PN-ABX-538

Mozambique Private Sector Road Transport Support Study

Phase I: Diagnostic Study

Draft Final Report

Prepared for the Government of Mozambique

April, 1992

Privatization and Development Project
USAID Contract No. DPE-0016-Q-00-1002-00

Prepared by:

Abt Associates Inc.
in association with
Price Waterhouse/International Privatization Group

CONTENTS

CONTENTS (cont.)

LIST OF TERMS

Acronyms

ASDI	Swedish International Development Agency
AGRICOM	State Enterprise for Agricultural Marketing
BOM	Bank of Mozambique
CAMOC	Camionagem de Mozambique (State Trucking Company)
CFM	National Railway of Mozambique
CIF	Cost, Insurance & Freight
CIP	Commodity Import Program
DNEP	National Directorate of Roads and Bridges
DPCCN	Department for the Prevention and Combat of Natural Calamities
E.E.	Empresa Estatal (State-Owned Enterprise)
EMOSE	Empresa Mocambicana de Seguros (Insurance Company of Mozambique)
GRM	Government of the Republic of Mozambique
GVW	Gross Vehicle Weight
MSC	Mercado Secundario de Cambio (Secondary Foreign Exchange Market)
PTA	Preferential Trade Area (for East and Southern Africa)
SATCC	Southern African Transport and Communications Commission
SATS	South African Transport Services
SME	Small and Medium Scale Enterprise
USAID	United States Agency for International Development

Glossary

comerciante	trader
metical	Mozambique currency; US$1 = 2,100 meticais at the MSC rate (early March, 1992); abbreviation: Mt
meticais	plural of metical

PREFACE

This diagnostic study was undertaken by an Abt Associates Inc. team on the behalf of the Government of Mozambique, with funding provided by USAID/Mozambique through the "Privatization and Development" contract held by Price Waterhouse. The World Bank assisted with the technical design of the consultant's Terms of Reference.

We thank Messrs. Tim Born and Peter Argo, USAID/Mozambique, for their overall technical direction and substantive guidance. We appreciate as well the important input of Mission management staff, and of Mr. Carlos DeCastro, consultant to the World Bank in Washington DC.

The team is particularly grateful for the cooperation and information provided by the numerous members of the public and private sectors in Mozambique contacted during the course of the study.

Finally, we would like to thank our colleagues James Waddell, Mara Fellouris and Peggy Norgren of Price Waterhouse's International Privatization Group for their support and technical assistance.

We take full responsibility for any errors or omissions in the report.

Anthony Davis
Charles Reinhardt
Harold Kurzman

EXECUTIVE SUMMARY

Mozambique Private Sector Road Transport Support Study

Phase I: Diagnostic Study

1.1 Background and Study Objectives

Within the broader context of the Economic and Social Rehabilitation Program, the Government of Mozambique (GRM) has identified improvements to transport infrastructure serving domestic needs as a priority for investment. The main objective is to promote rural development and trade, despite the constraints imposed by the continuing adverse security situation.

The GRM has emphasized that development of a road transport subsector which relies on the private sector will require development of a sensible program of policy and regulatory reform. Principal constraints to efficient functioning of the subsector are seen by government as:

a. High concentration of the truck fleet in large Government-controlled or parastatal fleets;

b. Inefficient vehicle utilization; and,

c. Poor facilities for maintenance and other support services.

The overall objectives of this current study are to:

- Assess the prospects and most suitable channels for divestment of parastatal truck fleets; and,

- Develop proposals for the liberalization of regulations and other restrictions on private sector road transport activities.

The study has been divided into two phases -- Phase I: Diagnostic Study; and, Phase II: Divestment/Liberalization Plans.

- The purpose of Phase I is to collect and analyze basic information on the nature and structure of the trucking industry, and to assess the current status and government intentions with regard to divestment of the parastatal truck fleets and liberalization of the trucking industry. This report reflects Phase I findings only.

- In Phase II, an action plan for the liberalization of trucking industry regulation and creation of an enabling environment will be developed. In addition, the feasibility of parastatal fleet divestment will be tested, and if the results are favorable, then an overall program and process for divestment will be developed.

1.2 Conduct of the Study

Field work for Phase I of the study was conducted in Mozambique during March 1992, where interviews were held with members of government, the private sector and members of the donor community.

The core team included: Anthony Davis, Team Leader/Privatization Specialist (Abt Associates); Charles Reinhardt, Trucking Operations Specialist (Abt consultant); and, Harold Kurzman, Trucking Policy and Regulation Specialist (Abt consultant).

The study was funded by USAID, via the "Privatization and Development" contract held by Price Waterhouse, under which Abt Associates is a sub-contractor.

1.3 Main Findings and Conclusions

A. Nature and Structure of Fleet

- The size Mozambique's overall truck fleet has contracted substantially since Independence, and the share accounted for by the private sector has declined even more rapidly.

- The overall truck fleet is estimated at 8,000 to 10,000 units. However: (i) the vast majority are thought to be smaller trucks in the 2- to 5-ton range; and, (ii) many trucks are out of service due to the war or awaiting repairs.

- Truck fleet ownership is concentrated in four principal segments:

  - Private vehicles operated by small businessmen and traders;

  - Proprietary fleets of large corporations, which in theory do not provide for-hire services;

  - Common carrier road haulers offering transport services for hire; and,

  - Large, government-owned and parastatal fleets.

- There are four main parastatal trucking fleets, operated by: (i) CAMOC; (ii) AGRICOM; (iii) DPCCN; and, (iv) Transcarga, respectively.

  CAMOC is the national state trucking company which was formed by consolidating the operations of several private trucking firms which operated in the pre-Independence period.

  The fleet consists of forty-one trucks, with a 21-ton capacity each; twenty-four trucks, or 59 percent, are currently out of service; nearly all trucks were manufactured by Scania; and, the trucks range from 3 to 12 years in age, with the fleet having an average age of 9.5 years.

  AGRICOM is a state enterprise that was formed to stabilize agricultural production and prices. AGRICOM's truck fleet transports seeds, fertilizers and other inputs to farms, and crops and other produce to market.

  The fleet comprises 170 trucks (mainly Scania, Renault and Mercedes Benz), ranging from 2 to 15 tons in capacity, of which 79 percent is operational; half of all the trucks are 6 years old or less; fleets are active in all 10 provinces, with the greatest number of trucks concentrated in Nampula, Cabo Delgado, Maputo and Niassa; and, AGRICOM also has 141 Massey-Ferguson farm tractors of which 108 are operational, which it uses for transporting goods.

  DPCCN was established in 1980 as Mozambique's national disaster relief organization, and transports relief cargo throughout the country, particularly to remote and/or war-torn areas.

  The fleet consists of 510 trucks ranging in size from 4 to 25 tons, the average being 11 tons; 371 trucks, or 72 percent, are currently operational; 80 percent of the fleet is 6 years old or less; major makes of trucks include Leyland, Volvo, Fiat, Nissan and DAF; and, donations from Italy, ASDI and CARE account for 46 percent of DPCCN's total truck transport capacity.

  Transcarga is the principal national hauler serving the Beira Corridor. It is jointly owned by several government entities, and was established with substantial assistance from ASDI.

  Transcarga operates a modern fleet of forty 25-ton tractor-trailers, all of which are four years old or less.

- The economics of the trucking business in Mozambique under current circumstances are very unfavorable as a consequence of the high cost of vehicles and inputs, low levels of utilization, poor road conditions, poor maintenance facilities and practices, and risks and damage resulting from the war. Official tariffs fall far short of break-even thresholds. Most parastatal fleets are heavily subsidized through donations of vehicles and other inputs to truck operations.

B. Trucking Industry Regulation and Constraints

- While existing regulation of road transport in practice presents little hinderance to private truck operators, because enforcement is minimal, much can be done to create an enabling environment to enhance private sector road transport.

- A number of initiatives are underway to improve road transport regulation.

  - Liberalization of tariffs, improved collection/system of user charges, administration of a Road Fund, and establishment of an Institute of Road Transport are all being contemplated.

  - However, full and efficient implementation of these initiatives has yet to be achieved, and other priorities need to be addressed as well.

- Other priority regulatory areas which need to be addressed include the following.

  - Taxes and levies on vehicle operations, especially tariffs and other charges levied on imported spares and tires, are inordinately high and place a great financial burden on truckers, particularly given the intensity with which these inputs are used in the Mozambican context.

  - Practices and procedures to ensure public safety on roads barely exist, and where evident, are poorly enforced.

  - Roads are poorly maintained, and sources and allocations of funds for maintenance are neither sufficient nor rationally disbursed.

- A number of other constraints to the efficient functioning of private sector road transport exist and should be addressed.

  Credit is very expensive and in short supply.

  Comprehensive insurance -- exclusive of war-related risk -- exists, but the sole monopoly insurance provider rarely settles claims.

- Spare parts are expensive, in short supply, and suboptimal use is made of used and cannibalized parts.

- Skills are lacking at all levels of the trucking industry and in related government agencies, especially with the required change in government's role as a result of increased private/reduced public sector participation in fleet ownership and operation.

- Transporter associations, known as "nucleos", are meant to exist in every province. However, only a few are active and largely operate as booking agents only.

C. Divestment of Government-Owned Fleets

- An overall policy for the divestment of public enterprises, supported by the necessary basic laws and regulations, is in place in Mozambique. The general institutional arrangements for assessing and ultimately executing privatization initiatives for a given public enterprise are also set out in broad terms.

- Thus, the issue with regard to the divestment of government-owned truck fleets is largely a question of whether the parastatal fleets should be divested. This in turn will depend primarily on:

  (i) the absorptive capacity of the private sector, especially with respect to financial resources and the human capacity to profitably operate and maintain the vehicles;

  (ii) the specific divestment process chosen in individual cases, and the government's capacity to implement any given process; and,

  (iii) assumptions regarding the nature and continuation of the war.

- A number of key considerations will heavily influence the design and selection of future divestment action plans.

  - The motivation for fleet divestment is driven more by the realization that the fleets are poorly managed and under-utilized, than by financial or fiscal needs.

  - Divestment of the fleets will involve a number of ministries and other government entities, which either operate the fleets and/or have a mandated role in the divestment process.

There is no clear consensus within government on: (i) the definition of what constitutes privatization and/or divestment; nor, (ii) the process by which fleets are to be divested.

Differences of opinion exist as to which entity is the recipient of financial proceeds from divestment -- the Treasury is the most likely candidate but the line ministries in charge of the divested fleets are also possibilities.

Deciding the optimal timing of divestment is complex -- many factors argue in favor of action in the near term (maximizing fleet value, reducing fiscal drain and implicit subsidization, and leveraging the buoyant market conditions implied by the drought situation). However, the human costs if the private sector does not adequately serve the more remote, war-torn areas are extremely high, especially under current drought conditions.

The absorptive capacity of the private sector (managerial, financial, and operational) is limited, especially for smaller entrepreneurs.

Much of the parastatal fleet is not suited to international or long-haul traffic -- this should bias the "distribution/sale" of trucks in favor of smaller owner-operators, serving rural, domestic market segments.

The geographic dispersion of fleets, along provincial lines, should be taken into consideration in the divestment process.

As long as the war continues, operating costs will remain high, physical operating conditions will be suboptimal, and the government may have to act as transporter of last resort. Fleet ownership is not a pre-requisite for the government to perform this function -- it can arrange to reserve "blocks" of trucking capacity as part of the terms of a sale or lease agreement.

- The clarity and status of divestment for the individual parastatal fleets varies considerably. In all cases, however, it is recognized that poor management is a limiting constraint to efficient operations -- and needs to be addressed.

  CAMOC is clearly slated for divestment. A bid has been received from Transcarga for CAMOC's Maputo operations, and is in principle acceptable to the government provided Transcarga finds a private foreign firm with which to associate, in order to inject further financial and managerial resources. No offers exist for CAMOC's operations outside Maputo.

  AGRICOM's transport division is to be spun-off. However, it has not been decided whether privatization, divestment, or the creation of autonomous, government-owned companies should be the course of action.

DPCCN's fleet is under consideration for divestment. However, given the disaster relief nature of DPCCN's function and the current drought situation, the timing and degree of fleet divestment are in question. Most observers feel a drought year is not the year for divestment, and expect thereafter that DPCCN will need to act as "transporter of last resort" under certain circumstances.

Transcarga is not considered by the government to be a parastatal and thus, is not under consideration for divestment. This is despite Transcarga being almost entirely government owned. The impending departure of foreign technical assistance from Transcarga will test its managerial capacity.

- It is questionable whether now is the right time for divestment as a course of action.

  An enabling environment needs to be put in place first, or at least concurrently, as a pre-requisite to divestment.

  The main problems that are cited with regards to the parastatal fleets -- high concentration of the fleet in the public sector and poor management/under-utilization of the fleets -- can be addressed by solutions which do not involve divestment or the sale of assets. These need to be explored.

  Furthermore, there is a need for additional evidence that: (i) the private sector can either manage the fleet better than the public sector and has the financial means to buy/lease and operate the vehicles; and, (ii) the government has the institutional capacity to carry out complex divestment programs -- and they are likely to be complicated given the resource constraints and "hostile" environment present in Mozambique.

  Finally, the continuing war -- with the resulting increased costs and risks of doing business (insurance, convoys, maintenance, loss of assets) and the overall dampening demand for trucking services -- reduces the attractiveness of the industry to prospective private sector participants/investors.

1.4 Preliminary Recommendations and Next Steps

A. Liberalization Plan for Road Transport Industry

Irrespective of whether parastatal fleets are divested, a plan for the liberalization of regulations and creation of an enabling environment for private sector road transport activities should be developed.

- Priority areas for liberalization and creation of an enabling environment include:

  - Improve access to, and costs of, finance, through the development of new mechanisms and/or institutional entities.

  - Develop a war-related risk insurance scheme for vehicles, with government acting as guarantor and/or initial funding provided by donors.

  - Improve availability and cost of imported and used spare parts.

  - Design industry-specific training programs for private sector operators, especially small owner-operators, and to train government in its new functions -- detailed terms of reference need to be developed to identify types of training needed and appropriate delivery models.

  - Ensure that proposed tariff liberalization is fully implemented.

- Additional related tasks to be undertaken in Phase II include:

  a. Investigate non-divestment means for shifting the balance of the fleet into the private sector. Consider feasibility of :

     -- Stipulating that all new vehicles provided by donors in the future be allocated to the private sector, using a USAID-type CIP or similar mechanism; and/or,

     -- Converting private dedicated fleets to common carrier usage.

  b. Assess the impact of the liberalization plan on the economics of the road transport business, and conduct sensitivity analyses for key variables such as credit, insurance, and spare parts availability.

B. Feasibility of Parastatal Truck Fleet Divestment

The feasibility of divesting the major parastatal truck fleets needs to be tested, in advance of developing specific divestment plans. If divestment is considered infeasible in the near term, then divestment plans should be postponed until the liberalization of regulations and the creation of an enabling environment for private sector road transport activities can be accomplished.

- The main features of the feasibility analysis should include at a minimum the following.

  Parameters of the analysis should include: (i) all four parastatals identified in this study; and, (ii) assessment of a range of divestment and privatization options.

  Assess the capacity of both the private and public sectors with respect to divestment, particularly the financial and managerial capacity of the private sector and the public sector's ability to implement alternative divestment and privatization options.

  Conduct a preliminary valuation of the main parastatal truck fleets to develop "order of magnitude" estimates of the level of financial resources the private sector would need to mobilize to "acquire" the fleet. The purpose of this activity is more to gauge private sector capacity requirements than to establish values/prices for divestment.

  Clarify key institutional and procedural issues related to divestment of truck fleets, such as which entity receives the financial proceeds from the sale or lease of assets, and the definition of what constitutes divestment versus privatization.

- If the outcome of the feasibility analysis is generally favorable, then an overall outline of a divestment plan should be developed. This would identify key steps, time frame and an overall process for divestment, as well as evaluate the most feasible options for divestment or privatization of the four individual fleets.

C. Recommended Non-Phase II Activities:

Further activities not contemplated for Phase II of this study but which should be undertaken nonetheless, include the following.

- Assess the feasibility of, and requirements for, rehabilitating the existing truck fleet (be it publicly or privately owned), and for developing a vehicle rehabilitation industry on an on-going basis.

- Assess the prospects and requirements for rehabilitation of workshops and related facilities, and managing the inventory and flow of spare parts.

- Conduct an institutional analysis of government entities involved in road transport regulation and make recommendations in light of the government's new role as a result of industry liberalization.

- Implement the training programs designed as a follow-on activity to Phase II.

Chapter 2

INTRODUCTION

2.1 Background

Within the broader context of the Economic and Social Pehabilitation Program, the Government of Mozambique (GRM) has identified improvements to transport infrastructure serving domestic needs as a priority for investment. The main objective is to promote rural development and trade, despite the constraints imposed by the continuing adverse security situation.

In recent years, substantial amounts of financial resources have been channeled to the rehabilitation of railway corridors to re-open international transit traffic facilities and restore an important source of foreign exchange earnings. However, the emphasis of public expenditure programs in the transport sector is now shifting toward: (i) the rehabilitation of rural feeder road networks and primary and secondary roads providing access to the sea; and, (ii) increasing coastal shipping and trucking capacity.

The GRM is currently applying to the World Bank for a credit for a Coastal Shipping Project, but recognizes the need for a coherent strategy to develop all modes of transport serving the domestic economy. Policy reforms in the road transport subsector, which lay the groundwork for subsequent investment activities in road rehabilitation and related road transport services are seen as an early priority activity.

Consequently, the GRM has emphasized that development of a road transport subsector which relies on the private sector will require development of a sensible program of policy and regulatory reform. Principal constraints to efficient functioning of the subsector are seen by government as: (i) high concentration of the truck fleet in large Government-controlled or parastatal fleets; (ii) inefficient vehicle utilization; and, (iii) poor facilities for maintenance and other support services.

The GRM has decided to study the most cost-effective means to remedy these constraints, and has sought technical assistance to help prepare action programs leading to: (i) privatization of parastatal and Government trucking fleets; (ii) liberalization of regulatory constraints to private initiatives in the trucking subsector; and, (iii) rehabilitation and productive utilization of the existing fleet.

To support the GRM in these efforts, the World Bank and USAID are cooperating to conduct a set of studies which contain actions and proposals suitable for immediate implementation through either USAID program assistance or through a proposed World Bank/IDA roads project.

These donors are planning to assist the GRM in four specific study areas:

1. Development of guidelines for shifting the balance of the trucking industry from the public to the private sector.

2. Development of proposals for the liberalization of regulations and other restrictions on private sector road transport activities, including reduced and re-oriented role for Government agencies.

3. Identification of types of training and/or other assistance needed by emerging private sector operators and by GRM agencies to fulfill their new roles in road transport activities.

4. Assessment of the potential for rehabilitation of existing resources and projected needs -- including the mechanical condition of the present parastatal fleets and the mechanical skills at the workshop level.

This current study addresses the first two areas above -- shifting the balance to the private sector and liberalization of the trucking industry -- and will develop the Terms of Reference for assistance in the third area "Training". Work has not yet started in the fourth area "Rehabilitation".

2.2 Study Objectives

The overall objectives of this current study are to:

a. Assess the prospects and most suitable channels for divestment of parastatal truck fleets; and,

b. Develop proposals for the liberalization of regulations and other restrictions on private sector road transport activities.

The study has been divided into two phases: (i) Phase I: Diagnostic Study; and (ii) Phase II: Divestment/Liberalization Plans. The purpose of Phase I is to collect and analyze basic information of the nature and structure of the trucking industry, and to assess the current status and government intentions with regard to divestment of the parastatal truck fleet and liberalization of the trucking industry. This report reflects Phase I findings only. In Phase II, an action program for liberalization of trucking industry regulation and for the divestment of the

main parastatal trucking fleets will be developed[1]. The Terms of Reference for the overall study are provided in Annex A.

2.3 Conduct of the Study

Field work for Phase I of the study was conducted in Mozambique during March 1992, where interviews were held with members of government, the private sector and members of the donor community (see Annex B for complete list of contacts).

The core team included: Anthony Davis, Team Leader/Privatization Specialist (Abt Associates); Charles Reinhardt, Trucking Operations Specialist (Abt consultant); and, Harold Kurzman, Trucking Policy and Regulation Specialist (Abt consultant).

The study was funded by USAID, via the "Privatization and Development" contract held by Price Waterhouse, under which Abt Associates is a sub-contractor.

2.4 Structure of Report

This introductory chapter is preceded by an Executive Summary. Thereafter, in Chapter 3, a description of the structure and nature of the trucking industry in Mozambique is presented. In Chapter 4, the current trucking industry regulatory environment is reviewed, and in Chapter 5, other issues and constraints which influence the trucking industry are assessed. Then, in Chapter 6, the prospects for and key issues involved in divesting the main parastatal truck fleets are discussed. Finally, in Chapter 7, preliminary recommendations and next steps are presented.

---

[1] As noted later in the report, the feasibility of divestment needs to be assessed prior to developing an action plan for divestment.

Chapter 3

THE NATURE AND STRUCTURE OF THE TRUCKING INDUSTRY

In this chapter, the nature and structure of the trucking industry in Mozambique are examined. First, an overview of the evolution of the industry is presented, including a description of the composition of ownership by principal segment together with a profile of each of the main parastatal trucking fleets. Subsequently, the operating economics of truck transportation are investigated to assess implications particular to the current environment in Mozambique.

3.1 Industry Evolution and Ownership Structure

Mozambique's vehicle fleet has contracted substantially since Independence in 1975, and the share accounted for by the private sector has declined steadily throughout the late 1970s and 1980s.

- At the time of Independence, much of the vehicle stock was either exported or destroyed by emigrating owners.

- Thereafter, the decline in private ownership was further accentuated by:

  (i) the difficulty the private sector experienced in obtaining funding, spare parts, fuel, and replacement vehicles; and,

  (ii) the government's response, based in part on the Marxist-oriented regime in place at the time, was to own and operate its own fleets in an attempt to secure regular road services.

- In the early to mid-1980s, the government -- in response to drought, famine, and an intensifying war situation -- furthered its ownership of the trucks by acquiring, mainly with donor assistance, large fleets dedicated to special market uses such as disaster relief and the distribution of agricultural inputs and produce.

- The limited statistics available suggest that the private sector, which accounted for over 60 percent of the ton-km movements in 1975, contracted to around 40 percent by 1980 and is currently estimated at 25 to 30 percent.

No reliable statistics exist on the current census of the trucking fleet. Best estimates suggest that the present fleet totals between 8,000 and 10,000 trucks, with many of these likely to be inactive due to lack of needed spare parts. It is also believed that the vast share of the fleet is comprised of smaller trucks in the 2-ton to 5-ton range.

3.1.1 Principal Segments

Mozambique's trucking fleet is concentrated in four principal segments:

- Private vehicles operated by small businessman and traders ("comerciantes"). Although presumably dedicated to the entrepreneurs' own needs, many also offer for-hire transportation on a space available basis.
- Proprietary, in-house fleets of large multinational enterprises such as Lomaco.
- Common carrier road haulers offering transport services that range from intra city and inter-provincial moves, to international carriage on major transit corridors.
- The large, government-owned parastatal trucking fleets.

3.1.1.1 Private and Proprietary Operators

The "comerciantes" and private businesses constitute the largest group of truck owners. Although not licensed as common carriers, many operate for-hire on an informal basis. The relaxed regulatory environment in Mozambique permits them to do this with impunity. Typically, they have just one or two small- to medium-sized trucks and they tend to capitalize on opportunities to provide transport services when it is convenient with their other primary business activities. An example would be to earn back-haul revenue on an otherwise empty return trip. Many common carriers refuse to operate in wide areas of the country due to the guerrilla insurgency. Therefore, the "comerciantes" appear to fulfill an important public service by making-up for the shortfall in transport supply in some sectors.

Mozambique also has several large proprietary trucking fleets that are operated strictly to handle the in-house transport requirements of large integrated commercial enterprises. Although at present these operators are not a direct factor in the market, they have the potential to have a significant impact on the road transport sector. Lomaco, for instance, has expressed an interest in obtaining a license to become a public transporter. The economies of scale, high asset utilization rates and geographic span of operations made possible by its baseload traffic would likely make it a very formidable competitor. However, most of these captive trucking fleets, presumably, evolved out of necessity because no other reliable transport services were available to serve in-house transportation needs. A robust and competitive private trucking industry could

actually obviate the need for their existence serving to open-up important new markets to the private sector.

