials to reduce misconceptions and barriers to corporate problem solving.

4. Help the recipient organization to perceive the specific problems that exist, their cause and the responsibility for corrective action.

5. Assess the conditions needed for continued USAID support, determine where difficulties could be anticipated and make recommendations to alter the program if necessary.

6. Participate with the financial and legal experts where they affect the process of improving the institutional environment.

Transport Economics

Evaluate the Government of Swaziland's commitment to strengthening SR and making it a financially viable organization. Determine what changes the Government is willing to accept. For example, would the Government allow SR to increase national tariffs? Will SATS and the Government allow tariffs to be raised to a more comparable level for transit traffic? Determine the role the Government of Swaziland feels SR should be taking -- commercial emphasis or social role. What is the government's policy on transport? Can the railway be made more competitive with road transport? What level of subsidies is the Government willing to bear in order to keep the railway operating? Examine road-rail competition and the Commission of Inquiry's findings and make recommendations for improving the railway's position.

B. LONG TERM TECHNICAL ASSISTANCE

Chief Executive Officer (Chief of Party)
Duration - 4 years
Qualifications

The candidate shall have at least 20 years experience in the management of railways of which at least 5 shall have been in a developing country, desirably in Africa. The candidate shall be required to have well developed managerial and administrative skills and in addition have a good sense of diplomacy and integrity.

The candidate shall have a good appreciation of railways management information, systems and procedure and be able to specify their requirements.

Minimum academic qualifications - MBA or equivalent although priority will be weighted more to experience than academic qualifications.

General

The position of Chief Executive Officer of Swaziland Railways will be vacated in October 1988. The candidate for CEO will be expected to fill this vacancy for a period of not less than 2 years and a new CEO who will be appointed during the life of project is prepared to assume full operational responsibilities. THe CEO will have full executive responsibilities for Swaziland Railways and will be responsible directly to the Board of Directors under the Minister of Works and Communications.

In addition to the executive responsibilities of CEO the position also includes being Chief of Party of the technical assistance team. The Chief of Party will be responsible for day-to-day management of the TA program, coordination and liaison with USAID and representation at national and international levels.

CEO-Specific Tasks
Short Term

- Revise short-term policies to reverse the deteriorating financial position of SR.

- Prepare a plan of action which includes the elements of the TA program, setting goals and targets for performance in all areas.

- Obtain confirmation and agreement on priorities for action from the Board of Directors and the Minister . The plan should address the following issues in detail:

    a) Communications with MOWC pricing policy for transit traffic;

b) Corporate objectives;
c) Financial structuring;
d) Commercial strategy;
e) Revenue and expenditure projections;
f) Outline training program to senior managers;
g) Program of implementation

The plan should be intended as a broad policy statement on the problems and aspirations of SR and, overall, improve the level of confidence by Government in SR management. Once approved the plan shall be included in SR's annual report (Y/E 31/3/90).

<u>Medium Term</u> -1991/2

The CEO shall ensure that the TA program is being carried out reporting every 3 months to USAID and the Board on its progress. In particular the following aspects will need to be redressed:

a) Inadequate Management Information
b) Weaknesses in internal audit procedures
c) Traffic costing and Tariff restructuring
d) Institutional linkages
e) Training program effectiveness
f) Competence of counterparts and suggestions for CEO succession.

<u>Long Term</u> (1992/3)

The succeeding CEO will be selected in this period and the expatriate CEO will take an advisory role. During the period the following tasks will need to be completed:

a) The definitive Corporate Plan;
b) A 5-year rolling business plan;
c) A comprehensive report on the TA program.

W

Financial Director

Duration-- A minimum of 2 years as Director then 1 year as advisor to the new director when that individual assumes full operational responsibility.

Qualifications

1. 12-15 years of financial experience reflecting increasing levels of responsibility and management experience.

2. Experience in review, analysis and design of financial systems in various types of organizations.

3. High level of exposure to broad managerial issues, able to identify, establish, and reach corporate strategy, goals and objectives.

4. Ability to manage host country nationals and short-term consultants. Good inter-personal skills and experience in working in overseas environment.

5. Ability to identify short-term TA needs, draft necessary scopes of work and supervise and evaluate the performance of consultants.