3.1.1.2 Common Carriers

The private common carrier trucking industry is comprised of many diverse entities. Some, such a Transportes Lourenco, can trace their roots back to the colonial era. Others like Cassamo and Salema have only recently commenced operations. Although lack of broad statistical data on the industry makes it difficult to reach many definitive conclusions, available information suggests that the industry is both decentralized and highly competitive with little concentration of market power in the hands of any single operator, as is evidenced by Exhibit 3-1. While not an exhaustive compilation, it lists many of the leading transport firms found to be operating in a sampling of four selected provinces.

The industry is also comprised of many entrepreneurs who both own and operate their own trucks. Typically, these trucks are aged, with many being twenty to twenty-five years old. Historically, many of these operators provided inter-city and inter-provincial service. However, most have fled the war ravaged countryside to seek the relative safety of the larger cities. This has resulted in a glut of trucking capacity in secure areas like the Maputo city limits.

3.1.1.3 Government-Owned Trucking Fleets

The last segment of the trucking industry includes vehicles that were acquired either as part of a national state transportation enterprise or to provide transport services within state-owned companies. Mozambique has four such parastatal fleets:

- Camionagem de Mozambique - CAMOC
- AGRICOM
- DPCCN
- Transcarga

Camionagem de Mozambique

CAMOC was established in 1976 as Mozambique's national state trucking company by consolidating the operations of several private firms including Vicar Transports, Transport Gaspar, Transport Mendes, Transport Isac Moreira and Transportadora, Lda. The current composition of the trucking fleet is as follows:

Exhibit 3-1
Representative Common Carrier Trucking Companies in Selected Provinces

PROVINCE	CARRIER	NUMBER OF TRUCKS	TOTAL CAPACITY (tons)	AVERAGE TRUCK (tons)
MAPUTO	CASSAMO	15	375	25
	SALEMA	42	902	21
	TRANSMAP	15	315	21
	LOURENCO	5	125	25
	ANGELO SILVA	2	40	20
	WAN PHORN	3	30	10
	ANTONIO OLIVEIRA	4	30	8
	GUILHERME SILVA	1	9	9
	SUBTOTAL	**87**	**1826**	**21**
SOFALA	EDMUNDO CARRELO	10	250	25
	SACUR & FILHOS	4	95	24
	TRANSPORTE RIVAT	4	20	5
	TRANSPORTE BANOO	19	250	13
	DAVID NAVROLEON	1	25	25
	ABDUL KARIM AZAM	2	10	5
	FARUK KARIM AZAM	1	25	25
	TRANSPORTE MITHA	2	50	25
	MARCO SOUSA SOARES	2	16	8
	TRANSPORTE PESTANA	1	10	10
	TRANSPORTE BORIS	1	15	15
	TRANSPORTE MUCHANGA	1	8	8
	TRANSPORTE KATIJA	1	8	8
	HERCULANO PORTRAIGHT	1	18	18
	TRANSPORTE RIEIRO	2	20	10
	MUSSA KARA	3	70	23
	ORIENTAL	3	32	11
	GULAMO KARA BAY	3	58	19
	SUBTOTAL	**61**	**980**	**16**
ZAMBEZIA	GILDO AZEVEDO	1	10	10
	CHOCOLE ERMINIO	1	10	10
	JOSE MANUEL	2	24	12
	ALTAF GAFAR	7	84	12
	AMERICO SOARES	1	12	12
	SUBTOTAL	**12**	**140**	**12**
NAMPULA	ISMAIL SADARDINE	6	120	20
	NARCISO	6	120	20
	ABACASSAMO	8	200	25
	SUBTOTAL	**20**	**440**	**22**

Sources: Interviews with industry personnel, government data.

- forty-one trucks in total with 21 tons capacity each;
- twenty-four trucks, or 59 percent, are currently out of service;
- nearly all trucks were manufactured by Scania;
- trucks ranging from 3 years to 12 years in age, and having an average age of 9.5 years.

Over the years this enterprise has had a scandal-plagued history characterized by inefficiency, unreliability and allegations of corruption. Conditions were in such a crisis during the team's recent visit to Maputo that no one from CAMOC was willing to meet with them. Indications are that the Ministry of Transport, the agency responsible for CAMOC, is investigating strategies for its divestiture.

AGRICOM

AGRICOM is a state enterprise that was formed to stabilize agricultural production and prices. The logistics of moving crops to market, and distributing seed, fertilizer and related materials to producing areas made transportation a key element of AGRICOM's overall mission. During the 1980s AGRICOM benefitted from donor programs which led to the creation of a modern fleet of trucks and farm equipment. The current fleet encompasses:

- 170 trucks (mainly Scania, Renault and Mercedes Benz), ranging from 2 to 15 tons capacity, of which 79 percent is operational;
- half of all trucks are 6 years old or less with the overall fleet having an average capacity of 10 tons;
- transport is conducted in all 10 provinces with the greatest number of trucks concentrated in Nampula, Cabo Delgado, Maputo and Niassa;
- 141 Massey-Ferguson farm tractors of which 108 are operational and are used to transport inputs and produce.

Fundamental shifts in Mozambique's agricultural markets in recent years have dramatically altered AGRICOM's role. Where it was once responsible for 80 percent of the country's agriculturally driven transportation needs, it now handles just 20 percent. As a result much of the truck fleet is now very under utilized. AGRICOM is currently reassessing its mission and it is likely that in the near future it will be considering strategies for divesting most of its transportation assets (see Annex E for details of AGRICOM's fleet).

Department for the Prevention and Combat of Natural Calamities (DPCCN)

DPCCN was established in 1980 as Mozambique's national disaster relief organization. Over the years and with extensive technical assistance from donors such as CARE, it has become the principal agency responsible for coordinating the transportation and distribution of emergency food aid. In this role, it has assumed the front-line responsibility for providing transport services. In isolated, war-torn areas DPCCN is the "transporter of last resort" even to the extent of employing air drops when all other methods prove unsuccessful.

Because of this critical humanitarian mission, DPCCN has been the recipient of generous contributions from many countries. Included among these have been a large number of trucks to support its extensive logistics responsibilities. DPCCN currently operates the single largest fleet of modern trucks in Mozambique. This fleet includes:

- 510 trucks ranging in size from 4 tons to 25 tons, the average being 11 tons; 371 trucks or 72 percent is currently operational.
- 80 percent of the fleet is 6 years old or less.
- major makes of trucks include Leyland, Volvo, Fiat, Nissan and DAF
- Donations from Italy, ASDI and CARE account for 46 percent DPCCN's total truck transport capacity.

DPCCN recently commissioned a consulting study to explore possible strategies for divesting and privatizing its transport assets. However, continuing hostilities and the worsening drought indicate that transportation may be critically important in the near-term. It is likely that DPCCN will resist any action that might compromise its abilities to support urgently needed relief unless it is confident that adequate alternative transportation services can be purchased on the open market (Annex F contains details of DPCCN truck fleet).

Transcarga

Transcarga is the principal national hauler serving the Beira Corridor. It was established as a consortium with operations that are separate from those of its principal share holding companies, which include the parastatal firms CAMOC; AGRICOM; and CFM; and, ACAUTO, a private parts supply company. Transcarga operates a modern fleet of forty 25-ton tractor-trailers, all of which are four years old or less. A major portion of its business comes from contracts for long-term haulage services.

The Beira Corridor is served both by truck and by rail. Although rail would normally have a significant competitive advantage based on rates, lack of reliable service and long delays on the

CFM have enabled trucking to be competitive. Transcarga is also reported to benefit from preferential access to the Port of Beira[2] which is operated by the CFM.

Annual utilization of the Transcarga truck fleet averages only about 40,000 km. This rate is low for a carrier engaged in international transit carriage with medium length hauls.

3.1.1.4 Government Versus Private Ownership

Limited data availability about the private sector common carriers make it difficult to compare the share of total trucking capacity operated by the public and private fleets. However, to illustrate representative values, Exhibit 3-2 was created for the four provinces for which at least partial data could be obtained.

- Overall, DPCCN and AGRICOM together account for just over half of all trucking capacity in the four provinces analyzed.
- Private common carriers are most active in Maputo, where many have concentrated to avoid war-related risks.
- Common carriers are least active in Zambesia.

Common carriers are well represented in three of the four provinces indicating that it is possible to transition more toward the private sector in those areas. However, if the private sector's limited activity in Zambesia is due to war-related risks, this would argue for needed reforms in the area of war risk insurance and, perhaps, a continuing role for the government as the transporter of last resort.

3.2 Road Transport Sector Economics

3.2.1 General Operating Conditions

Today, Mozambique's truck fleet is in very poor condition. The high cost of vehicles and inputs, low levels of utilization, poor road conditions, poor maintenance facilities and practices, and risks posed by the war all make trucking an unattractive and uneconomic industry. In addition, the public sector dominates the medium-to-heavy truck sector, particularly the newer equipment, but is very poorly managed and caters only to a limited set of market segments. The industry is characterized or influenced by a number of interrelated factors, all of which lead to poor performance.

---

[2] In fact, Transcarga may be the only trucking company allowed direct access to the port.

Exhibit 3-2
Share of Capacity for Principal Operators in Selected Provinces
Common Carriers Versus AGRICOM and DPCCN

PROVINCE	OPERATOR	NUMBER OF TRUCKS	TOTAL CAPACITY	SHARE OF CAPACITY
MAPUTO	COMMON CARRIERS	87	1826	76.9%
	AGRICOM	26	309	13.0%
	DPCCN	30	238	10.0%
	SUBTOTAL	**143**	**2373**	**100.0%**
SOFALA	COMMON CARRIERS	61	980	51.9%
	AGRICOM	4	40	2.1%
	DPCCN	70	867	45.9%
	SUBTOTAL	**135**	**1887**	**100.0%**
ZAMBESIA	COMMON CARRIERS	12	140	9.9%
	AGRICOM	13	115	8.1%
	DPCCN	89	1161	82.0%
	SUBTOTAL	**114**	**1416**	**100.0%**
NAMPULA	COMMON CARRIERS	20	440	35.9%
	AGRICOM	39	358	29.2%
	DPCCN	48	428	34.9%
	SUBTOTAL	**107**	**1226**	**100.0%**
ALL FOUR PROVINCES	COMMON CARRIERS	180	3386	49.1%
	AGRICOM	82	822	11.9%
	DPCCN	237	2694	39.0%
	TOTAL	**499**	**6902**	**100.0%**

Sources: Exhibit 3-1, Annex E and Annex F.

qa.

- Low vehicle utilization, in terms of overall distances traveled, ton-km performance and load factors:

  - annual distances traveled rarely exceed 30,000 to 40,000 kms, whereas truckers in neighboring Zimbabwe average 100,000 to 200,000 km per year -- Mozambican performance is constrained by the war, poor road conditions which reduce average traveling speeds, and the large amount of time spent out of service due to the excessive wear and tear created by the road conditions.

  - low load factors, which are at best 60 percent, but more typically reported to be about 30 percent -- result from: (i) the lack of incentive in the public sector to generate backhauls; (ii) regulations which prohibit private fleets from carrying commercial traffic; and (iii) poor fleet management.

- Short vehicle life -- which is estimated at 18 to 48 months, due to poor road conditions, inadequate maintenance, and damage caused to vehicles by war activities.

- Poor maintenance -- the deterioration of the fleets' physical condition is accentuated by: (i) the poor planning of maintenance and repairs, and inadequate workshops and related facilities and services; and, (ii) the shortage and expense of spare parts.

- Expensive and scarce inputs such as spare parts and tires, which reflect:

  - the high cost of inputs due to extremely high duties and taxes on imported parts and tires, and the impact of massive devaluations in the metical

  - the mismatch in parts inventories and needs because of poor inventory control and the "abnormal" parts replacement requirements posed by the war (that is, a more frequent need for specific parts which under normal conditions would be needed only very infrequently)

  - the sparse distribution network throughout the country for parts, which is compounded by the multitude of makes and models in operation and the existence of only one major independent parts supplier

- Expensive imported, new vehicles -- due to the depreciating metical and the substantial add-on costs in taxes, duties and dealer mark-ups on imported vehicles -- which often add 60 to 70 percent to the CIF price of a vehicle.

- Proliferation of makes and models -- about 90 different models are reported to exist in Mozambique, leading to diseconomies in operation and repair, and has resulted from:

  - the government's indiscriminate practices with regard to vehicle procurement

- the fact that a large portion of the more modern fleet was provided by a variety of donors who often stipulate procurement of vehicles made in their home country

- "Abnormal" trucking costs -- which are incurred as result of:

  - the need for armed and/or military escorts for convoys, which can add 8 to 40 percent to the cost of a ton-km

  - the high levels of pilferage that escorted convoys seem to experience.

- Low tariffs -- which are insufficient to cover operating costs in all but the most "conducive" environments -- that is on paved roads, in secure areas and with good utilization rates.

The industry, as described above, is in very poor condition. However, trucking has an important role to play in resurrecting the Mozambican economy, particularly in rural areas. Efforts must be made to improve its performance.

While ending the war is the single most important factor contributing to the turnaround of the trucking and many other industries, a number of positive steps can be taken in the interim. Liberalizing industry regulation and creating an enabling environment for private sector trucking are important early actions. The fact that a number of sizeable commercial trucking companies have been established successfully in recent years (Transcarga, Salema and Sirs Cargo), suggest that with an improved environment, there could be a relatively more positive outlook for the industry.

3.2.2 Unit Transportation Costs

The conditions cited above currently make Mozambique a very difficult and uneconomic environment in which to operate a trucking business. High capital costs result from currency devaluations, tariffs and taxes, a situation that is further exacerbated by onerous interest rates and financing terms, necessitate extraordinarily high levels of utilization be achieved in order to be profitable in this price-regulated market. However, war, daytime only operations, unserviceable roads, extended out-of-service periods for lack of needed spare parts and management inexperience, all combine to hold truck utilization rates at low levels. This may be the single most critical constraint inhibiting revitalization of the road transport sector.

Current truck operating costs were developed for three sizes of trucks: 8-tons, 20-tons and 25-tons (details are presented in Annex D) and used to calculate unit operating costs in meticais per ton-kilometer for a wide range of combined capital costs, annual operating distances and capacity utilization rates. The results of this analysis are summarized in Exhibit 3-3.
Four factors have a significant impact on the unit costs of truck transportation:

Exhibit 3-3
Comparison of Estimated Vehicle Operating Expenses Under Normal Service Conditions for New and Amortized Trucks (Metcicais per Ton-Kilometer)

ANNUAL DISTANCE (Kilometers)	--UTILIZATION RATE-- 20 Percent	40 Percent	60 Percent	80 Percent
		8 TON TRUCK - NEW		
20,000	3,756	1,878	1,252	939
40,000	2,031	1,016	677	508
60,000	1,456	728	485	364
80,000	1,169	584	390	292
100,000	996	498	332	249
		20 TON TRUCK - NEW		
20,000	2,025	1,012	675	506
40,000	1,098	549	366	275
60,000	789	395	263	197
80,000	635	317	212	159
100,000	542	271	181	136
		25 TON TRUCK - NEW		
20,000	2,094	1,047	698	523
40,000	1,131	565	377	283
60,000	810	405	270	202
80,000	649	325	216	162
100,000	553	276	184	138
		8 TON TRUCK - AMORTIZED		
20,000	1,178	589	393	294
40,000	885	442	295	221
60,000	787	394	262	197
80,000	739	369	246	185
100,000	709	355	236	177
		20 TON TRUCK - AMORTIZED		
20,000	623	312	208	156
40,000	469	234	156	117
60,000	417	209	139	104
80,000	392	196	131	98
100,000	376	188	125	94
		25 TON TRUCK - AMORTIZED		
20,000	610	305	203	152
40,000	450	225	150	112
60,000	397	198	132	99
80,000	370	185	123	92
100,000	354	177	118	88

Source: Annex D

- Utilization and Annual Distance

  -- In the case of a new 8 ton truck, costs are estimated to be 1,016 Mt. per ton-kilometer if 40,000 kilometers are driven per year at 40 percent utilization;

  -- 498 Mt. if utilization is held constant but the annual distance is increased to 100,000 kilometers; and,

  -- if utilization is increased to 80 percent, unit costs decrease further to 249 Mt. per ton-kilometer.

- Truck size and capital cost

  -- 485 Mt. for a new 8-ton truck operated at 60,000 kilometers per year and 60 percent utilization versus 263 Mt. for an new 20-ton truck at the same usage level;

  -- Unit costs for 8-ton and 20-ton trucks when fully amortized are 262 Mt. and 139 Mt., respectively.

This last point clearly demonstrates the cost benefits possible when vehicle service life is extended past the point where it becomes unburdened from financing expenses. However, in Mozambique, inadequate maintenance practices coupled with the harsh operating environment result in many trucks having inordinately short lives. Typically, these are often just two to four years.

3.2.3 Additional Costs From Operations in Mozambique

The ongoing war and sub-standard road conditions dramatically inflate unit transport costs above those for "normal" conditions. In many areas the war necessitates that trucks be operated in protected convoys. Typically, the Mozambican Army provides the personnel needed to make up these escorts. Although the wages for the guard force are paid for by the government, the truck operators participating in the convoy are responsible for furnishing transportation and providing food for the troops. In some cases operators find it desirable to engage a dedicated, full time paramilitary force for protection. Although cost estimates vary widely, it is believed that military escorts add between 25 and 50 meticais per ton-kilometer, increasing total transport expenses in some cases by more than 30 percent.

Generally poor road conditions also inflate transportation costs. Slower than normal transit times, and wear and tear caused by rough road conditions, reduce truck utilization rates and

increase maintenance expenses. A study[3] conducted for DNEP in the late 1980s suggested that Mozambique's deteriorated roads could actually double the cost of truck transportation.

3.2.4 Transport Costs Versus Regulated Rates

Tariffs for the road haulage of cargo are set by the national government. In some cases these rates are superseded for the special conditions existing in certain provinces. The official current distance-based tariff is set at 132 Mt per ton-kilometer for paved roads and 164 Mt. for unpaved roads. In Nampula province these rates are reported to be 270 Mt. and 460 Mt. for paved and unpaved roads, respectively.

A comparison between these rates and the trucking cost estimates presented in Exhibit 3 - 3 (after factoring in adjustments for military escorts and rough roads) reveals little opportunity for profit exists. It is reported that some rate relief has been achieved through liberal interpretation of the tariffs, such as by charging for delay times and for empty backhauls. It should also be noted that the current system of setting rates is in the process of being deregulated and in the future it will be possible for truckers to negotiate rates freely with shippers. This is critical to the long-term health of the road transport industry. Rates must be freely set by the market to allow adequate levels of profitability to be achieve to stimulate new entrants and/or re-investment in the industry.

---

[3] Results of the World Bank Highway Design model as reported in the World Bank's "Mozambique Transport Sector Review", 1989 (see bibliography).

Chapter 4

CURRENT TRUCKING INDUSTRY POLICY AND REGULATION

While existing regulation of road transport in practice presents little hinderance to truck operators, as enforcement is minimal, much can be done to create an enabling environment to enhance private sector road transport.

A number of initiatives are underway to improve regulation. These include liberalization of tariffs, collection of user charges, administration of a Road Fund, and the proposed creation of a new Institute of Road Transport. However, full and efficient implementation of these initiatives has yet to be achieved, and other priorities need to be addressed as well. Highest priority areas for improvement include public safety, protection of road infrastructure, and a more rational system of taxing truck operations. Presented below is an assessment of some of the key areas of current road transport regulation in Mozambique.

4.1 Tariffs

Tariffs for trucking services are currently controlled by the government. The tariff levels are set centrally. However, individual provinces have the right, de facto, to revise the prices -- as has been the case in Nampula (Exhibit 4-1).

The tariffs have been set at unrealistically low levels and do not allow for full cost recovery of services provided, except perhaps for truckers operating in safe areas with well paved roads. Tariff levels are not varied sufficiently for varying conditions related to war risk, road surface conditions, the nature of the market served (long versus short haul, the type of good carried, the size of the vehicle), nor in recognition of the high import content of trucking and the depreciating metical. The fact that Nampula tariffs are 2 to 3 times higher than the national rates is indicative of how low national rates are and how little they reflect regional, operating differences.

There is evidence that informally some truckers have found means to circumvent these regulations where the tariffs were inadequate. In these instances, the official rates have probably operated more as reference prices than actual. However, it is not known how widespread this practice is. Parastatal trucking companies are required to observe the official tariffs. However, even in the parastatal sector, there are reported instances of attempts to command higher rates overall. For example, shippers reported that CAMOC, while charging the official rate for the primary haul, levied a number of "surcharges" (such as charging full rates for empty backhauls, and charging for services from the time the truck leaves the depot until the time it returns) which

Exhibit 4–1

Official Tariffs for Road Haulage of Cargo

	National	Nampula Province
MT per Ton–Km		
Paved Surface	132	270
Unpaved Surface	164	460
Hourly Rate, Intra–Urban (by truck capacity–size)		
Up to 4.5 tons	15,859	–
4.5 to 10 tons	19,512	–
10 to 16 tons	26,645	–
More than 16 tons	30,481	–

Sources: National figures based on September 28, 1991 "aviso", issued by the National Directorate of Road Transport, Ministry of Transport. Rates said to be still in effect. Nampula rates based on interviewed conducted and are still in effect as of February 17, 1992.

then in total equated near to or above the market rate[4]. Furthermore, the government is a significant shipper/customer and is mandated to purchase transport services at the official rates. Thus, official rates overall are levied in selected major segments of the market.

The Government is proposing to liberalize truck rates, and allow them to be freely determined by the market. A decision on this proposal, and the corresponding issuance of an "aviso", is expected within the next month.

The liberalization of trucking rates should have a profound effect on the market and future provision of road transport services. This will address in part a number of issues which have negatively influenced the industry in the past: (i) transport rates at different stages of the rural production logistics chain were centrally set and did not reflect differences in length or type of haul; (ii) low rates provided little incentive for private-owned fleets to reposition from deficit to surplus provinces; and, (iii) low rates made remote and/or insecure areas even more unattractive to service.

Tariff liberalization and the declining role of AGRICOM in rural transport should lead to significant changes in rural transport rates, the emergence of new transport service providers, and greater mobility and availability of fleets across provinces. Thus, a competitive trucking market should emerge, provided state-owned fleet are privatized or at least operated commercially, that is without subsidy and where services are priced on a real cost basis.

A more debatable question is at what price or whether private operators will service the more remote, insecure areas. Provided that sufficiently high rates can be commanded and that some war risk insurance can be obtained, then the private sector could serve these markets. However, in the absence of war risk insurance, and as long as the war persists, then the government may need to act as the transporter of last resort -- because the rates required to induce private operators to serve these areas would become restrictive. It should be noted, though, that government does not need to own or operate truck fleets in order to perform the function of transporter of last resort[5].

---

[4] Given that CAMOC is currently under investigation for poor business practices, this example should not be taken as indicative of how parastatal trucking operations or private truckers in general operate in Mozambique.

[5] The government could arrange block capacity agreements as a condition of the sale or lease of its fleets to the private sector, whereby the government would have first call on the use of a certain percentage of the fleet under certain, pre-set conditions.

4.2 Taxes and Levies on Vehicle Operation

A multi-tiered system of taxing vehicle operations exists in Mozambique, including: import duties and other taxes on imported vehicles, spare parts and tires; fees levied on vehicle licensing and registration; and, taxation of diesel fuel. Overall, trade-offs exist between providing appropriate incentives to stimulate the truck sector versus revenue collection for government. This area needs review and rationalization.

4.2.1 Imported Trucks, Parts and Tires

Imported trucks, spare parts and tires are subject to high levels of taxes, customs duties and mark-ups. The retail price of an imported truck to the end consumer is about 70% greater than its landed CIF price, inclusive of dealer mark-up, and about 55% if the dealer's margin is excluded (Exhibit 4-2). Increments to the retail prices of spare parts and tires are even greater -- margins over CIF price are about 135-145% inclusive of dealer margins (assuming an average dealer mark-up of 45%), and about 90-95% excluding dealer margins. In addition, spares and tires may be subject to 20% consumption tax as well[6].

Given the importance of spare parts and tires to the trucking industry, particularly in such a "hostile" environment (war, poor physical condition of roads) as Mozambique, reduction of import-related taxes should be considered -- but in a way that is tax revenue neutral and does not impede the growth of domestic industry. In both the case of spares and tires, the main difference in the level of import-related taxation relative to vehicles is the import duty. Spares and tires are subject to a 35% import duty whereas vehicles to only a 10% duty. This emanates from spares and tires being classified as "consumer goods". At a minimum, consideration should be given to classifying them as "finished industrial/commercial inputs" which are subject to a 25% import duty. This would appear justified due to the extreme importance of these inputs to trucking in Mozambique and the potentially significant role trucking could play in domestic transportation.

- Reduction of import duties on spares would make rehabilitation of the existing vehicle stock more attractive relative to importing new equipment, would lower the incentive to smuggle parts into the country (reported to be quite common), would lower out of service time of vehicles, and promote the safety of vehicle operations.

- Tire life under existing road conditions in Mozambique varies between 15,000 and 40,000 kms for tires manufactured locally or for comparable quality tires from South Africa. For large 18 or 22 wheel trucks this is a significant expense. Moreover, to operate on worn tires both increases the chances of breakdowns and accidents. Therefore

[6] Such a tax was reported to the consulting team during the course of interviews, but no official supporting documentation to this effect was found.

Exhibit 4–2

Import Duties and Taxes on Vehicles, Spare Parts and Tires

	Import Duty (a)	General Customs Duty (b)	Customs Sales Tax (c)	Margin (d)	Retail Sales Tax (e)
Vehicles	10.0%	7.5%	5.0%	25.0%	10.0%
Spares/Tires (f)	35.0%	7.5%	5.0%	10.0–80.0%	10.0%

Source: Industry interviews and offical tariff schedules.

Notes:

a. Direitos Aduaneiros
b. Emolument Jerais Aduanerois
c. Imposto de Circulacao na Alfandega
d. Margem de Comercializacao
e. Imposto de Circulacao
f. May also be subject to a 20% consumption tax, on after customs duty value
g. Per official schedules. Interviews indicated margins of 25–100% depending on type of spare part/tire and value.
h. The import and general customs duties are levied on the cif value. All other duties and taxes are calculated on a cumulative basis.

operators should be encouraged to replace tires according to professional operator norms. However, the high import duty acts as a disincentive to such practices. In addition, the domestic producer of tires is now mature, and it is hardly fair to consumers to continue to protect, and thus subsidize, the national monopoly. The appropriateness of removing such protection is evidenced by reports that the national manufacturer even exports tires, and at lower prices than the same tires are available in Mozambique. Haulers operating internationally have a significant advantage over domestic competitors in so far as they can easily purchase and mount foreign tires when they are travelling in neighboring countries and then enter without paying taxes. Furthermore, the massive devaluation of the metical in recent years should afford the domestic producer of tires more than sufficient protection, without additionally levying high import duties.

4.2.2 Vehicle Licensing and Registration Fees

Vehicle licensing and registration fees and taxes are levied at very low levels and collections performance is poor. Review of the purpose and value of such taxes is necessary. On the one hand, they can serve only to reimburse for services rendered and become receipts of the proposed Institute of Road Transport. On the other hand, they can be considered as one of the road user taxes to be paid into the Road User Fund. In this case, the fee schedule should be related to the road wear that each vehicle causes, and thus related to gross vehicle weight (GVW) and number of axles.

4.2.3 Diesel Fuel Tax

The level of taxation on diesel fuel is low, both in absolute terms and relative to the level of taxation on other types of fuel. Diesel fuel is taxed 5Mt. per litre or about 1% of the retail price, whereas taxes on gasoline are 250Mt. to 300Mt. per litre, on regular and super blends, respectively, which is about 10 to 25% of the retail price.

One can argue that because diesel fuel is used mostly in commercial operations, it should be taxed lower than gasoline, where high taxation can serve to "ration" consumption. However, the differential in Mozambique is much greater than in most other countries. If the Road Fund is going to be used to pay for highway maintenance, then commercial transporters should pay their share. The largest source of revenue for such purposes in most countries comes from fuel taxes. It is an appropriate source as volumes purchased relate quite closely to road usage, and it is a relatively easy tax to collect. In the case of Mozambique, serious consideration should be given to applying fuel taxes as a percentage of ad valorem of the CIF price, perhaps adjusted or at least reviewed annually. In fact, a proposal to implement something similar has existed since 1986, but no action has been taken. The proposal suggested a 10% tax on petrol and oils and lubricants, 20% on diesel, and the elimination altogether of taxes on aviation gas[7].

[7] It is reported that the fuel tax regime will be an area for investigation under a proposed World Bank consultancy, which will examine revenue generation and budget allocation for the

4.2.4 Other Road User Charges

The policy on vehicle user charges is unclear. A Road Fund was legally established to increase funding available for roads' maintenance and into which was to be deposited user charges. The application of disbursement was to be largely under the control of the Ministry responsible for roads. However, the decree establishing the taxes was designed by the Ministry of Finance as a consumption tax which would reduce gasoline consumption and thereby conserve foreign exchange. These revenues are then disbursed mainly to urban areas (80%), although rural areas are where much of the trucking operations occur and are in substantial need of repair and maintenance. The tax formula hardly taxes diesel (see above) and provides no significant additional revenue for maintenance of the national network. There is clearly a contradiction which needs correction. The upcoming World Bank study will provide assistance in this area.

4.3 Standards and Safety

4.3.1 Standards

During the years since Independence, Mozambique's network of paved and light duty roads has deteriorated rapidly from lack of required maintenance. Additionally, because of the original construction specifications of these roads, which are low by modern standards, limits are often exceeded by the high axle loadings possible with current model trucks. Repeated exposure to high volumes of over-gross traffic has further accelerated destruction of road surfaces and undermined the structural integrity of key bridges. These conditions slow traffic flows, decrease truck utilization rates and increase maintenance and repair requirements, all of which lead to higher operating expenses for Mozambique's truckers.

The consulting team interviewed a large number of truck operators to determine attitudes about enforcement of vehicle weight restrictions. Based on these interviews, unanimous approval was found in support of the fair enforcement of weight limitations since it was understood that this would lead to improved roads conditions. The Mozambican truck operators attributed the vast majority of overloading problems to foreign transit carriers that operate in Mozambique from areas having higher limits. A review of regional regulations confirmed that Mozambique does have more restrictive laws regarding vehicle weights.

Upgrading Mozambique's roads to support the use of larger trucks should be an important goal. This will provide shippers with more economical services and help to ensure that Mozambique remains a competitive gateway for international transit cargoes. Bringing Mozambique's standards into harmony with those of neighboring countries will also serve to simplify the enforcement of these laws.

---

road sector.

In the near term, however, Mozambique can not tolerate the ongoing damage being caused to its roads and critical bridges by overweight vehicles. Existing standards should be reassessed for each principal corridor to ensure that they are appropriate, and then a streamlined system should be implemented to support enforcement. Ideally, this would include establishing fixed weighbridges at key border crossings and ports of entry for through-transit cargoes. These installations should be operated under the exclusive authority of a single agency such as DNEP or customs to enable strict monitoring and to avoid potential abuses.

4.3.2 Safety

The current relaxed regulatory environment in Mozambique has had profound consequences to public safety. High rates of property damage, death and injury result from motor vehicle accidents. Public interest aside, improving this situation will likely be a prerequisite to attracting asset-based lending institutions and insurance companies.

Mozambique requires enhanced regulation and enforcement in two key areas:

- Vehicle Inspection
- Driver Licensing, Testing and Monitoring

Annual safety inspections are needed for all vehicles, but especially for large trucks operated at high speeds. Inspection compliance could be established as a precondition for vehicle registration renewal. This would centralize authority with the Ministry of Transport and away from local law enforcement officials.

Licenses are presently issued for life without differentiation for class of vehicle. Clearly, the driver of large passenger bus or tractor trailer should be required to demonstrate higher levels of competency than that of a small van. Additionally, changes in physical abilities can occur over long periods as a result of illness, injury or the normal aging process. Standards must be established for vision and hearing and drivers tested at reasonable intervals. Finally, a national database should be created to provide a central clearing house of information on all active truck drivers. Flagrant violations, repeated accidents or chronic histories of intoxication should be grounds for de-certification.

Both programs will require a significant commitment of resources if they are to be implemented successfully. Attrition of trained personnel to higher paying private sector jobs will also likely be an ongoing problem. Still, these programs can offer real and important savings. It should also be possible to fund each directly with carefully selected user fees from licenses and vehicle inspections.

4.4 Regulation of International and Transit Haulage

There are several issues with respect to international transport which require consideration. International transport is a specialized business, requiring equipment, financial resources, and entrepreneurial and management skill to a higher and more sophisticated level than for a national operator. A marketing and operations-handling capability is needed in foreign countries, and the documentation and logistics requirements increase significantly.

As is the case with other "infant" industries, Mozambique trucking may need a measure of protection, for some initial period of time, from foreign competition and special government support -- at least in terms of fair treatment in neighboring countries and access to foreign exchange. As a matter of national policy, the Government may have a security interest in maintaining a national fleet capable of international haulage.

Certain user tax policies are suitable for the national fleet but may place the international hauler at a competitive disadvantage with fleets operating out of neighboring countries, and should be reviewed within this context. In addition, the objective of taxing foreign operators or restricting access through permit control needs to be examined. Options have been suggested by both PTA (which favors a fee-based system) and SATCC (which favors a permit system) for regional harmonization.

Furthermore, there is a policy on the Beira corridor to reserve as much of the import/export traffic as possible for the railroad. CFM accomplishes this through its control of access to the port. CFM is apparently unwilling to allow shippers complete discretion in choosing whether to use rail or road. There is some reason to believe that this restriction accounts in part for shippers preference to use alternative ports. This policy has a history in southern Africa and was recently abandoned by the SATS in RA, making trucking to/from Durban more competitive.

Beira port has important revenue generating potential for Mozambique. Any policy which discourages use of the Beira corridor is counter-productive and only serves to mask the deficiencies in rail services as perceived by the only people that really count, the shippers. With improved road security along the Beira corridor, the cost and service levels provided by trucking along the corridor will be very competitive vis-a-vis rail, particularly for general cargo but also many bulk cargoes as well.

Chapter 5

OTHER ISSUES AND CONSTRAINTS

A number of issues and constraints, which are outside the direct realm of road transport industry policy and regulation, will need to be addressed to develop a dynamic and competitive commercial trucking subsector in Mozambique. Selected key issues include credit and insurance, availability of spare parts, training, and the role of transporter associations.

5.1 Credit and Insurance

5.1.1 Credit

The need for credit is the refrain heard most consistently from professional transporters in Mozambique. Trucking is a capital intensive business, with the vehicle representing a major investment which, if new, should be amortized over at least five years for larger units and 2-3 years for lighter ones if used intensively. Transporters must also have a line of credit to pay for emergency repairs, which until made will keep their vehicle off the road. However, transporters and particularly owner-operators are considered high risk business by banking institutions. This is especially true under the security risk environment in Mozambique. A credit institution would always require the borrower to have all-risk insurance coverage (exclusive of war risk), because the vehicle is normally the collateral for the loan. This typically costs about 6% of the vehicle's insured value. The probability of collecting on claims promptly, or at all, in Mozambique is said to be poor.

At present the facilities for obtaining credit for purchase of new vehicles are limited and the credit is very expensive. There is no institution which finances the purchase of used equipment, nor can small transporters obtain lines of credit unless they have other assets as collateral or can find a guarantor.

The Bank of Mozambique (BOM) used to provide individual, unincorporated transporters 75% financing for three years for transport equipment, with a minimum of a 10% downpayment required and the dealer typically providing the residual financing needs (usually over a 1 to 1.5 year period). Lately, the BOM has tightened its credit policy, and shifted the responsibility and risk of financing to the company selling the vehicle. The dealer's have responded well by

providing a higher share of the financing and extending the terms of the dealer loan[8]. For example, Industria Technica is offering the following terms: 25% cash down payment, a 50% bank loan at 42% interest over 2 years, and 25% dealer's own credit for a maximum of one year. Entreposto is offering up to 50% of the finance itself over a 1 to 2 year period[9]. Toyota, however, requires a 30% to 35% down payment and a guarantor for the dealer note. BOM is not offering to discount the dealer's paper.

Few transporters can earn enough to accept such terms. Low availability and access to bank funds remains a limiting factor, and the higher down payments and guarantee requirements are acting as barriers to entry. Additionally, dealers can only be seen as a partial solution. They are unlikely to be able to provide more than 50% of the finance on a sustainable basis. Dealer credit only covers for the most part new imported vehicles, and the term period of their finance, while longer than it used to be, is still not the 3 years that BOM used to offer and it places too heavy an ongoing debt servicing requirement on truck operations.

The objective should be to make available to transporters the medium term credit needed to purchase and rehabilitate used machinery and short-term credit to deal with emergencies or temporary cash flow interruptions. The absolute level of funds required to place a used vehicle in service is obviously lower than the cost of purchasing a new vehicle. Thus, a policy of stimulating the purchase of used vehicles would also serve the purpose of reducing overall credit requirements. However, financing facilities serving these needs are virtually non-existent at present. This is compounded by the fact that there is very little evidence of well developed informal financial sector markets operating in Mozambique[10].

---

[8] The change in BOM policy is designed to ration credit (as part of an overall credit rationalization and restructuring program, which is not sector-specific), but also to relieve the bank of the administrative burden of supervising multiple small borrowers.

[9] The rate of interest on finance is set by the Ministry of Finance and Bank of Mozambique. As of September 1991, the relevant rates were set at 40% for loans of up to 2 years, 41% for ones up to 3 years, and at 42% on loans for more than 3 years. Obviously real rates of interest are much lower, given that inflation is running at between 25% and 40% (good estimates of inflation rates do not exist). Furthermore, it is interesting to note that there are two tiers for interest rates, whereby certain industries are charged the lower Level 1 rates and other industries the higher Level 2 rates. The spread between the two levels is significant, about 5% to 7%, depending on the term of the financing. Private road transport is in the more expensive Level 2 category, whereas rail and port-related transport and public transport of people and goods are in the lower Level 1 category. The rational for this apparent modal and/or public-private bias is not known, and should be examined.

[10] Village money lenders and informal rural financial mechanisms, according to the World Bank, are not widespread in Mozambique. This is in marked contrast to neighboring countries such as Malawi where informal markets mobilize and allocate large volumes of savings. This is most likely due to the disruptive influence of the war in the rural areas of Mozambique which

The World Bank project entitled "Small and Medium Enterprise Development", the objective of which is to "promote the rehabilitation and development of Small/Medium Enterprises (SMEs) by financing fixed assets and working capital for SMEs capable of efficient operation", may offer some assistance in this area.

5.1.2 Insurance

Linked to credit is all-risk insurance. No credit institution will provide financing without all-risk insurance, as the vehicle itself is most likely the collateral for loans. Insurance is now a State monopoly, run by Empresa Mocambicana de Seguros (EMOSE), which according to recent evaluations "leaves a lot to be desired".

The private operator needs to have more options, and a premium structure which recognizes that after financing costs, insurance may be his largest fixed cost. In addition, insurance providers who pay off legitimate claims promptly are needed. Recent proposals have been made in Mozambique both to restructure EMOSE by perhaps having it join up with a private foreign partner, and to encourage new entrants and increased competition.

The war risks are not covered under normal insurance policies, but are a real risk which can put the small operator out of business and make the outstanding debt on vehicles unrecoverable. This risk is one faced by the owners of any fixed asset in many parts of Mozambique, but truckers operating beyond secure urban areas or corridors are particularly at risk. It is a risk against which the Government must be the guarantor and a suitable war risk insurance scheme needs to be developed, as long as the war persists. Donors may also have a role to play, particularly in technical design and perhaps by providing an initial capital subscription to a special fund.

In addition, particular efforts should be made to "pool" the war risks faced by small owner-operators. If war insurance can be sold in "blocks" to groups of individual and small truck operators, then some of the risk can be diversified away through a "portfolio effect", and thus, the ultimate insurance carrying cost for each trucker can hopefully be reduced to an affordable and recoverable level. Were a truck leasing operation to emerge, it could have a similar "pooling" effect with regard to insurance and pass on the savings to individual lessees.

5.2 Availability of Spare Parts

Availability of spare parts is a problem in Mozambique -- parts are expensive and in limited supply, there is often a mismatch between requirements and existing inventory, positioning of parts around the country is poor, and sub-optimal use is made of the used or cannibalized supply

---

has led to the breakdown of traditional money lending activities, but also due to very low and declining levels of income and the inflation induced disincentive to saving.

of parts. This situation is exacerbated by the fact that there are so many makes and models of vehicles, arising from the multiplicity of nations donating vehicles, and a laissez faire policy on the part of Government to licensing new vehicle dealers irrespective of support services offered.

There is only one independent parts supplier, ACAUTO, and it only has a limited distribution network -- a major business in Maputo and a small one in Beira. There is only an informal market in second-hand parts, and no firm dealing in cannibalized or rebuilt parts. Given the low quantity and large variety of the truck fleet, it might be difficult for independents to achieve the critical mass required for adequate stock turnover to be profitable. Conversely, as there is already a supply of scrapped vehicles and more coming on the market, a second-hand parts supplier could fill a niche.

Some dealerships keep a better stock of spares than others, but none seems to really satisfy their customers. The more responsible dealers order usually from source only a couple of times a year. Shipping time is 2-3 months. There is always some mismatch between inventory on hand and customer's needs. This is especially true in Mozambique, where because of the bad road conditions and the armed attacks and burnings, parts not usually stocked have to be special ordered, which is expensive and time consuming. Sometimes a dealer will try to purchase parts in South Africa, but these are more expensive if available. For some truck types, such as those sourced in the former Soviet Union and Eastern Europe, there will be little further parts supply.

Imported parts are subject to the massive devaluations in the metical, like other imports. This has complicated the valuation of spare parts inventories and invoicing at the time of sale. Less scrupulous dealers are said to sell inventory at today's prices which purchased years earlier at the more favorable exchange rates, and thus make windfall gains.

There is furthermore a problem of parts positioning. Parts inventories are largest in a few major cities, and very limited elsewhere. Requirements in other locations have to be shipped, which involves risks and delays. New parts prices include substantial taxes and duties and dealer markups (see Chapter 4). Thus, parts are often not affordable when needed.

Rebuilding of trucks using complete kits has been successfully undertaken by the Mercedes dealer. It reported that more units could be done if the owners had the money or credit to pay for it. The cost is substantial, about one-third the cost of a comparable new vehicle. However, the dealers claim that the rebuilds can achieve up to 80% of the economic life of a new truck -- thus, rebuilds are potentially a very economic proposition[11]. There may be other sufficiently large and homogeneous truck fleets which would allow rehabilitation, but the financing aspect needs to be addressed.

---

[11] The economics of rebuilds, both from the prospective of the rebuilder as well as the ultimate operator, needs to be examined. This should be conducted as part of the proposed World Bank initiative, slatted for USAID funding, which is aimed at assessing rehabilitation of existing vehicles.

Government organizations, such as DPCCN and AGRICOM, which received donations of vehicles, also tended to receive significant amounts of spares. As these companies divest their transport functions, it is important that the spare parts inventories be managed in the interest of the new vehicle operators and not simply be sold off to the highest bidder. Persons acquiring the parts, if unscrupulous, could in some cases demand high mark-ups and make enormous profits, especially given the "windfall" scope provided by the high taxes on legally imported new spares.

5.3 Training

The road transport sector is a true microcosm of broader Mozambican society that faces many of the same problems including high rates of illiteracy, low technical skills and limited management experience in business and government. This conclusion is based on in-person interviews, on-site observations and a review of recent literature assessing the current state of the industry. In the course of collecting these data, the study team visited with the large parastatal fleet operators, emerging private sector operators, individual owner-operators, donor organizations, governmental bodies and regulatory agencies, and commercial vendors providing goods and services to this industry.

Lack of management skills was determined to be major problem in all of the private firms and government agencies visited, the exception being selected long-established vendors whose organizations predate Independence. Even in those organizations fortunate enough to have at least one capable executive at the top, skills fade very quickly at the middle manager and supervisory levels.

Various factors are significant in contributing to this condition. First, is a cultural attitude which tends to make many Mozambicans very risk averse. A government job, even at very low salary, is often preferred due to perceived job security, status and the opportunities for various "indirect" benefits. Additionally, the trucking industry is held in very low esteem; it simply is not the type of industry to attract Mozambique's best and the brightest. The industry will have to compete aggressively to retain experienced staff and to attract the qualified personnel needed to sustain future growth.

5.3.1 Required Skills by Sector

Private Sector

Large and small operators alike have significant training needs in two areas: (i) basic business skills; and, (ii) those unique to the road transport sector.

Many operators lacked the fundamental skills and resources needed either to operate a business or to make business decisions in a rational manner. For example, basic information on equipment operating costs often just does not exist. Lacking these data it is impossible to choose

between alternative equipment types or even to price one's services in a manner that is both competitive and compensatory.

Truck operators need to know more about basic business issues and how their business fits within the broader competitive industry. The main areas where all carrier organizations can benefit from training are presented in Exhibit 5-1.

Government Sector

The government sector in Mozambique is undergoing important changes and training will be required to support critically needed job skills. In a central planned economy, government officials have a very hands-on role and may even participate in day-to-day decisions about operations and production. In a free market economy, government involvement is confined to developing and administering a regulatory framework that contributes to the general economic welfare of the nation and the well-being of its people.

The regulatory environment can either evolve in response to specific problems, or in anticipation of potential abuses such as threats to public safety, detrimental predatory competition, or serious malpractices involving public transport services. In the case of Mozambique, there is a real danger that excessive regulation of the road transport sector during this critical juncture as the industry makes the transition from government-controlled to privately owned could have consequences adverse to this important goal. Therefore, it is important that the training program for government officials should have three important goals: (i) a thorough understanding of the industry; (ii) the fundamental technical skills needed by regulators to administer their public trust; and, (iii) the philosophical and practical knowledge needed to weigh fairly decisions affecting the near-term and longer-term public interests. Key skill areas which should be enhanced in the government sector are also shown in Exhibit 5-1.

5.3.2 Training Delivery Models

A wide range of options exists for delivering the training needed to support and revitalize the road transport sector. However, since only limited resources are available, the method selected must be both efficient and cost-effective. For instance, a customized, in-house program may be appropriate under certain circumstances. However, if similar but less costly training is available outside, that source should probably be used.

Training is required on many different levels. In addition to provisions for literacy training, basic skills and general business management, delivery models are needed for a variety of industry-specific areas.

Industry-Specific Management Training

Training in transport management is available at the national university and at other universities in the southern African region. The road transport sector should make maximum use these

Exhibit 5–1

Representative Areas for Skills Enhancement

Private Sector	Government Sector
Senior Management – Microeconomic Concepts – Transport Management – Sales and Marketing – Cost Analysis and Pricing – Business Decision Making – Strategic Planning and Competitive Analysis – Management Information Reporting and Systems – Human Resource Management **Operations and Technical Support Staff** – Vehicle Scheduling and Dispatch – Driver Education and Training – Primary and Advanced Maintenance and Repair – Workshop Operations Management **Administrative Support Staff** – Bookkeeping – Basic Computer Skills **Business Operations for Smaller Carriers**	**Ministers and Directors** – Transport Management – Microeconomic Concepts – Conceptual Foundations of Transport Regulation – Forecasting Methods – Strategic Planning – Project Management – Management Information Reporting and Systems – Human Resource Management **Regulatory and Enforcement Personnel** – Driver Testing and Licensing – Vehicle Inspections – Weighbridge Operations and Management

programs both as a source for recruitment and as a training resource for managers being groomed for future responsibilities.

However, as transport sector training becomes increasingly specialized, industry-specific, and practical, there will be fewer opportunities to outsource training services to traditional education providers like commercial schools, universities and vocational institutions. At this point it may become necessary to develop a special training program.

In-house training programs can be either formal or informal, or some combination of the two. Formal training requires the design of a suitable curriculum, development of appropriate training materials, allocation of staff to serve as trainers and a commitment to reserve blocks of time for staff development.

Informal training is usually much less structured and likely has a large on-the-job component. Enterprises receiving expatriate professional assistance have an important opportunity for valuable informal training. The goal in these situations should be to maximize the transfer of important technical knowledge. Unfortunately, there is often such a strong tendency to focus on day-to-day business requirements that it can interfere with this process. Opportunities for on the job training can also be negotiated as part of joint venture partnerships, contract management programs, and foreign internships in government or industry with donor countries.