6. Experience in developing or operating financial systems on personal or micro computers.

7. Good writing skills. Ability to develop procedure manuals.

8. Academic or professional credentials -- Degree in finance or accounting. Certified Public Accountant or its equivalent.

Anticipated Tasks
Short Term

- Restructure long and short term debt.

- Improve billing and payment procedures.

- Improve SATS account controls.

- Increase accuracy of revenue forecasts.

- Price discriminate to maximize profits especially transit traffic.

- Reuse and improve financial agreement with SATS foı use of northern route.

- Determine departmental training needs for senior staff and propose program to the personnel director for inclusion in the manpower development plan.

Medium Term

- Establish budgeting formats and procedures to ensure consistency and reliability.

- Specify and implement improvements to cost accounting systems including documentation, procedures and training of personnel.

- Transfer internal audit function to CEO and modify procedures to permit its effective implementation.

- Improve overall accounting skills through a training program in conjunction with personnel director.

- Set in place improvements to traffic costing methods to ensure that tariffs can be accurately related to the long run variable cost of the service. (With the commercial director).

- Ascertain the organizational needs for financial data, specify and develop the necessary reports accordingly.

- Make the asset register more comprehensive increase accuracy of asset valuations, to determine depreciation and provide input to balance sheet.

- Introduce job evaluation and staff assessment procedures to the financial department.

Long Term

- Contribute to the production of a corporate strategy and provide inputs to the proposed 5 year business plan including financial projections, targets and performance criteria.
- Reexamine the loan redemption situation and propose changes if appropriate.
- Establish investment appraisal procedures so that the future performance of capital investments is more reliably determined.
- Review adequacy of systems and procedures in place and modify accordingly.
- Provide a summary report on the effectiveness of the TA involvement in the Financial Department covering:

  a) A description of all TA inputs that have taken place during the program.

  b) Commentary on the financial situation that has occurred during the program.

  c) Organizational changes made.

  d) A skills inventory showing improvements made.

  e) The financial strategy and projections.

  f) Commentary on prevailing strengths and weaknesses.

  g) Proposals for further improvement.

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Technical Advisor to the Commercial Director

Duration - 2 years

Qualifications - (to be completed)

Anticipated Tasks

Short Term

- Review revenue forecasts in detail and revise budget accordingly.
- Produce a preliminary marketing strategy which identifies potential areas for diversification, estimates present market shares, proposes targets for increasing the share of existing markets and estimate budgeting effects.
- Propose an advertising budget.
- Identify suitable marketing personnel from both within SR and from private sector.
- Closely examine tariffs to determine the profitability of the major commodities.
- Determine departmental training needs for senior staff and propose a program of training to the director of personnel for incorporation in the overall manpower development plan.

Medium Term

- Specify changes and additions to management information systems which will improve the quality of commercial management decision making.
- Establish performance criteria.
- Implement marketing strategy including making necessary organizational changes.
- Review effectiveness of invoicing and revenue collection procedures and propose improvements.
- Completely review traffic costing procedures, propose and implement changes (if necessary use STC's).
- Assist in restructuring tariffs to ensure that long run variable costs are met.
- Introduce job evaluation and staff assessment procedures in the commercial department.

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Long Term

- Provide input to corporate strategy.

- Put in place procedures to monitor the effects of government economic policy and regional external factors on both traffic and revenue.

- Review adequacy of new information systems in place including the implementation and utilization skills of commercial department personnel.

- Review marketing strategy, comment on its effectiveness and investigate the potential for investing in commercial deportment or agency representation in South Africa and elsewhere in the region.

- Produce a summary report on the effects of the TA program indicating the following:

  a) Description of TA inputs that have taken place during the program;

  b) Changes in traffic, market shares and revenue;

  c) Organizational changes made;

  d) Skills inventory showing improvements made;

  e) The commercial strategy;

  f) Prevailing strengths and weaknesses;

  g) Proposals for further improvements.

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Systems Advisor

Duration - 2 years

Qualifications - (to be completed)

Anticipated Tasks

1. Review all management information procedures in place and support line management in determining their applicability.

2. Review systems needs related to:

   a) Operating data
   b) Commodity related revenue and cost data
   c) Budgeting and performance data
   d) Monthly reconciliation and balance sheet cost analysis
   e) Debt and Credit control data
   f) Labor resource productivity and performance data
   g) Manpower training and information
   h) Personnel Administration

3. Based on review above, ascertain management information needs of the various divisions and assist the department heads and senior level management to develop specifications for an MIS which will provide the required data.

4. Review automation needs of the the organization to determine hardware and software requirements. Develop a procurement plan to purchase the necessary equipment.

5. Develop a traffic costing system in conjunction with the financial director which will provide a derivation of variable costs by commodity by route. This would include application of internationally accepted techniques to allocate the variable costs to both movement and terminal functions as well as identify those fixed charges or costs which can not be covered directly out of traffic related items.

6. Train a counterpart systems analyst. The expatriate systems analyst will ensure that all systems in place can be adequately maintained by local personnel and his own function will be assimilated by a local Swazi national.

Personnel and Training Advisor
Term - 1.5 years
Qualifications

This individual should be an experienced railway personnel officer with at least three years as head of personnel and training division. Besides knowing railway personnel system, the individual must be experienced in developing structured and on-the-job training program.

This individual will have two areas of responsibility -- training and personnel/manpower systems. Tasks of developing the specific project training plan as well as manpower system will be the responsibility of the personnel and training advisor (PTA) working under the direction of the CEO and in close collaboration with the Personnel Officer, the Division Directors and members of the T.A team. The PTA duration of work should be between 15 and 18 months. She/he should begin work within three months after the arrival of the CEO. His/her task should include the following:

MONTH (After PTA arrival)

1-3 -Assess training needs for senior staff.

3-6 -Develop training plans with progress benchmarks.

4-12 Arrange management/policy workshop for Board of Directors.

End exercise to revise personnel structure including the following:

- Revised job assessments leading to new job description and salary structure.
- System for recruitment, placement and evaluation of personnel.
- Productivity assessments
- Revision of incentive schemes
- Improved co-ordination between the personnel and operational divisions.
- Computerization of personnel/training information system to include a l personnel records, reports,and projections.
- Revision/development of manpower plans for short, intermediate and long term.

12 PTA ends long term contract.
Remainder of work carried out on periodic visits of 1-3 months each.

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18-21 Revise staff development /training plans, personnel systems arrange/provide short term and OJT as needed.

27-30 Same as above
Long term trainees return.

36-39 Same as above.

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Operations Advisor

Duration -- 2 years

Qualifications - to be completed

Anticipated Tasks

1. Review all management information in place to determine its applicability to railway operations.

2. Review locomotive systems needs related to operating data:

   a) Number of locomotives leased and their daily costs.

   b) Type of locomotives, usage and ton-km.

   c) Maintenance, repair, breakdown, time not in use, when taken by leasing agency and arrival date of replacement.

   d) Type of maintenance in place and applicability of expansion into monthly, semi annually, 2 year, 4 year, 8 year periodic maintenance.

   e) Locomotive availability, utilization and operation.

   f) Train turnaround.

3. Review wagon systems needs relating to operating data.

   a) Number of wagons owned and number leased and at what cost.

   b) Type of wagons, usage and ton-km.

   c) Maintenance, repair, breakdown, time not in use, including time used in maintenance.

   d) Wagon requirements and types if totally owned. Expansion of maintenance and repair facilities.

   e) Wagon turnaround, duration of foreign wagons in Swaziland and their related costs.

4. Review present use of steam locos versus diesel or diesel/steam mix. Effect on existing system of total use of diesel.

5. Review training needs and time log based on the above.

6. Review workshop needs related to operating data:

   a) Capacity of workshop for 30 day through, 4 year locomotive maintenance.

b) Capacity or workshop for wagon needs.

c) Existing equipment, required equipment.

d) Existing tools, required tools.

e) Existing artisan skills, required skills for different types of locomotives.

f) Stores system, procurement system, workshop planner.

7. Based on review above, coordinate with other divisions and management.

8. Train a counterpart on railways operations so that all systems in place can be adequately maintained by local personnel.

9. Assist and work with short-term TA on future possibilities of lease, lease/buy, buy new, buy used locomotives and wagons together with total cost differential.