Regional Training Solutions

Mozambique is just one of several countries in the southern African region facing similar challenges in the road transport sector. Each has different specific needs as well as different resources from which to draw in its endeavors to solve these problems. Significant benefits may be possible through bilateral or collaborative training efforts. Therefore, Mozambique is encouraged to work with its neighbors to explore potential opportunities. SATCC could serve an important coordinating role for regional educational initiatives. It has already done extensive work to define transport sector training needs and to identify appropriate training institutions and providers. A first task in evaluating the potential merits of a regional training approach should include a thorough review SATCC's efforts in this area.

5.4 Transporter Associations

Cooperative trucking industry associations, with memberships comprised of small owner-operators, may have an important role in creating and then sustaining an enabling environment for the revitalization of private road transport sector and support of divestiture of the parastatal fleets. As a result, the scope of this study includes an investigation of transporters' associations from three perspectives: (i) legal status; (ii) ability to foster or impede increasing competitiveness in the road transport sector; and, (iii) potential for facilitating vehicle transfers from the public to private sector.

5.4.1 Legal Status

In Mozambique transporters' associations are called nucleos. They date back to the period just after Independence when the truck operators in each province were encouraged to cooperate to insure transport services were provided in efficient manner. The nucleos were established informally without specific organizational charters or government approval. However, the concept never really became established. Only three, those in Gaza, Nampula and Cabo Delgado, remain relatively active, serving their members principally as cargo booking agents.

Trucker attitudes about nucleos varies widely. In Maputo, little interest in the concept was found among many individual owner-operators who were interviewed. Carriers like Cassamo and Transmap are strongly against them. These entrepreneurs said they would shun affiliations that might inhibit their abilities to compete aggressively for market share.

5.4.2 Competitive Implications

Nucleos were initially encouraged at a time when transport tariffs were tightly controlled by the authority of central government. Since all truckers were paid the same for similar services, the potential for anti-competitive abuses was minimal. However, Mozambique is now moving in the direction of free market rates. In those areas where they have the greatest strength, nucleos may be tempted to influence adversely the rate setting process and/or limit access to markets. Indications are that the prevailing market should be sufficiently competitive to undermine any efforts at cartel-like pricing actions. However, if problems do arise, it may be necessary to prohibit by statute such anti-competitive practices on the part of nucleos.

5.4.3 Transporters' Associations as a Mechanism to Support Divestiture

Transporters associations have the potential to assist the divestment process by supporting owner-operators with the running of their businesses. Conceivably, if activities such as maintenance, inventory management, cargo booking, administrative services and training could be pooled through cooperative arrangements, all members of the nucleo would benefit from reduced overhead.

The study team is in the process of contacting all the nucleos currently active in Mozambique to ascertain their levels of interest in establishing such joint services. Since robust transporters associations do not exist in Mozambique, contact has been initiated with the leadership of the transporter associations in Swaziland and Malawi, to learn more about their roles and to see if they can serve as a models for nucleos in Mozambique. These findings will be presented in Phase II.

Chapter 6

DIVESTMENT OF GOVERNMENT-OWNED TRUCK FLEETS

An overall policy for the divestment of public enterprises, supported by the necessary basic laws and regulations, is in place in Mozambique. The general institutional arrangements for assessing and ultimately executing privatization initiatives for a given public enterprise are also set out in broad terms. Thus, the issue with regard to the divestment of government-owned truck fleets is largely a question of whether or when the parastatal fleets should be divested. This in turn will depend primarily on: (i) the absorptive capacity of the private sector, especially with respect to financial resources and the human capacity to profitably operate and maintain the vehicles; (ii) the specific divestment process chosen in individual cases, and the government's capacity to implement any given process; and, (iii) assumptions regarding the nature and continuation of the war.

6.1 Key Issues in Truck Fleet Divestment

A number of issues germane to the divestment of parastatal trucking fleets are key both in interpreting the current and planned actions of government, and for developing any future divestment plans.

The overall motivation for considering the divestment of government owned and parastatal truck fleets is stated by government to be the consequence of the realization that truck fleets currently owned and operated by the government are poorly managed and therefore, these assets are being utilized in a sub-optimal fashion. A lesser motivation is a belief by some members of government (and many donors) that the private sector can use these resources and perform transport services better than government.

The fact that these fleets almost certainly represent a fiscal burden and a drain on the government's budget apparently is not a stated motivation for fleet divestment on the behalf of government. This perhaps emanates from the fact that: (i) it is unclear, due to poor accounting procedures, what the level and nature of the fiscal burden is posed by any of the government fleets; and, (ii) as many of the fleets, spare parts and other inputs were donated by donors, operating losses suffer from definitional decisions regarding what to consider as actual versus economic costs of operations.

Divestment of government-owned and parastatal trucking fleets will involve a number of ministries and government entities, because: (i) no single Ministry has overall responsibility for the trucking industry -- CAMOC is under the Ministry of Transport, AGRICOM under the Ministry of Commerce, and DPCCN under the Ministry of Cooperation; and, (ii) multiple government entities, by design, are involved in the divestment process (both evaluation and execution) -- by law, at a minimum, the line ministry in question, the Ministry of Finance and Bank of Mozambique are included.

The definition of what constitutes privatization and/or divestment is unclear. The law allows for three main "transformations" for state-owned enterprises: (i) continuation of state control for enterprise operating in "strategic" activities; (ii) independent companies ("sociedades anonimas"), in which government holds majority or exclusive ownership; and, (iii) total or partial private ownership, but where the government need not be the majority share holder. Where a company is not being sold, or transferred, but only a subset of its assets are sold or control of which is transferred, the law is less clear. Thus, it is not clear whether the leasing of trucks to private parties, where the government retains ownership, would be considered privatization and/or divestment.

The process by which government truck fleets would be divested is unclear and no consensus appears to have been reached. This in part is a result of the numerous government entities involved in a given divestment and the fact that few privatizations of major state-owned enterprises have occurred to date in Mozambique in the non-agricultural sector. Most initiatives have involved enterprise restructuring, in which the government in one form or another has retained majority share ownership.

It is not clear which government entity (or entities) receive the financial proceeds from any prospective sale of such government assets as the truck fleets. Most members of government expressed the view that the Treasury would get the proceeds, because all assets of the State are ultimately owned by the Treasury. However, some members of government felt that it would depend on the legal status of the public enterprise in question. For example, AGRICOM as an "empresa estatal", feels that this status gives it the right to all or some of the proceeds of the sale of its assets. However, where the divestment leads to the dissolution of the state enterprise altogether, as would be the case were CAMOC to sell its fleet and workshops, then the flow of financial proceeds is brought into question again. Needless to say, resolution of this issue will greatly influence the various interest group's relative motivations for advancing the divestment process.

Compounding this issue, is the fact that many of the assets were donated by donors in the first place (for example, trucks in the case of AGRICOM and DPCCN), and presumably with a specific function in mind. It is not clear what the various donor's views are with regard to these

donated assets being sold off for financial gain[12]. In addition, in the case of DPCCN for example, where its overall function is not expected to change in the near term[13], if it sells its fleet and does not receive the financial proceeds (which appears likely given DPCCN's status within the Ministry of Cooperation), will donors or governmental and non-governmental sources be willing to finance the transport services that DPCCN would then need to purchase.

Little consensus exists on the appropriate valuation of truck fleet and related assets. A full range of values are suggested by different groups, including: (i) the market replacement value of vehicles -- that is, the total cost a purchasing new equipment today, either inclusive or exclusive of post-CIF charges and levies; (ii) an assumed book value on an almost fully depreciated basis; and, (iii) giving many vehicles away for free if their book value is near zero and they were donated in the first place.

Precedence exists for setting "floor" prices. The current divestment law lays out a process by which the Ministry of Finance in concert with the line ministry in question set a minimum price for assets which are slatted for sale, and thereafter bidders are meant to be selected on the basis of non-financial criteria.

The factors affecting the timing of the divestment of the fleets are working in mixed directions. On the one hand, pressures exist for divestment to occur as soon as possible because: (i) the fleets are aging rapidly, and thus the likely sale value and economic life of the assets are diminishing quickly; (ii) with the current drought situation, the demand for transport services will be heightened and fairly insensitive to the price of services, thus it would be a good "market" for private companies enter; and, (iii) to the extent that the fleets represent fiscal drains, the sooner such financial "hemorrhaging" is stopped the better. On the other hand, given it is a drought year, the cost of failure in human terms of "experimenting" unsuccessfully with private provision of transport services to the almost complete exclusion of public provision, is very high.

The geographic dispersion of the parastatal fleets, mainly along provincial lines, will need to be taken into consideration in the divestment process. A decentralized divestment process will facilitate a wider distribution of the divestment "benefits" and will save the expense of prospectively re-positioning fleets[14] in Maputo for auction or sale. However, the dispersion

---

[12] This, and related issues will be explored in Phase II of the study.

[13] In fact its role may increase in importance with worsening drought situation and impending need to transport relief cargo, both within Mozambique and in transit to land-locked neighboring countries.

[14] The issue whether decentralized sales or auctions should be conducted, and if so, whether they should be at the provincial or regional levels (that is, north, central, south), will be addressed in Phase II of this study.

complicates taking stock of inventory and may limit the ability to control quality in the execution of the divestment process itself.

The trucks in the main parastatals fleets are generally too small to perform international or long-haul services. These fleets consist largely of trucks in the 5- to 25-ton range, often averaging under 10 tons per vehicle. This means divestment should be biased towards domestic operators, particularly small owner-operators serving rural sector needs.

The absorptive capacity of the private sector to own, operate and/or maintain the parastatal truck fleets is questionable, especially in the case of smaller or individual owner-operators. Financial resources are scarce and difficult to obtain, the managerial skills for operating trucking companies are weak, and past experience suggests that maintenance will a limiting factor especially given the "hostile" (war, poor roads and costly inputs) environment truckers face in Mozambique.

As long as the war persists, "externalities" to the efficient functioning of the trucking industry will remain. For example: (i) the government may need to continue to be the transporter of last resort, particularly to more remote and war-torn areas; (ii) the ability to obtain comprehensive insurance inclusive of war risk will remain limited and consequently restrict access to credit and thus entry into the industry by the private sector; and, (iii) operating costs will be abnormally high due to the cost of procuring military/security escorts and market distortions created by having to arrange convoys and a bias towards operating on intra-urban (ie, safe) routes.

6.2 Status of Specific Fleet Divestments

The government's divestment decision with respect to individual fleets varies greatly in terms of both the degree of clarity of whether a decision has been made, and of the nature, extent and timing of the divestment contemplated.

CAMOC. The case of CAMOC's (Camionagen do Mozambique) fleet seems the most clear. A decision has been made by the governing Ministry (Ministry of Transport) to "privatize" the company and the fleet[15], and a number of actions have been taken in this direction.

The consulting team was informed that the Ministry has received a bid for the Maputo operations of CAMOC[16] from Transcarga. The Ministry is considering the offer but is requiring that

---

[15] The distinction between the company and the fleet is relatively easy in the case of CAMOC, as its sole business is road transport. However, in selling the fleet, additional assets do include a spare parts inventory and workshop facilities.

[16] The Maputo operations of CAMOC constitute the majority of its fleet and workshop capacity.

Transcarga find a suitable foreign partner with which to joint venture, to strengthen the bid's managerial and financial capacity. The terms and conditions of the bid were not disclosed to the consulting team.

The Ministry also states that it is in the process of conducting an inventory of CAMOC's assets. However, a member of senior management at CAMOC is under suspicion of corruption and had reportedly fled the country. This limited the consultant's access to the company, and no doubt is impeding the government's inventorying efforts.

A key question is whether a sale to Transcarga, which is 100% owned by various government entities, constitutes a divestment. If a majority foreign partner is found and a legal joint venture company formed, then this issue would presumably be automatically resolved.

It is also unclear which entity/entities within government would receive the proceeds of any sale, especially given that CAMOC E.E. would cease to exist as a result of the divestment[17].

AGRICOM. The decision to privatize, in some form, the transport division of AGRICOM has clearly been taken. However, the form that the privatization is to take and the specific process to be followed is less than certain.

The policy decision to privatize the transport division was facilitated by: (i) the recognition that the overall role of AGRICOM is changing, as the private sector now performs an increasing amount of the rural transport and distribution previously undertaken by AGRICOM -- so the transport function is no longer needed in-house; and, (ii) the fact that is was not AGRICOM's initial charter to perform transport functions, but it was largely created as a response to the war and the corresponding decline in private haulers.

AGRICOM itself is undertaking a number of initiatives to "test" alternatives for privatization. Most of these however do not involve the sale or leasing of assets, but rather represent attempts at commercialization and/or management contracting. For example, AGRICOM has experimented in three provinces (Maputo, Zambezia and Numpula) with delegating much more authority and responsibility to the provincial level to test the ability of these entities to operate independently. However, performance was reported to decline, highlighting the scarce/thin managerial resources available.

AGRICOM now plans to evaluate options which include: (i) forming joint ventures with private partners in each of the main provinces -- with the issue of the necessity for majority government ownership left outstanding; (ii) outright sale of the trucks to private transporters, but on a province by province or regional basis -- in recognition of the limited absorptive capacity of the

---

[17] The exact number, type and condition of CAMOC's fleet is not widely known, and such data is extremely sparse even at the Ministry of Transport, which is the ministry responsible for CAMOC. In chapter 3, estimates of the disposition of CAMOC's fleet are provided.

private sector and the need for regional equity; and, (iii) sale to individuals, province by province, but probably with AGRICOM providing favorable financing terms -- in essence a seller's note over a 5 to 7 year period, with the truck as collateral. The consulting team's impression was that these alternatives were at the very early stages of investigation.

DPCCN. The divestment of DPCCN's fleet is being considered, and alternative dispositions for the transport and logistics functions were evaluated in a recent and as yet unreleased report. However, there is considerable hesitation in divesting DPCCN's fleet due to: (i) DPCCN being seen as the "transporter of last resort", particularly for providing relief cargo in the more remote/war-torn areas; (ii) the fact that, unlike AGRICOM, the overall role of DPCCN is not expected to change significantly in the near to medium term; and, (iii) particularly in a period of drought, the perceived loss of government control over the transport of relief cargo by divesting DPCCN's fleet is considered dangerous and inappropriate.

As in the case of AGRICOM, transport was not an initial function set out for DPCCN originally but more emerged in response to the war. In addition, many of its assets were given by donors, with specific functions in mind. It is questionable as to whether donors would be receptive to the sale of these donated assets, and also where DPCCN would find the financial resources needed to pay for the transport services it currently provides in-house[18].

Transcarga. Transcarga, despite being vastly majority government owned, is not considered to be a parastatal by the government. As a result, no divestment decisions or plans have been made.

However, Transcarga should probably be considered a candidate for divestment because: (i) it is vastly majority government owned; (ii) while reportedly well-managed in the past, the quality of management will come into question with the removal of the remaining Swedish technical assistance, from which Transcarga has benefitted since its inception; and, (iii) given that two of Transcarga's largest shareholders, AGRICOM and CAMOC, are both themselves candidates for wholesale restructuring and/or dissolution, the domestic capital base for Transcarga may be greatly reduced[19].

---

[18] There is a perception that donors are more willing to provide assistance to an organization such as DPCCN in the form of goods (eg, trucks, spares), especially those procured from their home countries, and less inclined to provide the sort of untied general budgetary financial assistance DPCCN would need if it divest its trucking fleet and has to pay for commercial transport services.

[19] It is somewhat ironic that Transcarga is considered an acceptable "buyer" for CAMOC/Maputo, given the "suspect" environment that Transcarga faces itself -- in addition to the fact that: (a) it is 100% government owned; (b) may have limited quality managerial resources once the Swedes pull out; and, (c) it is itself part owned by CAMOC.

6.3 Feasibility of Parastatal Fleet Divestment

The feasibility of divesting the major parastatal trucking fleets will be investigated in Phase II of the study. However, it can already be concluded at this stage that it is questionable as to whether divestment is an appropriate course of action, and even if it were, is now the right time.

6.3.1 The Need for Parastatal Fleet Reform

The two main problems cited with regards to the parastatal fleet sector are: (i) high concentration of the truck fleet in Government-controlled or parastatal fleets; and, (ii) poor management of the parastatal fleets and under-utilization of the assets. Divestment does not necessarily offer the only solution to these problems.

Whether there actually is a high concentration of the truck fleet in the public sector is mute. Insufficient statistical information exists to measure the share of the national fleet that is in the parastatal sector. Nonetheless, evidence suggests that much of the newer capacity in the medium to heavier truck category resides within the public sector, largely due to the large share of imported trucks provided by donors to the parastatals. However, the composition of private dedicated fleets, is not known with any accuracy, but certainly could contain a substantial number of medium to large trucks -- particularly given that these large commercial enterprises have access to the requisite financial resources to import new trucks and their business operations would support the use of this size category of vehicle.

Assuming that a high share of this segment of the fleet is in government hands, is divestment the only and/or best means for readdressing the balance? Two main alternative strategies which do not involve divestment could be undertaken, either in addition to or instead of divestment.

Firstly, it could be stipulated that all trucks provided by donors in the future go to the private sector, and thus, the public-private mix would shift over time. In fact, the trend is somewhat in this direction already. The number of trucks donated to the main parastatals has been diminishing over the last couple years[20], and donors such as USAID have commodity import programs aimed solely at the private sector (although in the past, traders and farmers have largely been the beneficiaries, not common carriers).

The extent to which the numerous donors in Mozambique are "allowed" to provide vehicles to the private sector rather than public entities, and thus adopt a USAID-type CIP program, needs to be assessed. A number of options exist for re-directing donor resources: (i) to CIP-type programs for the procurement of vehicles and related goods; (ii) as funding "earmarked" for purchase of private sector transport services by the parastatals; and/or, (iii) in the form of funds

---

[20] Few major commitments for new trucks have been made in the last two to three years, although some new trucks are still arriving because there is sometimes a lag of a year or more between commitment and actual arrival of the vehicle.

and/or technical assistance directed at enhancing the enabling environment for private sector transporters (that is support to credit schemes, insurance funds and regulatory reform).

Secondly, encouraging private dedicated fleets to enter the common carriage, for-hire business would be a rapid way of readdressing the balance. These fleets are professionally managed and would require minimal investment to "gear up" for common carriage (such as increased resources for marketing and operations control). Some of these fleets have already expressed interest in entering the business, and many could do so cost-effectively given that they would enjoy economies of scale due to the baseload represented by their existing in-house cargo. This is potentially a fast way of increasing the private sector share of common carriage, and may be a particularly advisable step in the near term in order to be responsive to the drought situation.

It is fairly clear that parastatal fleets are poorly managed and the trucks are under-utilized. However, there is little definitive evidence to suggest that existing private sector common carriers would provide better management. Managerial resources are not abundant in the private sector, and the utilization levels experienced in the private sector are not significantly better than those in the parastatal sector. However: (i) the parastatal and private sectors currently serve different market segments, so direct comparison is not possible; (ii) management in the private sector is unlikely to be any worse than in the public sector; and, (iii) experience in Mozambique (for example "comerciantes" and selected, new common carriers) and elsewhere in the world suggest that private sector operators are likely to be better motivated and display greater ingenuity.

Divestment may not offer the solution to the management problem in the near term. A range of non-divestment alternatives needs to be assessed. For example, in the case of AGRICOM, it may make sense in the short term for AGRICOM to continue to own the trucks[21] but to hire a management contractor to manage the transport operations. Similarly, for example, in the case of DPCCN, which is likely to have to serve as transporter of the last resort as long as the war persists, it might consider leasing out it's fleet to the private sector, but stipulate in the terms of the lease that DPCCN reserves the right to use a certain percentage of annual capacity, at a given rate and advance period of notice.

6.3.2 Timing of Divestment

Divestment at this point in time confronts a number of obstacles which will require some preliminary groundwork to ensure a successful program. Firstly, the continuing war -- with the resulting increased costs and risks of doing business (insurance, convoys, maintenance, loss of assets) and the overall dampening of demand for trucking services due to the lower overall level of economic activity -- makes the industry uneconomic and unattractive to the private sector. Secondly, creating a enabling environment is pre-requisite for divestment, or at a minimum needs to be undertaken simultaneously in a coordinated fashion. This would include

[21] Largely because a limited market exists for these vehicles.

liberalization of regulatory environment as well as other enabling factors such as improved credit and insurance availability, training, and availability of spare parts. Thirdly, the capacity of both the private and public sectors are currently limited for undertaking divestment. The private sector lacks the financial resources and may lack the managerial capability. The government has limited capacity to execute the divestment process, especially given that the range of divestment and privatization options are likely to be sophisticated and complex. Several organizational and procedural complexities evident in the public sector have already been identified in Section 6.2.

6.4 Next Steps for Parastatal Fleet Reform

Several interrelated next steps should be considered for assessing the feasibility of divestment of the parastatal truck fleets and alternative forms of privatization. Key steps to be undertaken as part of Phase II of the study include the following.

1. Develop a plan to create an enabling environment -- this should occur irrespective of whether divestment is undertaken, but is a prerequisite for successful divestment.

2. Assess the capacity of the public and private sectors to undertake alternative divestment options.

3. Consider all four parastatal fleets identified in the report as prospective candidates for divestment. While certain events, such as an offer being already received for CAMOC, may be outpacing the planning process, none of the currently proposed courses of action are fully appropriate.

   Decisions have yet to be made with regard to AGRICOM and DPCCN, and in both cases non-divestment alternatives are still under consideration. The rationale and timing of selecting divestment options need to be carefully weighed.

   The bid for CAMOC is pending, and only covers its Maputo operations. Furthermore, whether a bid from a largely government owned entity, Transcarga, qualifies as divestment is debatable -- only if a majority private foreign partner is brought in, would this constitute a divestment to the private sector. The issue is further complicated by the fact that: (i) CAMOC itself is a major shareholder of Transcarga; and, (ii) Transcarga's managerial capacity may be severely reduced in the near term when the foreign technical assistance is terminated.

   Transcarga should be considered as a prospective candidate for divestment as it is largely government owned. In addition, as stated above, its formerly strong management performance may be eroded by the departure of expatriate management, and heightens the need to seek private partners or other divestment options.

4. Alternative models for the form of divestment and privatization should be evaluated. A preliminary list of non-mutually exclusive options include:

Outright sale of transport companies/divisions as on-going concerns -- capacity to handle such large scale acquisition is likely to rest only in the large company business sector and/or foreign companies -- this option will most likely subordinate the small owner-operator objectives.

Consignment sales on commission, in blocks or successive "tranches" of vehicles -- this involves shifting the responsibility for selling or leasing vehicles into the private sector to a company with specialized industry knowledge and managerial capacity; the government would give up some portion of financial proceeds via the commission, but would save the resources it would have to spend to manage the process (all probably at an inferior performance level than the private company); some of the major truck importers/dealers such as Entreposto and Industria Tecnica are potentially good candidates.

Lease-type method, using a combination of "dry" and/or "wet" leases -- development of a leasing industry or mechanism would be required and other types of equipment could be included in the lease fleet portfolio; "wet" leases where insurance and a maintenance and parts package are included could be a way of encouraging small owner-operator participation.

"Management" buy-outs -- the financial resources of management are probably limited, and given that poor management is one of the main reasons for divestment, this option seems unlikely; however, if management owns the fleet and operates in a liberalized industry environment, they may be better motivated; management contracts with foreign operators would improve the attractiveness of this alternative.

Severance or "long service" packages -- Transcarga has already experimented with this concept, whereby drivers with more than 5 year service are given an opportunity to "purchase" their vehicles -- Transcarga provides the financing, and has an opportunity to modernize/rejuvenate its fleet; this program has yet to be fully tested; as the major parastatals divest their fleets, drivers will be "let go", the vehicles could form part of a severance package -- however, equity issues arise given that the number of drivers far exceeds the number vehicles.

Transformation to "mixed" enterprises -- "empresa mista", or companies with mixed public-private ownership could be formed -- this is a variant on the outright sales option, but would require attraction of a private sector partner for only part of the fleet/division/company; the legal basis for this form of enterprise exists in Mozambique.

Chapter 7

PRELIMINARY RECOMMENDATIONS AND NEXT STEPS

Given that the principal objectives of "Phase I: Diagnostic Study" were to collect and analyze information as an input to Phase II of the study, preliminary recommendations focus on next steps for Phase II and beyond. The following activities should be considered for inclusion in Phase II.

A. Liberalization Plan for Road Transport Industry:

Irrespective of whether parastatal fleets are divested, a plan for the liberalization of regulations and creation of an enabling environment for private sector road transport activities should be developed.