AGREEMENTS BETWEEN SWAZILAND AND THE REPUBLIC OF SOUTH AFRICA

The Northern Link was a joint project by the Republic of South Africa and the Kingdom of Swaziland to decrease the costs of transit traffic going to and from the Eastern Transvaal and the South African ports of Richards Bay and Durban. The importance of the South African contribution in the building of the Link and in it s operation was recognized by the Swazi Minister of Works and Communications. Chief Sipho Shongwe in his February 4, 1987 speech on the occasion of the Link's inauguration: "The economic viability of this new railway will depend to a very great extent on traffic emanating from the Republic of South Africa. It is our hope that South African Railways will route as much through traffic as can be economically justified through this new line."

The purpose of this annex is to describe, on the basis of available information, the history of traffic forecasts and the obligation of South Africa Transport Services (SATS) concerning transit traffic on the Northern Link. There is considerable difference of opinion on this subject, ranging from the contention that SATS is responsible for funding Swazi Railways (SR) deficit on the Northern Link to the contention that SATS has no obligation whatsoever with regard to traffic levels or operating deficits. This annex will review both the available legal documentation and other documents relative to traffic forecasts and deficit coverage.

In 1979, during the discussions as to the feasibility of the Northern Link, the director general of South African Railways wrote a March 29, letter to the Chief Executive Officer of SR providing "details of the annual traffic which is expected to flow from the Republic of South Africa through Swaziland over the suggested rail connection." The traffic mentioned was comprised of: (a) 1,751,900 tons from the Eastern Transvaal to the North Coast and Durban (including 1,200,000 tons of rock phosphate, 300,000 tons of phosphoric acid and 109,900 tons of fruit for export; (b) 342,500 tons from the Steelpoort branch line to the North Coast and Durban (including 177,400 tons of chrome for local consumption and 52,000 tons of chrome for export); and (c) 116,300 tons from the North Coast and Durban to the Eastern Transvaal and the Steelpoort branch line. These totalled 2.2 million ton annually.

While a number of traffic figures were used during the next several years, the minimum estimation was usually i the range mentioned by the 1979 SAR letter. In a December 1983 feasibility study undertaken for the Swaziland government, SOFRERAIL consultants, for example, estimated 1982/83 volume ranging from 1.9 to 2.4 million tons as the level of transit traffic that would be sent over the Northern Link from SATS and, for the year 2000, 2.18 to 4.52 million tons. This report, however, clearly indicated that SAR was not at that point prepared to guarantee any traffic volume or a minimum amount of revenue although such guarantees are common for new transport investments, especially those tied to mineral transportation (including evidently the coal line from the Reef area to Richards Bay). SOFRERAIL advised that "SR is in a position to defer the decision of building the Link until SAR:

- has successfully negotiated with all companies presently involved in Contracts for Conveyance of commodities for which the Link is a natural alternative route, an additional clause to such Contracts to the effect that; (i) once the Link is commissioned, all relevant traffic should be routed through it; and (ii) this condition will be carried forward through future renewals of said Contracts.

- commits itself to insert a similar clause into any new Contract to be entered into in future with the same Companies or other Companies, when traffic from/to east of Airline to/from Richards Bay/Durban.

- commits itself to route through the Link all general traffic (not subject to Contract) from/to east of Airline to/from Richards Bay/Durban.

On the other hand, SR should be prepared to accept that a certain proportion of the benefits to be derived from using the Link be allocated to making up for lower tariff rates."

During discussions between SOFRERAIL and SAR December 18-19, 1980, the following exchanges took place according to the SOFRERAIL Report:

"SOFRERAIL: SR is not likely to engage into huge investments for constructing the Link unless it is guaranteed, in one way or another, a sufficient level of revenue to cover the redemption of capital and to wage the manpower they have to hire and train for operating the Link.

"S. : Traffic forecasts can only have an indicatory value and SAR car in no way promise that they will materialize. Besides, SAR's customers are free to specify by which route they want their consignments despatched and they may well decide that it is safer to continue using the present route; this specially applies to the rock phosphate Company who may fear that, if the new route ends up being unreliable, its (present) available capacity has been allocated to other users. Therefore, SAR is not prepared to vouch any traffic guarantee and SR (i) has to be satisfied that SAR's decision to invest in their side of the project is a sufficient proof that the project is viable and (ii) has to be prepared to grant the Customers tariff concessions which induce them to using the new route.