- Priority areas for liberalization and creation of an enabling environment include:
  - Improve access to, and costs of, finance, through the development of new mechanisms and/or institutional entities.
  - Develop a war-related risk insurance scheme for vehicles, with government acting as guarantor and/or initial funding provided by donors.
  - Improve availability and cost of imported and used spare parts.
  - Design industry-specific training programs for private sector operators, especially small owner-operators, and to train government in its new functions -- detailed terms of reference need to be developed to identify types of training needed and appropriate delivery models.
  - Ensure that proposed tariff liberalization is fully implemented.
- A summary of key issues and preliminary recommendations with regard to regulatory liberalization and alleviation of other constraints to an enabling environment are presented in Exhibit 7-1.

Exhibit 7-1

INDUSTRY LIBERALIZATION

Key Issues and Preliminary Recommendations

Action Area	Key Issues	Preliminary Recommendations
A. REGULATION		
1. Tariffs	Official rates too low/poorly set; rates observed by few in practice; govt. has stated intention of full liberalization	Ensure full liberalization occurs
2. Taxes/Levies on Vehicle Operations		
a. Imported trucks, spares, tires	Substantial add-on costs to CIF prices exist; spares & tires treated as consumption goods	Consider shifting spares and tires to lower import duty category; investigate fiscal recovery from other sources in truck industry
b. Licensing/registration fees	Current fees are minimal; collections performance is inadequate	Improve collections; consider raising fee levels; examine uses of funds
c. Diesel fuel tax	Tax is low in absloute terms and relative to rates levied on other fuel types; levied as flat rate	Consider raising the rate and calculating it as a percentage of price
d. Other Road User charges	Road Fund is poorly constituted; sources and uses of funds are inadequate/irrational	Develop program to improve revenue generation and budget allocation for the road sector (proposed in ROCS)
3. Standards and Safety	Inadequate certification processes; poor inspection procedures; harsh road conditions	Investigate harmonization with regional standards; examine enhanced weighbridge program; improve certs.
4. Regulation of International & Transit Road Traffic	International road traffic policy is unclear; anti-truck bias on Beira corridor in favor of rail	Consider options for fee-based or permit system for international traffic; examine PTA and SATCC regional proposals; discontinue bias on Beira corridor
B. OTHER CONSTRAINTS		
1. Credit and Insurance	Limited credit availability; credit is expensive; insurance industry is a monopoly and claims are rarely paid, if at all; no war risk insurance is available	Examine options for providing special finance arrangements to small/ medium scale truckers; establish war risk insurance fund, perhaps with govt. as guarantor and/or with initial funding from donors
2. Availability of Spare Parts	Spares are in limited supply & expensive when available; spares inventory management/dist. is poor use of used/cannibalized parts is sub-optimal; domestic parts industry is thin	Develop program to stimulate development of a used parts business; provide training in parts inventory management
3. Training	Significant lack of skills in public and private sectors, at all levels	Develop Terms of Reference for study to develop training program; leverage existing "modules"/resources
4. Transporters' Associations	Few transporters' associations are active; act primarily as booking agents	Examine options for associations to play non-cartel role in assisting small/individual owner-operators

- Additional related tasks to be undertaken in Phase II include:

  a. Investigate non-divestment means for shifting the balance of the fleet into the private sector. Consider feasibility of :

     -- Stipulating that all new vehicles provided by donors in the future be allocated to the private sector, using a USAID-type CIP or similar mechanism; and/or,

     -- Converting private dedicated fleets to common carrier usage.

  b. Assess the impact of the liberalization plan on the economics of the road transport business, and conduct sensitivity analyses for key variables (such as credit, insurance, spare parts availability).

B. Feasibility of Parastatal Truck Fleet Divestment:

The feasibility of divesting the major parastatal truck fleets needs to be tested, in advance of developing specific divestment plans. If divestment is considered infeasible in the near term, then divestment plans should be postponed until the liberalization of regulations and the creation of an enabling environment for private sector road transport activities can be accomplished.

- The main features of the feasibility analysis should include at a minimum the following.

  - Parameters of the analysis should include: (i) all four parastatals identified in this study; and, (ii) assessment of a range of divestment and privatization options.

  - Assess the capacity of both the private and public sectors with respect to divestment, particularly the financial and managerial capacity of the private sector and the public sector's ability to implement alternative divestment and privatization options.

  - Conduct a preliminary valuation of the main parastatal truck fleets to develop "order of magnitude" estimates of the level of financial resources the private sector would need to mobilize to "acquire" the fleet. The purpose of this activity is more to gauge private sector capacity requirements than to establish values/prices for divestment.

  - Clarify key institutional and procedural issues related to divestment of truck fleets, such as which entity receives the financial proceeds from the sale or lease of assets, and the definition of what constitutes divestment versus privatization.

- If the outcome of the feasibility analysis is generally favorable, then an overall outline of a divestment plan should be developed. This would identify key steps, time frame and an overall process for divestment, as well as evaluate the most feasible options for divestment or privatization of the four individual fleets.

C. Recommended Non-Phase II Activities:

Further activities not contemplated for Phase II of this study but which should be undertaken nonetheless, include the following.

- Assess the feasibility of, and requirements for, rehabilitating the existing truck fleet (be it publicly or privately owned), and for developing a vehicle rehabilitation industry on an on-going basis.

- Assess the prospects and requirements for rehabilitation of workshops and related facilities, and managing the inventory and flow of spare parts.

- Conduct an institutional analysis of government entities involved in road transport regulation and make recommendations in light of the government's new role as a result of industry liberalization.

- Implement the training programs designed as a follow-on activity to Phase II.

ANNEX A

CONSULTANT'S SCOPE OF WORK

Statement of Work

Mozambique Private Sector Road Transport Support Study

I. Objective

To provide primary information on the prospects and most suitable channels of privatization of parastatal trucking fleets and on the most critical areas of trucking-related regulation in need of liberalization.

II. Background

Within the larger context of the Economic and Social Rehabilitation Program supported by the IMF, the World Bank, and many bilateral donors, the Government of Mozambique (GRM) has identified improvements to transport infrastructure serving domestic needs as a priority for investment. The GRM is at present applying to the International Development Association (IDA) for a credit for a Coastal Shipping Project, but recognizes the need for a coherent strategy to develop all modes of transport serving the domestic economy. Development of the GRM's proposed Coastal Shipping and policy reforms in the road transport subsector, thereby laying the groundwork for later investment activities in road rehabilitation and related road transport services.

The GRM's main objective in the transport sector is to promote rural development and trade, despite the constraints imposed by the continuing adverse security situation. In recent years, substantial amounts of foreign financial assistance have been channeled to the rehabilitation of railway corridors to re-open international transit traffic facilities and restore an important source of foreign exchange earnings. The emphasis of public expenditure programs in this sector is now shifting, toward the rehabilitation of rural feeder road networks and primary and secondary roads providing access to the sea, and toward increasing coastal shipping and trucking capacity. Increased private sector participation will be fostered in all transport services, with the state retaining a much reduced role in transport. Divestiture of transport-related assets and responsibilities to the private sector will allow public enterprises to concentrate resources on priority activities and thereby improve performance. The GRM's pricing policy for transport services has already begun to shift to a full cost-recovery basis, and liberalization of transport pricing policy can be reasonably expected. In addition, steps are being taken to improve resource mobilization for road maintenance, for example through user charges for international road traffic (introduced in early 1990).
Development of a road transport subsector which relies on the

private sector will depend on a sensible program of policy and regulatory reform. At present, trucking-related services in Mozambique have three overriding operational characteristics: first, high concentration of the truck fleet in large Government-controlled or parastatal fleets; second, inefficient vehicle utilization; and third, poor facilities for maintenance and other support services. The GRM has decided to study the most cost-effective means to remedy the constraints these traits impose on developing more efficient and competitive road transport, and is seeking consulting services to prepare an action program leading to (i) privatization of parastatal and Government trucking fleets (ii) liberalization of regulatory constraints to private initiatives in this subsector, and (iii) rehabilitation and productive utilization of the existing fleet.

The World Bank and USAID are cooperating to support the GRM in this effort by conducting a set of studies containing actions and proposals suitable for immediate implementation through either USAID program assistance or through a proposed IDA roads project. The set of studies will have four elements:

1. Development of guidelines for shifting the balance of the trucking industry from the public to the private sector -- these will address the funding required to effectuate privatization of the parastatal fleets and of appropriate procedures and financial intermediaries (based on recognized commercial and banking practices) to move such funds; in this context, special attention will given to the small, entry-level owner-operator, and the potential role of cooperative associations in facilitating funding and vehicle transfers and in acquiring support services (such as spare parts procurement) will also be considered.

2. Development of proposals for the liberalization of regulations and other restrictions on private sector road transport activities, including a reduced and re-oriented role for Government agencies -- these will address the need for Government regulatory or support services to encourage transport growth, while keeping GRM involvement in road transport activities to a minimum; issues to be addressed include insurance, security, and safety in the industry, and cost-effective means to advocate such standards.

3. Identification of types of training and/or other assistance needed by emerging private sector operators and by GRM agencies to fulfill their new roles in road transport activities.

4. Assessment of the potential for rehabilitation of existing resources and projected needs -- including the mechanical condition of the present parastatal fleets and the

mechanical skills at the workshop floor level; also addressing workshop licensing constraints to installation of new capacity, the regulations relating to importation and distribution of spare parts and components, and availability of foreign exchange for workshop equipment and parts.

This statement of work addresses the first two of these four elements by providing primary information on the prospects and most suitable channels for privatization of parastatal fleets and the most critical areas of trucking regulation in need of liberalization.

III. Scope of Work

A. General

The Contractor will travel to Mozambique to consult with Government agencies, private sector transporters, donor agencies, and others involved in road transport and related services, in order to formulate cost-effective and operationally sound measures leading to privatization of Government and parastatal trucking fleets and liberalization of regulations and other restrictions on competitive private sector road transport activities, including mechanical and technical support services.

B. Specific

Specific tasks to be performed include but are not limited to the following:

1. Review the current policy framework supporting road transport operations and document and propose policy changes to effect stronger private sector participation in this subsector.

2. Review current regulations governing road transport activities and propose changes to streamline and liberalize these, including reform of tariff restrictions to permit road transport rates to be freely negotiated between transporter and client.

3. Review existing minimum standards for security and safety in the trucking industry, propose revisions as appropriate to reflect existing constraints to advocating these.

4. Identify types of training or assistance needed by the emerging private sector and by government agencies at appropriately decentralized levels to fulfill their new roles in road transport activities, and develop terms of reference for a more detailed study of these

training needs.

5. Propose detailed steps and transparent procedures for divestiture of vehicles, workshops, equipment, and similar or related facilities, from government institutions and parastatal companies to the private sector, with explicit consideration for small, entry-level owner-operators.

6. Assess funding needs and mechanisms for privatization of government and parastatal fleets, including appropriate procedures and intermediaries to move funds based on recognized commercial and banking practices, and taking into account ongoing World Bank assistance to restructure the banking sector in Mozambique.

7. Review the effectiveness of transporters' associations, their legal status, their potential role in facilitating vehicle transfers from public to private ownership, and their potential to foster or to impede increasing competitiveness in road transport.

8. Assess other constraints and make recommendations to improve the environment for private sector road transport activities (for example, insurance, reliable fuel availability, access to parts and services, etc.).

9. Develop a time frame for implementation of the policy reforms, regulatory changes, and privatization activities recommended.

IV. Required Expertise and Level of Effort

The Contractor will provide a three-person core team for a total of five person-months, of which approximately four person-months will be spent in-country. This team should include an economist and a two road transport specialists with a mix of specific expertise in privately owned/operated road transport operations and experience in financial services, road transport-related regulations and institutions, road transport-related skills development, and transport-related private sector enterprise development. Experience in sub-saharan Africa is essential. Portuguese language capability is highly desirable.

In addition, the Contractor may sub-contract to individuals to procure local technical expertise as necessary.

The study will be conducted in two parts; Phase I covering a Diagnostic Study and Phase II completing a Divestment/Liberalization Plan Development. Each phase will require approximately three weeks in country by each of the

required experts.

Phase I: Diagnostic Study. Phase I will be a diagnostic and information gathering phase in which the complete core team will assess the current status and intentions with regard to divestment of the parastatal trucking fleet and liberalization of the trucking industry. Specifically the team will investigate/assess: i) macro-economic conditions, the business climate and overall privatization policy and plans with respect to trucking privatization and liberalization; ii) trucking policy and regulation; and iii) trucking operations and small owner-operator issues.

Phase II: Divestment/liberalization Plan Development. The specialist in private sector enterprise development and the economist will further develop plans for divestment of the parastatal trucking fleet and liberalizing the trucking industry.

V. Timing and Duration

The required work should begin on/about February 24, 1992; in-country work should be completed by April 20, 1992 and the final report completed by May 18, 1992.

VI. Roles and Responsibilities

USAID and the World Bank will provide joint supervision for this study, with direct supervision by USAID/Mozambique. Close consultation and collaboration with a range of Mozambican agencies and individuals during this work will be critical to ensuring that the study's recommendations are implemented. The progress of the study will also be monitored by a representative of the National Directorate for Road Transport of the Ministry of Transport and Communications.

VII. Required Reports

1. Within one week after arrival in Mozambique, the Contractor will present to USAID, the World Bank, and the GRM an outline of the Phase I Diagnostic Report and a schedule for completion of the study, including itineraries for field visits and preliminary list of contracts.

2. Prior to departure from Mozambique, the Contractor will orally present to USAID, the World Bank, and the GRM the principal findings of the diagnostic phase and recommendations of the study. The Contractor will also present the findings orally to the appropriate World Bank staff in Washington D.C. upon return to the U.S.

3. Within ten days after departure from Mozambique, the Contractor will submit to USAID/Mozambique by courier service, transmittal to the World Bank and the GRM, ten copies of a complete draft report for the diagnostic phase including findings, recommendations, time frames, and other elements as described in the scope of work.

4. Within two weeks of receiving USAID, World Bank, and GRM comments on the draft report (to be consolidated and transmitted by USAID), the Contractor will provide USAID with 12 copies of the complete final report in English, for transmittal to the World Bank and the GRM.

   At the same time, the Contractor will provide USAID with 25 copies of a Portuguese translation of the final report's executive summary.

5. Prior to departure from Mozambique after Phase II, the Contractor will submit to USAID for transmittal to the World Bank and the GRM, ten copies of a complete draft report for the divestment and liberalization plans phase, containing findings, recommendations, time frames, and other selected elements described in the scope of work.

6. Also prior to departure from Mozambique after Phase II, the Contractor will orally present the principal findings from the divestment/liberalization plans phase study to USAID, the World Bank, and the GRM.

7. Within two weeks of receiving USAID, World Bank, and GRM comments on the draft report (to be consolidated and transmitted by USAID), the Contractor will provide USAID with 12 copies of the complete final report in English, for transmittal to the World Bank and the GRM.

   At the same time, the Contractor will provide USAID with 25 copies of a Portuguese translation of the final report's executive summary.

VIII. Logistical Support

USAID/Mozambique will provide the team with office space. All photocopy and secretarial/translation services will be a part of the contract. The local hired consultant will assist the team in arranging meetings with key contacts. USAID/Mozambique will make hotel and car hire reservations, arrange in-country travel, and assist with confirmation of onward travel arrangements. All other provisions are understood to be the responsibility of the contractor.

ANNEX B

LIST OF CONTACTS

MOZAMBIQUE PRIVATE SECTOR ROAD TRANSPORT SUPPORT STUDY

List of Contacts Made by the Study Team

Ministerio de Construcao e Aguas
Direccao Nacional de Estradas e Pontes
Carlos Fragoso
Director Nacional

Ministery of Transport and Communications
Roads Transport National Manager
Lucas J. Nhamizinga
Economist

Manica
Clive Stringer
Marketing Director

Transportes Cassamo
Nasser T. S. Suca
Gerente Geral

Ministery of Transport and Communications
Maria Helena Paulo
Director International Relations

AGRICOM
Rainer Helling
Project Coordinator

Direccao Nacional do Transportes Rodoviarios
Jose Chimbuebue Domingos
Chefe do Departmento de Trafego Rodoviario

Entreposto Comercial de Mocambique
Manuel Jose
Director

DPCCN
Harlan Hale
Director
Logistics Support Unit

DPCCN
Arthur Hussey
Co - Director
Logistics Support Unit

Austral Consultoria e Projectos, Lda.
Jeanne L. Stephens
General Manager

Transportes Lourenco, Lda
Antonia Caldeira
Director

Enrepostp Frigorifico da Matola
Luis Francisco
Director Geral

MINAGRI - MSU - USAID
Raul Jorge G. Varela
Agricultural Economist-Anthropologist

Lomaco
Mark Lucas
Commercial Manager

Institue of Transport Economics
Norwegian Center for Transport Research
Beth Nicolaysen
Research Economists

Institue of Transport Economics
Norwegian Center for Transport Research
Odd I. Larsen
Senior Economists

Swedish International Development Authority
Lars B. Lagging
Infrastructure Division

Southern Africa Transport and Communications Commission
Harold Ekker
Planning Officer

Southern Africa Transport and Communications Commission
Richard W. Corsino
Project Manager

African Development Bank
Dr. H. Nyame-Mensah
Senior Transport Economist

AMI Mocambique, S.A.R.L
David Joao Assuncao Mocare
Import Export Manager

Ministry of Finanace
Division of Internal Taxes

Entreposto Comercial de Mocambique
Manuel Jose
Director

Entreposto Comercial de Mocambique
Antonio Monteiro
Sales Manager

Toyota de Mocambique, Lda.
Jaime B. Gracez de Athouguia
Director Geral

UTRE
Minsisterio da financas
Bonifacio do Rosario Dias
Director

AGRICOM
Pedro Valdivia
Transport Director

Save The Children
Steve Morrow

SIR Group
A. Camal Junior
Presidente

World Bank
Philip W. Moeller
Transport Sector Training Expert

Smith Wilson Kirkpatrick
Alec Patterson
Consulting Engineer to DNEP

CARE INTERNATIONAL
Kent Glenzer
Training Coordinator

ENTREPOSTO COMERCIAL DE MOCAMBIQUE
Hernani Dores da Mata
Director of Service and Training

AGRICOM
Joao Manuel Dezanove
Director Geral

SWEDISH INTERNATIONAL DEVELOPMENT AUTHORITY
Ilmar Teng
Coordinator of Programs for SADCC

ANNEX C

BIBLIOGRAPHY

MOZAMBIQUE PRIVATE SECTOR ROAD TRANSPORT SUPPORT STUDY

Bibliography

Mozambique: Restoring Rural Production and Trade, World Bank, October 23, 1990.

Mozambique Transport Sector Review, World Bank, October 31, 1989.

Mozambique Private Sector Support Program, USAID, June 28, 1991.

Mozambique Urban Local Government and the Environment Sector Review, World Bank, December 16, 1991.

Mozambique Beira Transport Corridor Project, World Bank, July 18, 1989.

Mozambique: Country Program Strategic Plan FY 1990-1992, USAID, March 1990.

SADCC Transportation Corridors: Study of Financial Strategy, World Bank, November 1990.

Evaluation of AGRICOM E.E. - A Mozambican Agricultural Marketing Organization, Scandinavian Management Support AB, August, 1990.

Managing Policy Transition: Report of a Fact-Finding Mission to AGRICOM, SIDA, October 1990.

AGRICOM: Relatorio de Actividades 1990 e Programa Para 1991, AGRICOM, Abril 1991.

Privatization and Control of State-Owned Enterprises, EDI, 1991.

Privatization and Development, International Center for Economic Growth, 1987.

Divestiture in Developing Countries, World Bank, 1990.

Techniques of Privatization of State-Owned Enterprises, World Bank, October, 1989.

Estudio para a Autonomizacao da Logistica do DPCCN, Austral Consultoria e Projectos, Lda, Dezembro, 1991.

Bilateral Road Transport Agreements: Review of the Present Situation in the SADCC Region, Institue of Transport Economics, November, 1991.

SATCC Final Report on the Study of Road Traffic and Transport Training, Canadian Transport Technical Services Group, December 1989.

Detailed Implementation Plan for the SATCC Road Traffic and Transport Training Programme, S.L.I. Consultants, December 1990.

Technical Assistance Planning - Five Year Plan for DNEP, Scott Wilson Kirkpatrick, February 1991.

International Road Transport Agreements, SATCC, September 1984.

ANNEX D

BACKGROUND EXHIBITS SUPPORTING THE ECONOMIC ANALYSES

- Estimated Annual Vehicle Operating Expenses Showing Share of of Costs by Category for a 20 Ton Truck (Exhibit D-1).

- Estimated Vehicle Operating Expenses and Unit Costs as a Function of Annual Distance for New Trucks and Used Trucks (Exhibits D-2 and D-3).

- Graph of Unit Cost Versus Distance for New and Used 8 Ton Trucks at 60 Percent Utilization (Exhibit D-4).

- Graph of Unit Cost Versus Distance for New and Used 20 Ton Trucks at 60 Percent Utilization (Exhibit D-5).

ESTIMATED ANNUAL VEHICLE OPERATING EXPENSES
SHARE OF COSTS BY CATEGORY FOR A 20 TON TRUCK

ASSUMPTIONS:				
ANNUAL DISTANCE:	30,000 KM		60,000 KM	
USED TRUCK				
PRICE: FULLY AMORTIZED				
ANNUAL FIXED COSTS (Thous. MT)				
DRIVER	1,421	2.3%	1,421	1.4%
AMORTIZATION	0	0.0%	0	0.0%
AVERAGE INTEREST	0	0.0%	0	0.0%
INSURANCE & TAX	23,271	37.3%	23,271	23.2%
TOTAL FIXED	24,692	39.5%	24,692	24.6%
ANNUAL VARIABLE COSTS				
FUEL	3,521	5.6%	7,041	7.0%
TIRES	11,364	18.2%	22,729	22.7%
MAINTENANCE	22,856	36.6%	45,713	45.6%
TOTAL VARIABLE	37,741	60.5%	75,483	75.4%
TOTAL	62,433	100.0%	100,175	100.0%
UNIT COST PER TON-KILOMETER - 1	104		83	

ASSUMPTIONS:				
ANNUAL DISTANCE:	30,000 KM		60,000 KM	
NEW TRUCK				
PRICE: 277,059,000 MT				
ANNUAL FIXED COSTS (Thous. MT)				
DRIVER	1,421	0.8%	1,421	0.8%
AMORTIZATION - 2	55,412	32.8%	55,412	29.2%
AVERAGE INTEREST - 3	68,157	40.4%	68,157	36.0%
INSURANCE & TAX	23,271	13.8%	23,271	12.3%
TOTAL FIXED	148,261	87.8%	148,261	78.3%
ANNUAL VARIABLE COSTS				
FUEL	3,521	2.1%	7,041	3.7%
TIRES	11,364	6.7%	22,729	12.0%
MAINTENANCE	5,714	3.4%	11,428	6.0%
TOTAL VARIABLE	20,599	33.0%	41,198	41.1%
TOTAL	168,860	100.0%	189,459	100.0%
UNIT COST PER TON-KILOMETER - 1	281		158	

1 - Imputed units cost per ton-kilometer assuming 100% utilization.
Actual utilizatin is much lower and, consequently, units costs higher.
2 - 5 years.
3 - 41% per annum, constant repayment of principal, average over 5 years.

Exhibit D - 2

ESTIMATED VEHICLE OPERATING COSTS

******** ASSUMPTIONS: NEW TRUCK
60% Utilization
Full Capital Costs

TRUCK SIZE		8 Tons	20 Tons	25 Tons
MODEL		L1513/48	LS1924/36	LS2624/36
DELIVERED PRICE (thous. MT		205,473	277,059	360,170
ANNUAL FIXED COSTS				
DRIVER		1,421	1,421	1,421
AMORTIZATION (1)		41,095	55,412	72,034
AVERAGE INTERES	41%	50,546	68,157	88,602
INSUR. & TAX		17,328	23,271	30,558
TOTAL FIXED		110,390	148,261	192,615
ANNUAL VARIABLE COST				
FUEL		2,370	3,091	3,871
TIRES		6,525	9,978	12,847
MAINTENANCE		4,014	5,017	5,367
TOTAL VARIABLE		12,909	18,086	22,085
ANNUAL KILOMETERS		26,340	26,340	26,340
VARIABLE COST PER KM		490	687	838

OPERATING DISTANCE --Annual Kilometers--	OPERATING COSTS ----Meticais per ton-kilometer----		
10,000	2,402	1,293	1,340
20,000	1,252	675	698
30,000	869	469	484
40,000	677	366	377
50,000	562	304	313
60,000	485	263	270
70,000	431	234	239
80,000	390	212	216
90,000	358	194	199
100,000	332	181	184
110,000	311	170	173
120,000	294	160	163
130,000	279	152	155
140,000	266	145	148
150,000	255	140	142
160,000	246	134	136
170,000	237	130	131
180,000	230	126	127
190,000	223	122	123

1 - 5 year period of amortization.
2 - 5 year financing with constant repayment of principal.