"SOFRERAIL: SAR's willingness to invest in the project is certainly an indication that they believe the Link will carry enough traffic to make it viable. However, the risk to them is much less critical than to Swaziland as the capital required is very small compared to SAR's overall investment outlays and they would easily make up for

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the losses if this particular investment were faulty. Therefore, SAR should accept to guarantee SR - if not a determined amount of traffic volume, at least a minimum amount of revenue.

SAR: SAR is certainly not considering such a guarantee."

There is no further mention in the SOFRERAIL reports of guarantees.

At a special meeting of the SR Board of Directors on November 30, 1981, the Chairman stated that the negotiations for the Northern Link project had reached a stage where the Government "required a resolution from the Railway Board to proceed with construction." In answer to a question by one Board member about the Link's feasibility, the chairman replied that "as the Board was aware, the SAR had virtually guaranteed the viability of the line based on present traffics."

The Memorandum of Understanding between the Kingdom of Swaziland and the Republic of South Africa dated November 9, 1981 and the Business Agreement between SATS and SR of April 1982 are the only legal agreements available at present.

The Memorandum of Understanding states in clauses 3.2 "The South African Transport Services will endeavor to route through (the Northern Link) as much traffic as can be economically justified in comparison with other north-south routes." In clause 4 it is stated that: Swaziland Railway and the South African Transport Services have included in their assessment of commercial viability the following traffic volumes and calculated tariffs for the Swaziland Railway proportion in respect of the traffic described in clause 3.2: including 1.2 million tons of rock phosphate, .3 million tons of phospheric acid and .35 million tons of other traffic. These amounts were based on SATS' 1980/81 financial year "which are firm minimum values" expected to escalate thereafter.

With regard to any deficit on the North Link, clause 4.1 of the Memorandum of Understanding states: "If the total revenue from all traffic transversing part of the whole of the section of line within Swaziland is less than Swaziland Railway's costs in any one financial year during the first twenty (20) years of operation of the line, Swaziland and the South African Transport Services shall consult with a view to determining how financing shall be arranged for any agreed shortfall between costs and revenues, provided always that:

(a) Swaziland Railway's costs shall be taken as meaning:

- all operating costs,
- capital costs of the North Link,
- such costs incurred on the Southern Link as represent a replacement allowance for present fixed assets due to the railing of transit traffic;

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(b) it shall be Swaziland Railway's responsibility to satisfy the South African Transport Services as to the extent of the shortfall;

(c) such shortfall shall not include any costs that could have been avoided;

(d) any accumulative surpluses accrued since commissioning of the line shall be taken into account."

The Memorandum of Understanding does not include any provision for arbitration in case of dispute between the two parties.

The Business Agreement mentions the volume of traffic on the Northern Link as follows: "S.A. Transport Services undertakes to direct as much transit traffic as is possible through the Kingdom of Swaziland provided such action can economically be justified, based on cost." However, with regard to rates, clause 4.2.2 allows that rates on contract traffic are binding if both SATS and SR agree on the rates. An arbitration procedure is established in the Business Agreement for all matter 13 year length of the initial period of the Agreement.

In its 1981-82 annual report SATS notes with regard to the Northern Link, inter alia, "Another very important aspect is that the S.A. Transport Services has undertaken to assist Swaziland Railways with bridging finance for a period of twenty years in case Swaziland Railways' revenue from the line in any year is less than its operating costs. The finance will be in the form of normal loans at current interest rates."

Conclusion

A strict legal interpretation of SATS' obligations with regard to a guaranteed volume of traffic and funding part or all of any deficit on the Northern Link requires a lawyer. In any case, while the Business Agreement suggests that SATS will make its best efforts to orient traffic to the Northern Link, there would not appear to have much practical application beyond a statement of good intention although it is subject to arbitration. The one discussion of funding a deficit leaves several loopholes and/or areas for disagreement in interpretation and there is no provision for arbitration. Therefore, it appears, that the traffic guarantees suggested by SOFRERAIL were not granted and there is no legal obligation to fund a deficit beyond an exchange of views. Whether or not there is an implied obligation, or a non-legal but still strong obligation, is another matter.

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