Exhibit D - 3

ESTIMATED VEHICLE OPERATING COSTS

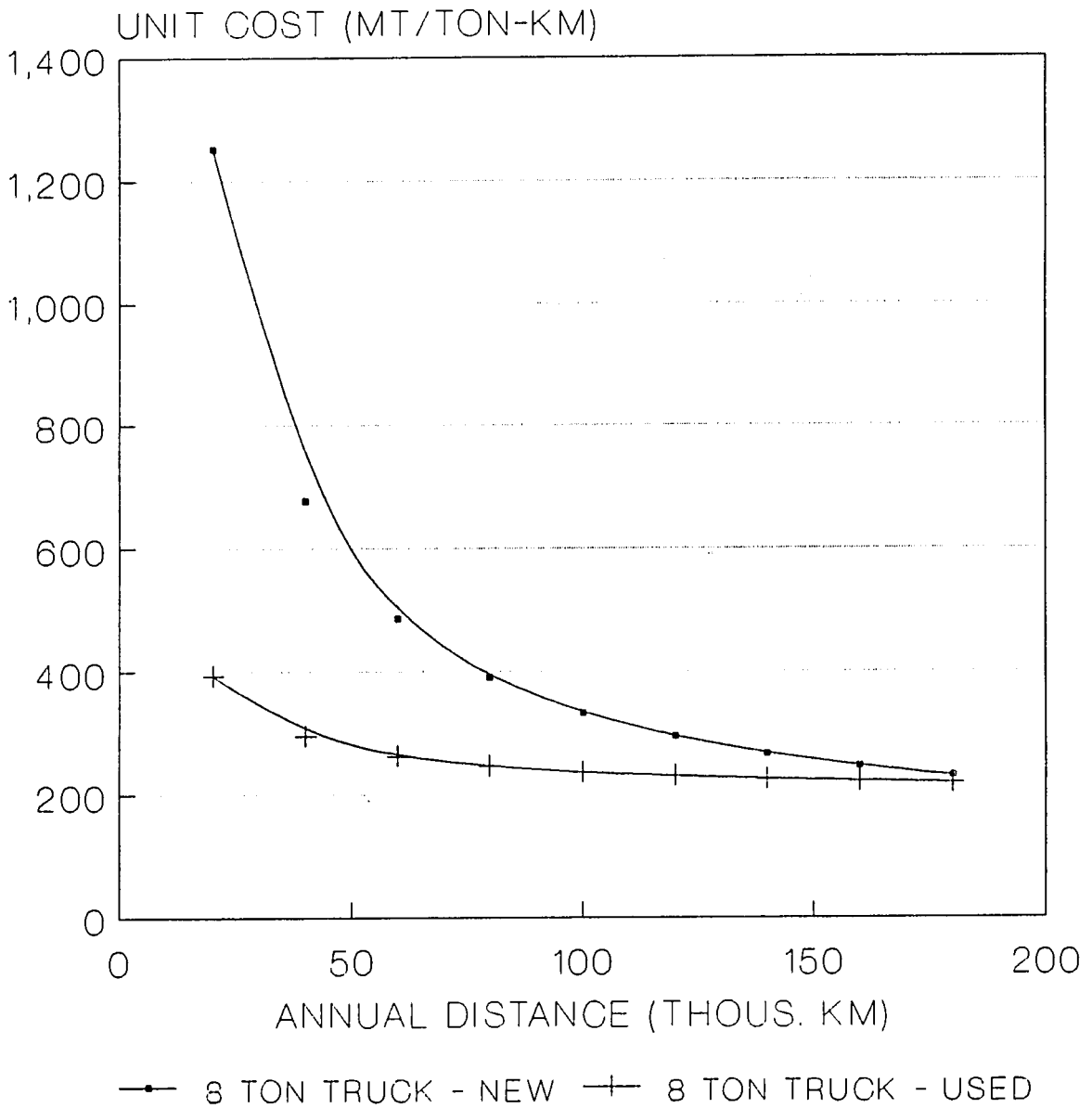
********* ASSUMPTIONS: USED TRUCK
60% Utilization
Zero Capital Costs

TRUCK SIZE		8 Tons	20 Tons	25 Tons
MODEL		L1513/48	LS1924/36	LS2624/36
DELIVERED PRICE (thous. MT)		0	0	0
ANNUAL FIXED COSTS				
DRIVER		1,421	1,421	1,421
AMORTIZATION(1)		0	0	0
AVERAGE INTEREST(2)	41%	0	0	0
INSURANCE & TAX		17,328	23,271	30,558
TOTAL FIXED		18,749	24,692	31,979
ANNUAL VARIABLE COSTS				
FUEL		2,370	3,091	3,871
TIRES		6,525	9,978	12,847
MAINTENANCE		16,056	20,068	21,468
TOTAL VARIABLE		24,951	33,137	38,186
ANNUAL KILOMETERS		26,340	26,340	26,340
VARIABLE COST PER KM		947	1,258	1,450

OPERATING DISTANCE --Annual Kilometers--	OPERATING COSTS ----Meticais per ton-kilometer----		
10,000	588	311	310
20,000	393	208	203
30,000	328	173	168
40,000	295	156	150
50,000	275	146	139
60,000	262	139	132
70,000	253	134	127
80,000	246	131	123
90,000	241	128	120
100,000	236	125	118
110,000	233	124	116
120,000	230	122	114
130,000	227	121	113
140,000	225	120	112
150,000	223	119	111
160,000	222	118	110
170,000	220	117	109
180,000	219	116	108
190,000	218	116	108

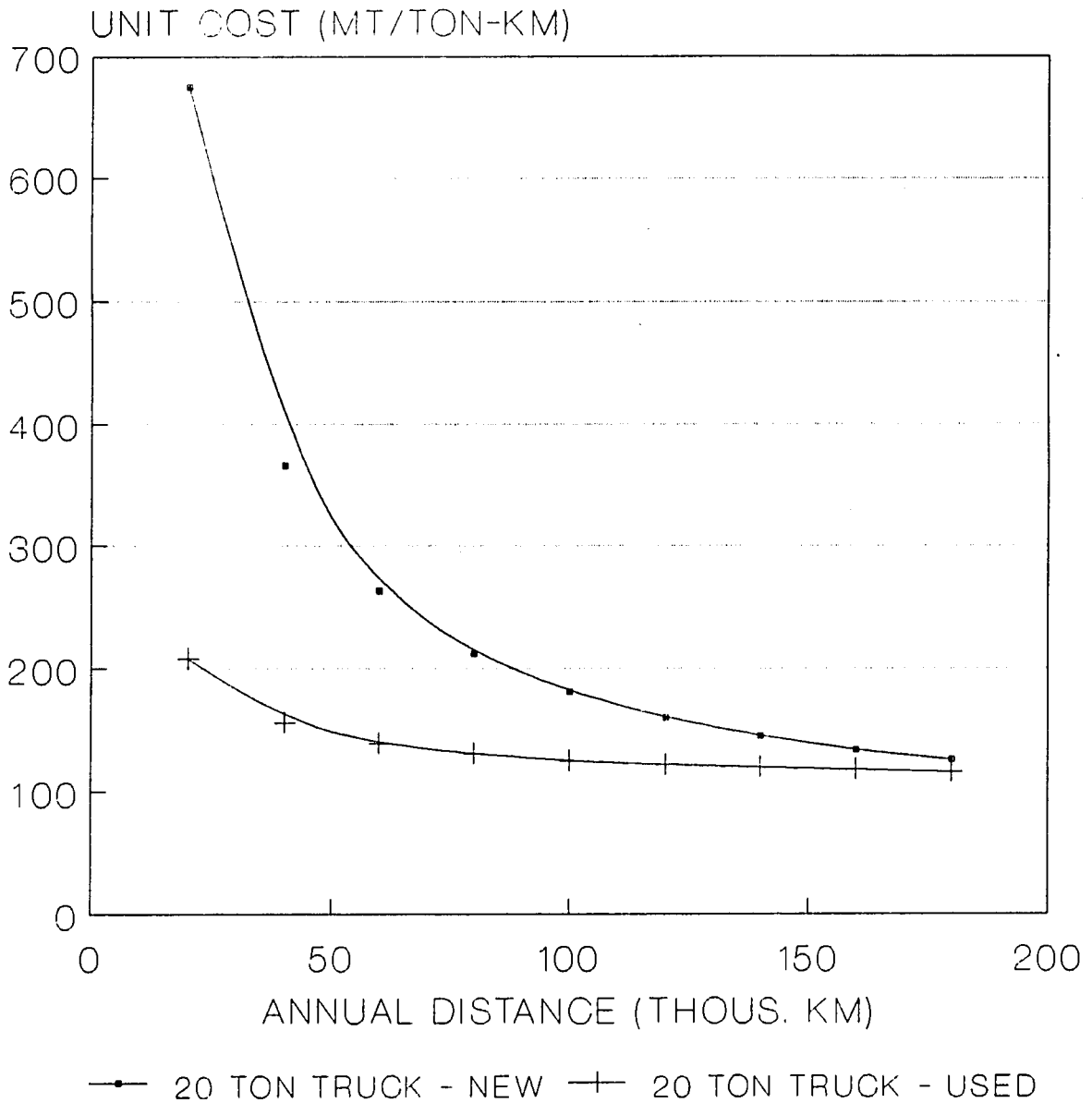
1 - 5 year period of amortization.
2 - 5 year financing with constant repayment of principal.

UNIT COST VERSUS DISTANCE FOR NEW AND USED 8 TON TRUCKS
AT 60 PERCENT UTILIZATION



FOR NORMAL DUTY SERVICE ON PAVED ROADS

UNIT COST VERSUS DISTANCE FOR NEW AND USED 20 TON TRUCKS
AT 60 PERCENT UTILIZATION



FOR NORMAL DUTY SERVICE ON PAVED ROADS

ANNEX E

STATISTICAL ANALYSIS OF THE AGRICOM FLEET

- Profile of Fleet by Equipment Type and Manufacturer (Exhibit E-1)
- Profile of Fleet by Year of Manufacture (Exhibits E-2)
- Profile of Fleet by Location and Operational Status (Exhibit E-3)
- Profile of Fleet by Truck Size (Exhibit E-4)
- Database of the Agricom Equipment Fleet (Exhibit E-5)

Exhibit E - 1

Profile of the AGRICOM Equipment Fleet

TYPE	MANUFACTURER	UNITS	TOTAL CAPACITY
TRUCKS	ATRELADO	7	105
	BERLIET	6	42
	FIAT	7	49
	IFA	5	25
	LEYLAND	1	10
	NISSAN	1	9
	MERCEDES BENZ	16	128
	RENAULT	26	182
	SCANIA	88	924
	TOYOTA	4	14
	VOLVO	9	135
TOTAL		**170**	**1623**
TRACTORS	MASSEY-FERGUSON	**141**	**707**

Profile of the AGRICOM Fleet
Number of Units by Year of Manufacture

Year of Manufacture	Number of Trucks	Total Capacity (tons)	Capacity Share of Total	Cum. Share of Total
1990	26	260	16.1%	16.1%
1989	21	219	13.5%	29.7%
1988	1	10	0.6%	30.3%
1987	5	65	4.0%	34.3%
1986	26	253	15.7%	50.0%
1985	32	275	17.0%	67.0%
1984	19	203	12.6%	79.6%
1983	8	73	4.5%	84.1%
1982	7	83	5.1%	89.3%
1981	1	10	0.6%	89.9%
1980	6	42	2.6%	92.5%
1979	6	45	2.8%	95.3%
1978	3	20	1.2%	96.5%
1977	7	56	3.5%	100.0%
TOTAL	168	1,613	100.0%	

Source: AGRICOM

Distribution of the AGRICOM Fleet by Equipment Type, Location and Status

Province	Tractors			Trucks		
	Operational	Non-Operational	Total	Operational	Non-Operational	Total
CABO DEL GADO	15	4	19	14	1	15
GAZA	7	1	8	16	6	22
INHAMBANE	9	3	12	9	4	13
MANICA	9	2	11	8	2	10
MAPUTO	2	0	2	25	1	26
NAMPULA	17	4	21	24	15	39
NIASSA	20	5	25	11	6	17
SOFALA	6	3	9	4	0	4
TETE	8	6	14	9	2	11
ZAMBESIA	13	5	18	10	3	13
UNKNOWN	2	0	2	0	0	0
TOTAL	108	33	141	130	40	170

Profile of the AGRICOM Fleet by Truck Size

Truck Capacity in Tons	Number of Trucks	Share by Number	Total Lift Capacity	Share by Capacity
15	27	15.9%	405	25.0%
10	67	39.4%	670	41.3%
9	14	8.2%	126	7.8%
8	16	9.4%	128	7.9%
7	33	19.4%	231	14.2%
6	4	2.4%	24	1.5%
5	6	3.5%	30	1.8%
3	2	1.2%	6	0.4%
2	1	0.6%	2	0.1%
	170	100.0%	1,622	100.0%

TYPEAGRI.WR1
14-Apr-92
13:58

Exhibit E - 5

INVENTORY OF THE AGRICOM EQUIPMENT FLEET

SORT BY TYPE AND MAKE

NUMBER	TYPE	MAKE	MODEL	CAPACITY (Tons)	YEAR	CIF PRICE		PROVINCE	STATUS
UNKNOWN	TRUCK	ATRELADO	MAQUINAG	15	1989	18,814.00	1	MAPUTO	OPERATIONAL
UNKNOWN	TRUCK	ATRELADO	MAQUINAG	15	1989	18,814.00	1	MAPUTO	OPERATIONAL
MLQ-43-36	TRUCK	ATRELADO	MAQUINAG	15	1985	18,814.00	1	MAPUTO	OPERATIONAL
MLP-70-73	TRUCK	ATRELADO	MAQUINAG	15	1985	18,814.00	1	MAPUTO	OPERATIONAL
MLQ-43-37	TRUCK	ATRELADO	MAQUINAG	15	1989	18,814.00	1	MAPUTO	OPERATIONAL
MLQ-37-38	TRUCK	ATRELADO	MAQUINAG	15	1985	18,814.00	1	MAPUTO	OPERATIONAL
MLQ-24-62	TRUCK	ATRELADO	MAQUINAG	15	1985	18,814.00	1	MAPUTO	OPERATIONAL
				105		131698	7		
MLP-91-35	TRUCK	BERLIET	L648R	6	1980	74,444.00	1	ZAMBESIA	OPERATIONAL
MLQ-09-67	TRUCK	BERLIET	L648R	6	1980	74,444.00	1	MANICA	OPERATIONAL
MLP-39-29	TRUCK	BERLIET	GLR 200	9	1980	97,773.00	1	ZAMBESIA	OPERATIONAL
	TRUCK	BERLIET	GLR 200	9	1980	97,773.00	1	TETE	NON-OPERATIONAL
MBB-92-56	TRUCK	BERLIET	L648R	6	1980	29,431.00	1	GAZA	NON-OPERATIONAL
MLQ-41-71	TRUCK	BERLIET	L648R	6	1980	74,444.00	1	ZAMBESIA	NON-OPERATIONAL
				42		448309	6		
MLQ-89-15	TRUCK	FIAT	602N	7	1985	29,431.00	1	GAZA	OPERATIONAL
MLQ-45-82	TRUCK	FIAT	602N	7	1985	29,431.00	1	GAZA	OPERATIONAL
MLQ-92-01	TRUCK	FIAT	602N	7	1985	29,431.00	1	GAZA	OPERATIONAL
MLQ-29-92	TRUCK	FIAT	602N	7	1985	29,431.00	1	GAZA	OPERATIONAL
MLQ-92-05	TRUCK	FIAT	602N	7	1985	29,431.00	1	GAZA	OPERATIONAL
MLQ-55-82	TRUCK	FIAT-GUI	682N3-GUIN	7	1985	79,194.00	1	GAZA	OPERATIONAL
MLQ-89-01	TRUCK	FIAT-OFI	602EN-OFIC	7	1985	66,330.00	1	GAZA	OPERATIONAL
				49		292679	7		
MLP-44-43	TRUCK	IFA	W50L	5	1978	25,000.00	1	INHMAMBANE	OPERATIONAL
MLQ-89-07	TRUCK	IFA	W50LR/P	5	1985	25,000.00	1	NAMPULA	NON-OPERATIONAL
MLP-47-35	TRUCK	IFA	W 50	5	1979	25,000.00	1	ZAMBESIA	NON-OPERATIONAL
MLQ-89-16	TRUCK	IFA	W50L	5	1978	25,000.00	1	INHMAMBANE	NON-OPERATIONAL
MLQ-30-08	TRUCK	IFA	W50L	5	1982	25,000.00	1	GAZA	NON-OPERATIONAL
				25		125000	5		
MLQ-73-42	TRUCK	LEYLAND	E402	10		38,600.00		ZAMBESIA	OPERATIONAL
MLQ-89-04	TRUCK	M.BENZ	1516	8	1979	52,620.25	1	TETE	OPERATIONAL
MLQ-89-72	TRUCK	M.BENZ	1513	8	1986	48,640.13	1	NIASSA	OPERATIONAL
MLQ-30-16	TRUCK	M.BENZ	1513	8	1986	48,640.13	1	NIASSA	OPERATIONAL
MLS-82-79	TRUCK	M.BENZ	1516	8	1979	52,620.25	1	TETE	OPERATIONAL
MLQ-89-10	TRUCK	M.BENZ	1513	8	1986	48,640.13	1	NIASSA	OPERATIONAL
MLQ-73-49	TRUCK	M.BENZ	1516	8	1979	52,620.25	1	NAMPULA	OPERATIONAL
MLQ-30-02	TRUCK	M.BENZ	1513	8	1977	48,640.13	1	INHMAMBANE	OPERATIONAL
MLQ-73-38	TRUCK	M.BENZ	1513	8	1977	48,640.13	1	NAMPULA	OPERATIONAL
MLP-70-91	TRUCK	M.BENZ	1513	8	1986	48,640.13	1	NIASSA	OPERATIONAL
MLQ-73-43	TRUCK	M.BENZ	1513	8	1977	48,640.13	1	NIASSA	NON-OPERATIONAL
ML-38-33	TRUCK	M.BENZ	1513	8	1977	48,640.13	1	NIASSA	NON-OPERATIONAL
MLQ-73-44	TRUCK	M.BENZ	1513	8	1977	48,640.13	1	NIASSA	NON-OPERATIONAL
MNB-67-77	TRUCK	M.BENZ	1513	8	1977	48,640.13	1	NIASSA	NON-OPERATIONAL
ML-50-85	TRUCK	M.BENZ	1516	8	1979	52,620.25	1	MANICA	NON-OPERATIONAL

MBB-92-48	TRUCK	M.BENZ	1516		8	1979	52,620.25	1	NAMPULA	NON-OPERATIONAL
MLQ-73-39	TRUCK	M.BENZ	1513		8	1977	48,640.13	1	NIASSA	NON-OPERATIONAL
					128		798142.68	16		
MNB-65-19	TRUCK	NISSAN			9	1986	36,000.00		ZAMBESIA	OPERATIONAL
MLQ-73-45	TRUCK	RENAULT	JE13	4X4	7	1986	52,826.69	1	CABO DEL GATO	OPERATIONAL
ML-38-29	TRUCK	RENAULT	JE13	4x2	7	1986	38,381.00	1	CABO DEL GATO	OPERATIONAL
MLQ-73-47	TRUCK	RENAULT	JE13	4X4	7	1986	38,381.00	1	CABO DEL GATO	OPERATIONAL
MLQ-92-03	TRUCK	RENAULT	JE13		7	1985	38,381.00	1	INHMAMBANE	OPERATIONAL
MLQ-73-50	TRUCK	RENAULT	JE13		7	1984	38,381.00	1	NAMPULA	OPERATIONAL
MNB-67-62	TRUCK	RENAULT	JE13		7	1984	38,381.00	1	NAMPULA	OPERATIONAL
MBB-92-49	TRUCK	RENAULT	JE13		7	1985	38,381.00	1	INHMAMBANE	OPERATIONAL
ML-38-35	TRUCK	RENAULT	JE13		7	1985	38,381.00	1	INHMAMBANE	OPERATIONAL
MNB-67-38	TRUCK	RENAULT	JE13		7	1985	38,381.00	1	NAMPULA	OPERATIONAL
MNB-67-66	TRUCK	RENAULT	JE13		7	1985	38,381.00	1	NAMPULA	OPERATIONAL
MNB-67-37	TRUCK	RENAULT	JE13		7	1986	38,381.00	1	GAZA	OPERATIONAL
MLQ-89-17	TRUCK	RENAULT	JE13		7	1984	38,381.00	1	NAMPULA	OPERATIONAL
MBB-93-92	TRUCK	RENAULT	JE13		7	1986	38,381.00	1	GAZA	OPERATIONAL
MNB-60-43	TRUCK	RENAULT	JE 13		7	1986	38,381.00	1	MAPUTO	OPERATIONAL
MBB-92-55	TRUCK	RENAULT	JE13		7	1984	38,381.00	1	NAMPULA	NON-OPERATIONAL
MBB-92-54	TRUCK	RENAULT	JE13		7	1985	38,381.00	1	NAMPULA	NON-OPERATIONAL
MLQ-29-96	TRUCK	RENAULT	JE13		7	1985	38,381.00	1	INHMAMBANE	NON-OPERATIONAL
MLQ-46-03	TRUCK	RENAULT	JE13		7	1984	38,381.00	1	NAMPULA	NON-OPERATIONAL
MLQ-92-06	TRUCK	RENAULT	JE13		7	1984	38,381.00	1	NAMPULA	NON-OPERATIONAL
MNB-68-30	TRUCK	RENAULT	JE13		7	1985	38,381.00	1	INHMAMBANE	NON-OPERATIONAL
ML-38-88	TRUCK	RENAULT	JE13		7	1984	38,381.00	1	NAMPULA	NON-OPERATIONAL
MLQ-45-83	TRUCK	RENAULT	JE13		7	1984	38,381.00	1	NAMPULA	NON-OPERATIONAL
MLQ-43-40	TRUCK	RENAULT	JE-13		7	1986	38,381.00	1	GAZA	NON-OPERATIONAL
MNB-60-47	TRUCK	RENAULT	JE13		7	1985	38,381.00	1	NAMPULA	NON-OPERATIONAL
MLQ-43-32	TRUCK	RENAULT	JE13		7	1985	38,381.00	1	INHMAMBANE	NON-OPERATIONAL
MNB-67-64	TRUCK	RENAULT	JE13		7	1985	38,381.00	1	NAMPULA	NON-OPERATIONAL
					182		1012351.69	26		
MLQ-43-38	TRUCK	SCANIA	P82H4XRS4		9	1984	67,306.00	1	MAPUTO	OPERATIONAL
MNB-68-32	TRUCK	SCANIA	P93HL4X2		10	1990	61,399.00	1	MANICA	OPERATIONAL
MLQ-89-11	TRUCK	SCANIA	P92M		10	1985	48,705.00	1	NAMPULA	OPERATIONAL
MBB-92-51	TRUCK	SCANIA	P82M		9	1985	46,209.00	1	CABO DEL GATO	OPERATIONAL
MNB-67-39	TRUCK	SCANIA	P93HL-4X2A		10	1990	62,000.00	1	ZAMBESIA	OPERATIONAL
MLQ-89-09	TRUCK	SCANIA	P92M		10	1986	48,705.00	1	MANICA	OPERATIONAL
MNB-67-63	TRUCK	SCANIA	P93HL4X2		10	1989	61,399.00	1	INHMAMBANE	OPERATIONAL
MLQ-49-53	TRUCK	SCANIA	P93HL-4X2		10	1990	62,000.00	1	SOFALA	OPERATIONAL
MLQ-30-07	TRUCK	SCANIA	P93HL4X2		10	1989	61,399.00	1	INHMAMBANE	OPERATIONAL
MLQ-41-73	TRUCK	SCANIA	P82M		9	1986	46,209.00	1	CABO DEL GATO	OPERATIONAL
MLQ-29-95	TRUCK	SCANIA	P93HL-4X2A		10	1990	62,000.00	1	GAZA	OPERATIONAL
MLQ-89-02	TRUCK	SCANIA	P92M		10	1985	48,705.00	1	NAMPULA	OPERATIONAL
EMPILHADEI	TRUCK	SCANIA	P93HL4X2		10	1989	61,399.00	1	MANICA	OPERATIONAL
MLQ-89-12	TRUCK	SCANIA	P92M		10	1988	48,705.00	1	TETE	OPERATIONAL
MLP-69-18	TRUCK	SCANIA	P82M		9	1986	46,209.00	1	MAPUTO	OPERATIONAL
MLQ-92-04	TRUCK	SCANIA	P93HL4X2		10	1989	61,399.00	1	NAMPULA	OPERATIONAL
MNB-64-47	TRUCK	SCANIA	P93HL-4X2A		10	1990	62,000.00	1	ZAMBESIA	OPERATIONAL
MLQ-89-03	TRUCK	SCANIA	T112E6X4		15	1987	77,720.00	1	MAPUTO	OPERATIONAL
MLQ-24-67	TRUCK	SCANIA	P93HL-4X2A		10	1990	62,000.00	1	INHMAMBANE	OPERATIONAL
MLQ-73-35	TRUCK	SCANIA	T82H		10	1983	53,005.00	1	NAMPULA	OPERATIONAL
MLP-69-06	TRUCK	SCANIA	P93HL4X2		10	1989	61,399.00	1	TETE	OPERATIONAL
MLQ-73-41	TRUCK	SCANIA	P93HL-4X2A		10	1990	62,000.00	1	TETE	OPERATIONAL
MLQ-20-01	TRUCK	SCANIA	P93HL4X2		10	1989	61,399.00	1	NIASSA	OPERATIONAL
MLQ-73-52	TRUCK	SCANIA	P93HL-4X2		10	1990	62,000.00	1	CABO DEL GATO	OPERATIONAL

MLQ-73-48	TRUCK	SCANIA	P93HL-4X2A	10	1990	62,000.00	1	TETE	OPERATIONAL
MNB-60-45	TRUCK	SCANIA	P93HL4X2	10	1989	61,399.00	1	NIASSA	OPERATIONAL
MLQ-73-46	TRUCK	SCANIA	P82M	9	1986	62,988.00	1	CABO DEL GATO	OPERATIONAL
MNB-65-91	TRUCK	SCANIA	P93HL-4X2	10	1990	62,000.00	1	NIASSA	OPERATIONAL
MBB-93-93	TRUCK	SCANIA	P93HL-4X2	10	1990	62,000.00	1	MAPUTO	OPERATIONAL
MLQ-24-61	TRUCK	SCANIA	P93HL4X2	10	1989	61,399.00	1	NIASSA	OPERATIONAL
MBB-92-50	TRUCK	SCANIA	P93HL4X2	10	1989	61,399.00	1	NIASSA	OPERATIONAL
MLQ-46-02	TRUCK	SCANIA	P82M	9	1986	46,209.00	1	CABO DEL GATO	OPERATIONAL
MLQ-52-52	TRUCK	SCANIA	P92M	10	1987	48,705.00	1	SOFALA	OPERATIONAL
MLQ-37-41	TRUCK	SCANIA	P82H	15	1982	62,768.00	1	NAMPULA	OPERATIONAL
MLQ-46-45	TRUCK	SCANIA	P93HL-4X2A	10	1990	62,000.00	1	NAMPULA	OPERATIONAL
MLQ-37-34	TRUCK	SCANIA	LB81	10	1983	38,542.00	1	ZAMBESIA	OPERATIONAL
MLP-91-60	TRUCK	SCANIA	P82H	15	1982	62,768.00	1	NAMPULA	OPERATIONAL
MLQ-92-02	TRUCK	SCANIA	P93HL4X2	10	1989	61,399.00	1	NAMPULA	OPERATIONAL
MNB-55-43	TRUCK	SCANIA	P93HL-4X2	10	1990	62,000.00	1	NIASSA	OPERATIONAL
MLQ-47-26	TRUCK	SCANIA	P92M	10	1985	48,705.00	1	NAMPULA	OPERATIONAL
MNB-64-38	TRUCK	SCANIA	P93HL-4X2	10	1990	62,000.00	1	SOFALA	OPERATIONAL
MNB-68-31	TRUCK	SCANIA	P93HL-4X2A	10	1990	62,000.00	1	NAMPULA	OPERATIONAL
3LQ-24-47	TRUCK	SCANIA	P93HL4X2	10	1989	61,399.00	1	NIASSA	OPERATIONAL
MLQ-89-00	TRUCK	SCANIA	P92H6X4	15	1986	67,306.00	1	MAPUTO	OPERATIONAL
MLQ-24-53	TRUCK	SCANIA	P93HL4X2	10	1989	61,399.00	1	CABO DEL GATO	OPERATIONAL
MLQ-73-37	TRUCK	SCANIA	P82H	15	1982	62,768.00	1	NAMPULA	OPERATIONAL
EMPILHADEI	TRUCK	SCANIA	P92M	10	1985	48,705.00	1	TETE	OPERATIONAL
MLQ-73-40	TRUCK	SCANIA	P93HL-4X2A	10	1990	62,000.00	1	ZAMBESIA	OPERATIONAL
MLQ-24-44	TRUCK	SCANIA	P93HL-4X2A	10	1990	62,000.00	1	ZAMBESIA	OPERATIONAL
ML-40-65	TRUCK	SCANIA	T82H	10	1983	53,005.00	1	NAMPULA	OPERATIONAL
MLQ-92-00	TRUCK	SCANIA	P93HL-4X2A	10	1990	62,000.00	1	INHMAMBANE	OPERATIONAL
MBB-93-91	TRUCK	SCANIA	P92H6X4	15	1986	67,306.00	1	MAPUTO	OPERATIONAL
MLP-39-40	TRUCK	SCANIA	P93HL-4X2	10	1990	62,000.00	1	CABO DEL GATO	OPERATIONAL
MNB-60-39	TRUCK	SCANIA	P82M	9	1982	38,542.00	1	NAMPULA	OPERATIONAL
MNB-63-44	TRUCK	SCANIA	P82M	9	1986	46,209.00	1	CABO DEL GATO	OPERATIONAL
MBB-92-57	TRUCK	SCANIA	T112E6X4	15	1987	77,720.00	1	MAPUTO	OPERATIONAL
MBB-81-08	TRUCK	SCANIA	P92M	10	1986	48,705.00	1	MANICA	OPERATIONAL
MLQ-89-08	TRUCK	SCANIA	P93HL4X2	10	1989	61,399.00	1	NAMPULA	OPERATIONAL
EMPILHADEI	TRUCK	SCANIA	P93HL-4X2	10	1990	62,000.00	1	CABO DEL GATO	OPERATIONAL
MLQ-73-51	TRUCK	SCANIA	T112E6X4	15	1987	77,720.00	1	MAPUTO	OPERATIONAL
MLQ-89-73	TRUCK	SCANIA	P93HL-4X2	10	1990	62,000.00	1	MANICA	OPERATIONAL
MLQ-73-36	TRUCK	SCANIA	P93HL-4X2A	10	1990	62,000.00	1	GAZA	OPERATIONAL
MNB-63-50	TRUCK	SCANIA	P93HL4X2	10	1989	61,399.00	1	TETE	OPERATIONAL
MNB-65-83	TRUCK	SCANIA	P92M	10	1985	48,705.00	1	MAPUTO	OPERATIONAL
MQB-24-32	TRUCK	SCANIA	P92H6X4	15	1986	67,306.00	1	MAPUTO	OPERATIONAL
MLQ-89-06	TRUCK	SCANIA	P82M	9	1982	38,542.00	1	NAMPULA	OPERATIONAL
MLP-38-91	TRUCK	SCANIA	P93HL-4X2A	10	1990	62,000.00	1	MANICA	OPERATIONAL
MLQ-52-59	TRUCK	SCANIA	P92M	10	1986	46,200.00	1	MAPUTO	OPERATIONAL
ML-50-02	TRUCK	SCANIA	P93HL4X2	10	1989	61,399.00	1	MANICA	OPERATIONAL
MLQ-15-84	TRUCK	SCANIA	P93HL-4X2	10	1990	62,000.00	1	NAMPULA	OPERATIONAL
MNB-60-29	TRUCK	SCANIA	P82M	9	1986	46,209.00	1	CABO DEL GATO	OPERATIONAL
MBB-73-69	TRUCK	SCANIA	P92M	10	1987	48,705.00	1	SOFALA	OPERATIONAL
MNB-67-65	TRUCK	SCANIA	P93HL4X2	10	1989	61,399.00	1	CABO DEL GATO	OPERATIONAL
MLQ-24-80	TRUCK	SCANIA	LB81	10	1981	38,542.00	1	ZAMBESIA	OPERATIONAL
MBB-92-52	TRUCK	SCANIA	P93HL4X2	10	1989	61,399.00	1	TETE	OPERATIONAL
MNB-64-40	TRUCK	SCANIA	P93HL-4X2A	10	1990	62,000.00	1	NAMPULA	OPERATIONAL
MNB-60-27	TRUCK	SCANIA	T82H	10	1983	53,005.00	1	NAMPULA	NON-OPERATIONAL
MBB-92-46	TRUCK	SCANIA	T82H	10	1983	53,005.00	1	NAMPULA	NON-OPERATIONAL
MNB-65-94	TRUCK	SCANIA	P92M	10	1986	48,705.00	1	MANICA	NON-OPERATIONAL
MLQ-24-36	TRUCK	SCANIA	LB81	10	1978	38,542.00	1	GAZA	NON-OPERATIONAL
MLP-71-42	TRUCK	SCANIA	P82M	9	1986	$46,209.00	1	CABO DEL GATO	NON-OPERATIONAL
MNB-63-48	TRUCK	SCANIA	P82H	15	1982	62,768.00	1	NAMPULA	NON-OPERATIONAL
MNB-65-85	TRUCK	SCANIA	P93HL-4X2	10	1990	62,000.00	1	NIASSA	NON-OPERATIONAL

MNB-64-37	TRUCK	SCANIA	P92M	10	1985	46,200.00	1	NAMPULA	NON-OPERATIONAL
MLQ-49-52	TRUCK	SCANIA	LB81	10	1983	38,542.00	1	ZAMBESIA	NON-OPERATIONAL
MNB-64-41	TRUCK	SCANIA	P92M	10	1985	48,705.00	1	TETE	NON-OPERATIONAL
MNB-68-08	TRUCK	SCANIA	T82H	10	1983	53,005.00	1	NAMPULA	NON-OPERATIONAL
				924		5035532	88		
MLP-38-88	TRUCK	TOYOTA	02-2FD 20	2.5	1983	17,400.00	1	MAPUTO	OPERATIONAL
MBB-81-32	TRUCK	TOYOTA	40 BFD 50	5	1985	32,437.00	1	MAPUTO	OPERATIONAL
MNB-63-47	TRUCK	TOYOTA	FB 30 Elec	3	1984	19,860.00	1	MAPUTO	OPERATIONAL
MNB-65-99	TRUCK	TOYOTA	DYNA BU88R	3.5	1989	11,585.91	1	MAPUTO	OPERATIONAL
				14		81282.91	4		
MNB-67-75	TRUCK	VOLVO	N1033	15	1984	56,208.00	1	GAZA	OPERATIONAL
MLP-69-19	TRUCK	VOLVO	N1033	15	1984	56,208.00	1	GAZA	OPERATIONAL
MNB-63-45	TRUCK	VOLVO	N1033	15	1984	56,208.00	1	GAZA	OPERATIONAL
MLQ-08-52	TRUCK	VOLVO	N1033	15	1984	56,208.00	1	GAZA	OPERATIONAL
MLP-44-40	TRUCK	VOLVO	N1033	15	1984	56,208.00	1	GAZA	OPERATIONAL
MLP-53-20	TRUCK	VOLVO	N1033	15	1984	56,208.00	1	MAPUTO	OPERATIONAL
MLP-69-13	TRUCK	VOLVO	N1033	15	1984	56,208.00	1	MAPUTO	NON-OPERATIONAL
MLP-53-21	TRUCK	VOLVO	N1033	15	1984	56,208.00	1	GAZA	NON-OPERATIONAL
MLQ-47-35	TRUCK	VOLVO	N1033	15	1984	56,208.00	1	GAZA	NON-OPERATIONAL
				135		505872	9		
	TOTAL NUMBER TRUCKS		170						
MBB-81-10	TRACTOR	MASSEY-FERG.	MF 390 +At	5	1990	0.00	1	NIASSA	OPERATIONAL
MLQ-29-65	TRACTOR	MASSEY-FERG.	MF 265 4X2	5	1984	11,201.00	1	NIASSA	OPERATIONAL
MLQ-42-05	TRACTOR	MASSEY-FERG.	MF 265	5	1987	11,201.00	1	ZAMBESIA	OPERATIONAL
MNB-67-67	TRACTOR	MASSEY-FERG.	MF 205	5	1985	11,201.00	1	TETE	OPERATIONAL
MNB-67-29	TRACTOR	MASSEY-FERG.	MF 390 4X2	5	1990	12,321.00	1	CABO DEL GATO	OPERATIONAL
MNB-63-16	TRACTOR	MASSEY-FERG.	MF 205	5	1985	11,201.00	1	TETE	OPERATIONAL
MNB-67-27	TRACTOR	MASSEY-FERG.	MF 205	5	1985	11,201.00	1	TETE	OPERATIONAL
MNB-67-31	TRACTOR	MASSEY-FERG.	MF 265 4X4	5	1982	15,100.00	1	NIASSA	OPERATIONAL
MNB-60-16	TRACTOR	MASSEY-FERG.	MF 265	5	1986	11,201.00	1	MANICA	OPERATIONAL
MBP-05-95	TRACTOR	MASSEY-FERG.	MF 265 4X2	5	1984	11,201.00	1	NIASSA	OPERATIONAL
MBB-90-60	TRACTOR	MASSEY-FERG.	MF 4X2	5	1986	11,201.00	1	NAMPULA	OPERATIONAL
MBP-05-94	TRACTOR	MASSEY-FERG.	MF 265 4X2	5	1984	11,201.00	1	NIASSA	OPERATIONAL
MBB-92-24	TRACTOR	MASSEY-FERG.	MF 4X2	5	1986	11,201.00	1	NAMPULA	OPERATIONAL
MBP-05-98	TRACTOR	MASSEY-FERG.	MF 265	5	1986	11,201.00	1	MANICA	OPERATIONAL
MLQ-42-26	TRACTOR	MASSEY-FERG.	MF 205	5	1985	11,201.00	1	TETE	OPERATIONAL
MBP-05-97	TRACTOR	MASSEY-FERG.	MF 265	5	1987	11,201.00	1	ZAMBESIA	OPERATIONAL
MBB-91-92	TRACTOR	MASSEY-FERG.	MF 390 +At	5	1990	21,043.00	1	INHMAMBANE	OPERATIONAL
MBB-99-54	TRACTOR	MASSEY-FERG.	MF 265	5	1987	11,201.00	1	ZAMBESIA	OPERATIONAL
MLQ-42-14	TRACTOR	MASSEY-FERG.	MF 265	5	1985	11,201.00	1	TETE	OPERATIONAL
MLQ-86-96	TRACTOR	MASSEY-FERG.	MF 265 4X2	5	1984	11,201.00	1	NIASSA	OPERATIONAL
MBB-92-31	TRACTOR	MASSEY-FERG.	MF 265 4X2	5	1984	11,201.00	1	NIASSA	OPERATIONAL
MBB-99-69	TRACTOR	MASSEY-FERG.	MF 390 +At	5	1990	21,043.00	1	ZAMBESIA	OPERATIONAL
MBB-92-33	TRACTOR	MASSEY-FERG.	MF 205	5	1985	11,201.00	1	TETE	OPERATIONAL
MBP-06-01	TRACTOR	MASSEY-FERG.	MF 390+At	5	1990	21,043.00	1	ZAMBESIA	OPERATIONAL
MNB-60-15	TRACTOR	MASSEY-FERG.	MF 4X2	5	1986	11,201.00	1	NAMPULA	OPERATIONAL
MNB-59-96	TRACTOR	MASSEY-FERG.	MF 265	5	1987	11,201.00	1	ZAMBESIA	OPERATIONAL
MNB-67-14	TRACTOR	MASSEY-FERG.	MF 390 +At	5	1990	21,043.00	1	UNKNOWN	OPERATIONAL
MNB-67-21	TRACTOR	MASSEY-FERG.	MF 390 +At	5	1990	21,043.00	1	INHMAMBANE	OPERATIONAL
MLQ-42-23	TRACTOR	MASSEY-FERG.	MF 4X2	5	1982	11,201.00	1	NAMPULA	OPERATIONAL
MBB-92-44	TRACTOR	MASSEY-FERG.	MF 390	5	1990	12,321.00	1	MAPUTO	OPERATIONAL
MLQ-42-21	TRACTOR	MASSEY-FERG.	MF 390	5	1990	12,321.00	1	GAZA	OPERATIONAL
MNB-63-21	TRACTOR	MASSEY-FERG.	MF 265	5	1986	11,201.00	1	MANICA	OPERATIONAL
MLQ-42-06	TRACTOR	MASSEY-FERG.	MF 265 4X2	5	1984	11,201.00	1	NIASSA	OPERATIONAL

MBB-92-28	TRACTOR	MASSEY-FERG.	MF 265	5	1987	11,201.00	1	MANICA	OPERATIONAL
MNB-59-88	TRACTOR	MASSEY-FERG.	MF 4X2	5	1982	11,201.00	1	NAMPULA	OPERATIONAL
MNB-67-13	TRACTOR	MASSEY-FERG.	MF 265 4X2	5	1984	11,201.00	1	NIASSA	OPERATIONAL
MLQ-42-27	TRACTOR	MASSEY-FERG.	MF.4X4	5	1982	15,100.00	1	NAMPULA	OPERATIONAL
MNB-63-23	TRACTOR	MASSEY-FERG.	MF 265	5	1986	11,201.00	1	MANICA	OPERATIONAL
MLQ-42-17	TRACTOR	MASSEY-FERG.	MF.4X4	5	1982	15,100.00	1	NAMPULA	OPERATIONAL
MNB-60-20	TRACTOR	MASSEY-FERG.	MF 265	5	1986	11,201.00	1	MANICA	OPERATIONAL
MLQ-42-25	TRACTOR	MASSEY-FERG.	MF.4X4	5	1982	15,100.00	1	NAMPULA	OPERATIONAL
MBB-92-42	TRACTOR	MASSEY-FERG.	MF 4X2	5	1982	11,201.00	1	NAMPULA	OPERATIONAL
MLQ-42-15	TRACTOR	MASSEY-FERG.	MF 265	5	1985	11,201.00	1	TETE	OPERATIONAL
MLQ-42-29	TRACTOR	MASSEY-FERG.	MF 4X2	5	1982	11,201.00	1	NAMPULA	OPERATIONAL
MLQ-86-98	TRACTOR	MASSEY-FERG.	MF 265 4X2	5	1985	11,201.00	1	NIASSA	OPERATIONAL
MNB-60-13	TRACTOR	MASSEY-FERG.	MF.4X2	5	1982	11,201.00	1	NAMPULA	OPERATIONAL
MNB-67-28	TRACTOR	MASSEY-FERG.	MF 265	5	1987	11,201.00	1	ZAMBESIA	OPERATIONAL
MNB-59-97	TRACTOR	MASSEY-FERG.	MF 4X4	5	1982	15,100.00	1	NAMPULA	OPERATIONAL
MNB-59-93	TRACTOR	MASSEY-FERG.	MF 265 4X2	5	1984	11,201.00	1	NIASSA	OPERATIONAL
MNB-63-11	TRACTOR	MASSEY-FERG.	MF 265 4X2	5	1984	11,201.00	1	NIASSA	OPERATIONAL
MNB-63-20	TRACTOR	MASSEY-FERG.	MF 265	5	1985	11,201.00	1	ZAMBESIA	OPERATIONAL
MNB-59-95	TRACTOR	MASSEY-FERG.	MF.4X2	5	1982	11,201.00	1	NAMPULA	OPERATIONAL
MLQ-19-34	TRACTOR	MASSEY-FERG.	MF 4X2	5	1982	11,201.00	1	NAMPULA	OPERATIONAL
MLQ-42-30	TRACTOR	MASSEY-FERG.	MF 390 +At	5	1990	21,043.00	1	SOFALA	OPERATIONAL
MBB-92-23	TRACTOR	MASSEY-FERG.	MF 390 +At	5	1990	21,043.00	1	UNKNOWN	OPERATIONAL
MLQ-42-11	TRACTOR	MASSEY-FERG.	MF 265 4X4	5	1982	15,100.00	1	NIASSA	OPERATIONAL
MNB-67-32	TRACTOR	MASSEY-FERG.	MF 265 4X2	5	1984	11,201.00	1	NIASSA	OPERATIONAL
MNB-59-86	TRACTOR	MASSEY-FERG.	MF 265	5	1986	11,201.00	1	SOFALA	OPERATIONAL
MBB-91-91	TRACTOR	MASSEY-FERG.	MF 265	5	1987	11,201.00	1	ZAMBESIA	OPERATIONAL
MLQ-42-18	TRACTOR	MASSEY-FERG.	MF 265	5	1986	11,201.00	1	SOFALA	OPERATIONAL
MNB-67-35	TRACTOR	MASSEY-FERG.	MF 265 4X2	5	1984	11,201.00	1	NIASSA	OPERATIONAL
MBB-92-29	TRACTOR	MASSEY-FERG.	MF.4X2	5	1982	11,201.00	1	NAMPULA	OPERATIONAL
MBP-06-00	TRACTOR	MASSEY-FERG.	MF 390 +At	5	1990	21,043.00	1	NIASSA	OPERATIONAL
MLQ-42-12	TRACTOR	MASSEY-FERG.	MF 390 +At	5	1990	21,043.00	1	CABO DEL GATO	OPERATIONAL
MBP-05-99	TRACTOR	MASSEY-FERG.	MF 265 4X2	5	1984	11,201.00	1	NIASSA	OPERATIONAL
MNB-67-25	TRACTOR	MASSEY-FERG.	MF 390	5	1990	12,321.00	1	MAPUTO	OPERATIONAL
MLQ-87-00	TRACTOR	MASSEY-FERG.	MF 265	5	1987	11,201.00	1	ZAMBESIA	OPERATIONAL
MNB-67-20	TRACTOR	MASSEY-FERG.	MF 265 4X2	5	1985	11,201.00	1	NIASSA	OPERATIONAL
MBB-99-72	TRACTOR	MASSEY-FERG.	MF 265	5	1987	11,201.00	1	ZAMBESIA	OPERATIONAL
MNB-67-55	TRACTOR	MASSEY-FERG.	MF 390 +At	5	1990	21,043.00	1	SOFALA	OPERATIONAL
MBB-99-71	TRACTOR	MASSEY-FERG.	MF 205	5	1985	11,201.00	1	TETE	OPERATIONAL
MLQ-29-67	TRACTOR	MASSEY-FERG.	MF 4X4	5	1982	15,100.00	1	NAMPULA	OPERATIONAL
MNB-59-87	TRACTOR	MASSEY-FERG.	MF 265	5	1986	11,201.00	1	MANICA	OPERATIONAL
MNB-67-26	TRACTOR	MASSEY-FERG.	MF 265	5	1986	11,201.00	1	SOFALA	OPERATIONAL
MNB-67-61	TRACTOR	MASSEY-FERG.	MF 265 4X2	5	1984	11,201.00	1	NIASSA	OPERATIONAL
MLQ-19-35	TRACTOR	MASSEY-FERG.	MF 265	5	1987	11,201.00	1	ZAMBESIA	OPERATIONAL
MNB-67-19	TRACTOR	MASSEY-FERG.	MF 265	5	1987	11,201.00	1	MANICA	OPERATIONAL
MBB-92-43	TRACTOR	MASSEY-FERG.	MF 4X4	5	1982	15,100.00	1	NAMPULA	OPERATIONAL
MLQ-42-04	TRACTOR	MASSEY-FERG.	MF 390 +At	5	1990	21,043.00	1	INHMAMBANE	OPERATIONAL
MBB-67-12	TRACTOR	MASSEY-FERG.	MF 265	5	1986	11,201.00	1	MANICA	OPERATIONAL
MBP-05-96	TRACTOR	MASSEY-FERG.	MF 265	5	1986	11,201.00	1	SOFALA	OPERATIONAL
MNB-63-12	TRACTOR	MASSEY-FERG.	MF 265 4X2	5	1984	11,201.11	1	NIASSA	OPERATIONAL
MNB-60-19	TRACTOR	MASSEY-FERG.	MF 265	5	1987	11,201.00	1	ZAMBESIA	OPERATIONAL
MLQ-42-19	TRACTOR	MASSEY-FERG.	MF 265	5	1986	11,201.00	1	MANICA	NON-OPERATIONAL
MNB-67-70	TRACTOR	MASSEY-FERG.	MF 265 4X4	5	1986	15,100.00	1	NAMPULA	NON-OPERATIONAL
MNB-65-55	TRACTOR	MASSEY-FERG.	MF 265	5	1985	11,201.00	1	ZAMBESIA	NON-OPERATIONAL
MNB-67-40	TRACTOR	MASSEY-FERG.	MF 4X2	5	1986	11,201.00	1	NAMPULA	NON-OPERATIONAL
MLQ-42-07	TRACTOR	MASSEY-FERG.	MF 265	5	1987	11,201.00	1	ZAMBESIA	NON-OPERATIONAL
MBB-92-30	TRACTOR	MASSEY-FERG.	MF 290	5	1985	15,100.00	1	SOFALA	NON-OPERATIONAL
MBB-92-34	TRACTOR	MASSEY-FERG.	MF 205	5	1985	11,201.00	1	TETE	NON-OPERATIONAL
MLQ-86-99	TRACTOR	MASSEY-FERG.	MF 265	5	1985	11,201.00	1	TETE	NON-OPERATIONAL
MNB-67-33	TRACTOR	MASSEY-FERG.	MF 265 4X4	5	1982	15,100.00	1	NIASSA	NON-OPERATIONAL
MBB-99-70	TRACTOR	MASSEY-FERG.	MF 265	5	1985	11,201.00	1	TETE	NON-OPERATIONAL

MNB-67-56	TRACTOR	MASSEY-FERG.	MF 265		5	1986	11,201.00	1	SOFALA	NON-OPERATIONAL
MLQ-42-20	TRACTOR	MASSEY-FERG.	MF 265	4X4	5	1982	15,100.00	1	NIASSA	NON-OPERATIONAL
MNB-67-48	TRACTOR	MASSEY-FERG.	MF 265	4X2	5	1984	11,201.00	1	NIASSA	NON-OPERATIONAL
MNB-67-18	TRACTOR	MASSEY-FERG.	MF 265		5	1985	11,201.00	1	TETE	NON-OPERATIONAL
MLQ-42-22	TRACTOR	MASSEY-FERG.	MF 265	4X4	5	1982	15,100.00	1	NIASSA	NON-OPERATIONAL
MNB-63-17	TRACTOR	MASSEY-FERG.	MF.4X2		5	1982	11,201.00	1	NAMPULA	NON-OPERATIONAL
MLQ-42-10	TRACTOR	MASSEY-FERG.	MF 265		5	1985	11,201.00	1	TETE	NON-OPERATIONAL
MNB-63-15	TRACTOR	MASSEY-FERG.	MF 4X2		5	1986	11,201.00	1	NAMPULA	NON-OPERATIONAL
MNB-63-13	TRACTOR	MASSEY-FERG.	MF 265	4X2	5	1985	11,201.00	1	NIASSA	NON-OPERATIONAL
MBP-06-26	TRACTOR	MASSEY-FERG.	MF 265		5	1985	11,201.00	1	TETE	NON-OPERATIONAL
MNB-67-22	TRACTOR	MASSEY-FERG.	MF 265		5	1985	11,201.00	1	ZAMBESIA	NON-OPERATIONAL
MNB-67-69	TRACTOR	MASSEY-FERG.	MF 265		5	1987	11,201.00	1	SOFALA	NON-OPERATIONAL
MNB-67-18	TRACTOR	MASSEY-FERG.	MF 265		5	1987	11,201.00	1	MANICA	NON-OPERATIONAL
MNB-67-59	TRACTOR	MASSEY-FERG.	MF 265		5	1987	11,201.00	1	ZAMBESIA	NON-OPERATIONAL
MNB-67-36	TRACTOR	MASSEY-FERG.	MF 265		5	1987	11,201.00	1	ZAMBESIA	NON-OPERATIONAL
MNB-67-24	TRACTOR	NASSEY-FERG.	MF 265		5	1989	12,321.00	1	INHMAMBANE	OPERATIONAL
MNB-67-51	TRACTOR	NASSEY-FERG.	MF 265		5	1986	11,201.00	1	GAZA	OPERATIONAL
MLQ-42-31	TRACTOR	NASSEY-FERG.	MF 265	4X2	5	1986	11,201.00	1	CABO DEL GATO	OPERATIONAL
MLQ-86-97	TRACTOR	NASSEY-FERG.	MF 265		5	1986	11,201.00	1	GAZA	OPERATIONAL
MNB-63-22	TRACTOR	NASSEY-FERG.	MF 265	4X4	6	1986	15,100.00	1	CABO DEL GATO	OPERATIONAL
MNB-67-23	TRACTOR	NASSEY-FERG.	MF 265	4X4	5	1986	15,100.00	1	CABO DEL GATO	OPERATIONAL
MBB-99-73	TRACTOR	NASSEY-FERG.	MF 265	4X2	5	1986	11,201.00	1	CABO DEL GATO	OPERATIONAL
MNB-63-26	TRACTOR	NASSEY-FERG.	MF 265	4X2	5	1986	11,201.00	1	CABO DEL GATO	OPERATIONAL
MLQ-42-08	TRACTOR	NASSEY-FERG.	MF 265		5	1986	11,201.00	1	GAZA	OPERATIONAL
MNB-60-17	TRACTOR	NASSEY-FERG.	MF 265	4X4	5	1986	15,100.00	1	CABO DEL GATO	OPERATIONAL
MLQ-29-66	TRACTOR	NASSEY-FERG.	MF 390	+At	5	1990	21,043.00	1	GAZA	OPERATIONAL
MNB-60-14	TRACTOR	NASSEY-FERG.	MF 265	4X2	5	1986	11,201.00	1	CABO DEL GATO	OPERATIONAL
MNB-63-14	TRACTOR	NASSEY-FERG.	MF 265		5	1986	11,201.00	1	GAZA	OPERATIONAL
MLQ-42-13	TRACTOR	NASSEY-FERG.	MF 390	+At	5	1990	21,043.00	1	GAZA	OPERATIONAL
MBB-92-27	TRACTOR	NASSEY-FERG.	MF 265	4X2	5	1986	11,201.00	1	CABO DEL GATO	OPERATIONAL
MLQ-42-09	TRACTOR	NASSEY-FERG.	MF 265		5	1985	11,201.00	1	INHMAMBANE	OPERATIONAL
MLQ-25-53	TRACTOR	NASSEY-FERG.	MF 265	4X4	6	1986	15,100.00	1	CABO DEL GATO	OPERATIONAL
MBB-67-57	TRACTOR	NASSEY-FERG.	MF 265	4X2	5	1986	11,201.00	1	CABO DEL GATO	OPERATIONAL
MLQ-19-36	TRACTOR	NASSEY-FERG.	MF 265		5	1985	11,201.00	1	INHMAMBANE	OPERATIONAL
MBB-92-25	TRACTOR	NASSEY-FERG.	MF 265	4X2	5	1986	11,201.00	1	CABO DEL GATO	OPERATIONAL
MBB-92-40	TRACTOR	NASSEY-FERG.	MF 265		5	1983	11,201.00	1	INHMAMBANE	OPERATIONAL
MNB-59-19	TRACTOR	NASSEY-FERG.	MF 265		5	1985	11,201.00	1	INHMAMBANE	OPERATIONAL
MNB-59-89	TRACTOR	NASSEY-FERG.	MF 265	4X2	5	1986	11,201.00	1	CABO DEL GATO	OPERATIONAL
MNB-67-15	TRACTOR	NASSEY-FERG.	MF 265	4X2	5	1986	11,201.00	1	CABO DEL GATO	OPERATIONAL
MBB-92-41	TRACTOR	NASSEY-FERG.	MF 265		5	1985	11,201.00	1	INHMAMBANE	OPERATIONAL
MLQ-17-95	TRACTOR	NASSEY-FERG.	MF 265	4X4	5	1986	15,100.00	1	CABO DEL GATO	NON-OPERATIONAL
MBB-92-32	TRACTOR	NASSEY-FERG.	MF 265	4X2	5	1986	11,201.00	1	CABO DEL GATO	NON-OPERATIONAL
MBB-92-39	TRACTOR	NASSEY-FERG.	MF 265		5	1983	11,201.00	1	INHMAMBANE	NON-OPERATIONAL
MNB-63-21	TRACTOR	NASSEY-FERG.	MF 265	4X2	5	1986	11,201.00	1	CABO DEL GATO	NON-OPERATIONAL
MBB-92-38	TRACTOR	NASSEY-FERG.	MF 265	4X2	5	1986	11,201.00	1	CABO DEL GATO	NON-OPERATIONAL
MBB-90-61	TRACTOR	NASSEY-FERG.	MF 265		5	1989	12,321.00	1	INHMAMBANE	NON-OPERATIONAL
MBB-90-56	TRACTOR	NASSEY-FERG.	MF 265		5	1986	11,201.00	1	GAZA	NON-OPERATIONAL
MNB-59-90	TRACTOR	NASSEY-FERG.	MF 265		5	1983	11,201.00	1	INHMAMBANE	NON-OPERATIONAL
					707		1772988.11	141		

TOTAL NUMBER OF TRACTORS 141

ANNEX F

STATISTICAL ANALYSIS OF THE DPCCN EQUIPMENT FLEET

- Profile of Fleet by Equipment Type and Manufacturer (Exhibit F-1)
- Profile of Fleet by Year of Manufacture (Exhibits F-2)
- Profile of Fleet by Location and Operational Status (Exhibit F-3)
- Profile of Fleet by Truck Size (Exhibit F-4)
- Ranking Donor Contributions by Truck Capacity (Exhibit F-5)
- Database of the DPCCN Equipment Fleet (Exhibit F-6)

Exhibit F - 1

Profile of the DPCCN Equipment Fleet

Type	Manufacturer	Units	Total Capacity
TRUCK	AVM	20	297
	DAF	57	499
	FIAT	78	1046
	IFA	11	45
	IVECO	24	96
	LEYLAND	126	1359
	MAN	7	70
	MERCEDES BENZ	20	174
	NISSAN	66	520
	RENAULT	5	32
	SCANIA	2	16
	VOLVO	94	1245
TOTAL		**510**	**5471**
TRACTORS	MASSEY-FERGUSON	22	
	IMT	3	
TOTAL		**25**	

Source: DPCCN

Exhibit F - 2

Profile of the DPCCN Truck Fleet
Number of Trucks by Year Manufactured

Year of Manufacture	Number of Trucks	Capacity in Tons	Share of Total Capacity	Cum. Share of Capacity
1991	23	230	4.3%	4.3%
1990	49	680	12.6%	16.9%
1989	82	1138	21.2%	38.1%
1988	20	289	5.4%	43.5%
1987	96	869	16.2%	59.6%
1986	114	1144	21.3%	80.9%
1985	37	250	4.7%	85.3%
1984	63	542	10.1%	95.6%
1983	12	194	3.6%	99.3%
••	••	••		
••	••	••		
1961	2	20	0.4%	99.6%
1960	2	20	0.4%	100.0%
Unknown	10	95		
Total	510	5471	100.0%	

Source: DPCCN

Distribution of the DPCCN Fleet by Equipment Type, Location and Status

Province	Trucks			Tractors		
	Operational	Non-operational	Total	Operational	Non-operational	Total
CABO DEL GADO	21	6	27			0
GAZA	18	18	36	12		12
INHAMBANE	22	14	36	6		6
MANICA	25	21	46			0
MAPUTO	23	7	30	6	1	7
NAMPULA	41	7	48			0
NIASSA	36	9	45			0
SOFALA	55	15	70			0
TETE	27	14	41			0
ZAMBESIA	66	23	89			0
OPERATIONS	37	5	42			0
TOTAL	371	139	510	24	1	25

Profile of the DPCCN Fleet by Truck Size

Truck Capacity in Tons	Number of Trucks	Share by Number	Total Lift Capacity	Share by Capacity
25	14	2.7%	350	6.4%
20	19	3.7%	380	6.9%
19	15	2.9%	285	5.2%
18	12	2.4%	128	2.3%
17	11	2.2%	187	3.4%
16	36	7.1%	576	10.5%
15	9	1.8%	135	2.5%
13	13	2.5%	169	3.1%
12	30	5.9%	360	6.6%
11	20	3.9%	128	2.3%
10	132	25.9%	1,320	24.1%
9	38	7.5%	342	6.3%
8	15	2.9%	120	2.2%
7	94	18.4%	658	12.0%
6	2	0.4%	12	0.2%
5	1	0.2%	5	0.1%
4	34	6.7%	136	2.5%
UNKNOWN	15	2.9%	180	3.3%
TOTAL	510	100.0%	5471	100.0%

Source: DPCCN

Exhibit F - 5

Profile of the DPCCN Truck Fleet
Number of Trucks by Donor

Donor	Number of Trucks	Capacity in Tons	Share of Total Capacity	Cum. Share of Total
ITALY	77	1,039	18.8%	18.8%
ASDI	66	857	15.5%	34.4%
CARE	49	614	11.1%	45.5%
JAPAN	57	439	8.0%	53.5%
HOLLAND	44	415	7.5%	61.0%
SCF/UK	29	399	7.2%	68.3%
ODA	28	319	5.8%	74.0%
USA/AFR	15	230	4.2%	78.2%
UNKNOWN	33	213	3.9%	82.1%
UNITED KINGDOM	27	192	3.5%	85.6%
OXFAM	34	187	3.4%	89.0%
FML	9	160	2.9%	91.9%
COCAMO	10	90	1.6%	93.5%
OUA	8	77	1.4%	94.9%
AAA	7	70	1.3%	96.2%
NOVIB	5	70	1.3%	97.4%
UNDRO	4	52	0.9%	98.4%
UNICEF	3	24	0.4%	98.8%
FEM	2	20	0.4%	99.2%
WVUSA	1	16	0.3%	99.5%
FRANCE	2	16	0.3%	99.7%
NARLM	1	7	0.1%	99.9%
LWF	1	7	0.1%	100.0%
TOTAL	510	5,471	100.0%	

Source: DPCCN

TYPEDPCCN
14-Apr-92
13:52

Exhibit F - 6

INVENTORY OF THE DPCCN EQUIPMENT FLEET

SOPT BY TYPE AND MAKE

NUMBER	TYPE	MAKE	MODEL	CAPACITY (Tons)		YEAR	DONOR	PROVINCE	STATUS
MBB 97-11	TRUCK	AVM	CD 710	20	1	1988	FML	SOFALA	OPERATIONAL
MLQ 63-08	TRUCK	AVM	CD 710	25	1	1988	NOVIB	GAZA	OPERATIONAL
MBB 94-85	TRUCK	AVM		10	1			SOFALA	OPERATIONAL
MBB 94-20	TRUCK	AVM	A260	10	1	1987	OUA	TETE	OPERATIONAL
MBB 96-58	TRUCK	AVM	CD 710	20	1	1988	FML	SOFALA	OPERATIONAL
MBB 93-84	TRUCK	AVM		10	1	1988	FML	SOFALA	OPERATIONAL
MBB 96-59	TRUCK	AVM	CD 710	20	1	1988	FML	SOFALA	OPERATIONAL
MLQ 63-07	TRUCK	AVM	CD 710	25	1	1988	NOVIB	GAZA	OPERATIONAL
MBB 96-53	TRUCK	AVM	CD 710	20	1	1989	FML	SOFALA	OPERATIONAL
MBB 94-35	TRUCK	AVM	A260	10	1	1987	OUA	TETE	OPERATIONAL
MBB 94-50	TRUCK	AVM	A-260-DH	9	1	1987	OUA	MANICA	OPERATIONAL
MBB 94-52	TRUCK	AVM	A-260-DH	9	1	1987	OUA	MANICA	OPERATIONAL
MBB 94-21	TRUCK	AVM	A-260-DH	9	1	1987	OUA	MANICA	OPERATIONAL
MBB 96-57	TRUCK	AVM	CD 710	20	1	1988	FML	SOFALA	OPERATIONAL
MBB 96-60	TRUCK	AVM	CD 710	20	1	1988	FML	SOFALA	OPERATIONAL
MBB 93-85	TRUCK	AVM		10	1	1988	FML	SOFALA	NON-OPER
MBB 96-54	TRUCK	AVM	CD 710	20	1	1988	FML	SOFALA	NON-OPER
MBB 94-32	TRUCK	AVM		10	1	1988	OUA	SOFALA	NON-OPER
MBB 94-52	TRUCK	AVM		10	1	1988	OUA	SOFALA	NON-OPER
MBB 94-34	TRUCK	AVM		10	1	1988	OUA	SOFALA	NON-OPER
				297	20				
					1				
MBB 90-30	TRUCK	DAF	FAV105DH3	10	1	1985	HOLANDA	MANICA	OPERATIONAL
MBB 93-48	TRUCK	DAF	2526	16	1	1987	CARE	SOFALA	OPERATIONAL
MBB 93-39	TRUCK	DAF	1800	8	1	1987	HOLANDA	NIASSA	OPERATIONAL
MLQ 45-44	TRUCK	DAF	FAU1800	10	1	1986	FEM	GAZA	OPERATIONAL
MBB 93-42	TRUCK	DAF	1800	8	1	1987	HOLANDA	NIASSA	OPERATIONAL
MBB 93-50	TRUCK	DAF	2526	16	1	1987	CARE	SOFALA	OPERATIONAL
MBB 93-40	TRUCK	DAF	2100	11	1	1987	HOLANDA	NIASSA	OPERATIONAL
MBB 96-27	TRUCK	DAF	2100	11	1	1988	HOLANDA	NIASSA	OPERATIONAL
MBB 89-28	TRUCK	DAF	FAV1800DH	10	1	1984	HOLANDA	MANICA	OPERATIONAL
MBB 90-37	TRUCK	DAF	FA2005DH	10	1	1984	HOLANDA	SOFALA	OPERATIONAL
MBB 90-40	TRUCK	DAF	FA2005DH	10	1	1984		SOFALA	OPERATIONAL
MLQ 63-46	TRUCK	DAF	FAV1800	10	1	1988	NOVIB	GAZA	OPERATIONAL
MBB 93-45	TRUCK	DAF	2100	11	1	1987	HOLANDA	NIASSA	OPERATIONAL
MBB 93-36	TRUCK	DAF	2526	16	1	1987	CARE	SOFALA	OPERATIONAL
MBB 94-60	TRUCK	DAF	2526	16	1	1987	CARE	SOFALA	OPERATIONAL
MBB 90-32	TRUCK	DAF	FAV1800DH	10	1	1984	HOLANDA	MANICA	OPERATIONAL
MBB 93-49	TRUCK	DAF	1800	8	1	1987	HOLANDA	NIASSA	OPERATIONAL
MBB 93-44	TRUCK	DAF	1800	8	1	1987	HOLANDA	NIASSA	OPERATIONAL
MBB 93-51	TRUCK	DAF	2526	16	1	1987	CARE	SOFALA	OPERATIONAL
MLQ 63-45	TRUCK	DAF	FAV1800	10	1	1988	NOVIB	GAZA	OPERATIONAL
MBB 90-44	TRUCK	DAF	FA2005DH	10	1	1984	HOLANDA	SOFALA	OPERATIONAL
MBB 93-37	TRUCK	DAF	2100	11	1	1987	HOLANDA	NIASSA	OPERATIONAL
MBB 93-46	TRUCK	DAF	2526	16	1	1987	CARE	SOFALA	OPERATIONAL

MBB 90-43	TRUCK	DAF		FA2005DH	10	1	1984	HOLANDA	SOFALA	OPERATIONAL
MBB 93-47	TRUCK	DAF		2100	11	1	1987	HOLANDA	NIASSA	OPERATIONAL
MBB 90-41	TRUCK	DAF		FA2005DH	10	1	1984	HOLANDA	SOFALA	OPERATIONAL
MBB 93-38	TRUCK	DAF		2100	11	1	1987	HOLANDA	NIASSA	OPERATIONAL
MBB 90-35	TRUCK	DAF		FA2105DH7	11	1	1984	HOLANDA	MANICA	OPERATIONAL
MBB 93-41	TRUCK	DAF		1800	8	1	1987	HOLANDA	NIASSA	NON-OPER
MBB 89-25	TRUCK	DAF		FAV1800DH	10	1	1984	HOLANDA	MANICA	NON-OPER
MLQ 63-44	TRUCK	DAF		FAV1800		1	1988	NOVIB	GAZA	NON-OPER
MLQ 45-43	TRUCK	DAF		FAU1800	10	1	1986	FEM	GAZA	NON-OPER
MBB 90-33	TRUCK	DAF		FA2105DH4	11	1	1984	HOLANDA	MANICA	NON-OPER
MBB 90-38	TRUCK	DAF		FA2005DH	10	1	1984	HOLANDA	SOFALA	NON-OPER
MBB 89-24	TRUCK	DAF		FAV1800DH	10	1	1984		MANICA	NON-OPER
MBB 89-16	TRUCK	DAF		FAV1880F	10	1	1984	HOLANDA	SOFALA	NON-OPER
MBB 93-43	TRUCK	DAF		2100	11	1	1987	HOLANDA	NIASSA	NON-OPER
MBB 90-23	TRUCK	DAF		FA2105DH4	11	1	1985	HOLANDA	MANICA	NON-OPER
MBB 90-26	TRUCK	DAF		FA2105DH4	11	1	1985	HOLANDA	MANICA	NON-OPER
MBB 90-34	TRUCK	DAF		FA2105DH4	11	1	1984	HOLANDA	MANICA	NON-OPER
MBB 89-23	TRUCK	DAF		FAV1880FH	10	1	1984	HOLANDA	MANICA	NON-OPER
MBB 90-24	TRUCK	DAF		FA2105DH4	10	1	1985	HOLANDA	MANICA	NON-OPER
MBB 90-29	TRUCK	DAF		FAV1800DH	10	1	1985	HOLANDA	MANICA	NON-OPER
MLQ 51-06	TRUCK	DAF		FAV1800		1	1987	HOLANDA	GAZA	NON-OPER
MLQ 51-05	TRUCK	DAF		FAV1800		1	1987	HOLANDA	GAZA	NON-OPER
MBB 89-27	TRUCK	DAF		FAV1800DH	10	1	1984	HOLANDA	MANICA	NON-OPER
MBB 90-28	TRUCK	DAF		FAV2105DH	10	1	1985	HOLANDA	MANICA	NON-OPER
MBB 90-36	TRUCK	DAF		FA2105DH4	11	1	1984	HOLANDA	MANICA	NON-OPER
MBB 90-31	TRUCK	DAF		FAV1800DH	10	1	1984	HOLANDA	MANICA	NON-OPER
MBB 90-25	TRUCK	DAF		FA2105DH4	11	1	1985	HOLANDA	MANICA	NON-OPER
MBB 90-27	TRUCK	DAF		FA2105DH4	11	1	1985	HOLANDA	MANICA	NON-OPER
MLQ 51-07	TRUCK	DAF		FAV1800		1	1987	HOLANDA	GAZA	NON-OPER
MBB 89-26	TRUCK	DAF	4X4	TANQUE	10	1	1984	HOLANDA	SOFALA	OPERATIONAL
MBB 89-19	TRUCK	DAF	4X4	FAV1880F	10	1	1984	HOLANDA	SOFALA	OPERATIONAL
MBB 89-13	TRUCK	DAF	4X4	FAV1880D	10	1	1984	HOLANDA	SOFALA	OPERATIONAL
MBB 89-18	TRUCK	DAF	4X4	FAV1880F	10	1	1984	HOLANDA	SOFALA	NON-OPER
MBB 89-21	TRUCK	DAF	4X4	FAV1880F	10	1	1984	HOLANDA	SOFALA	NON-OPER
					499	57				

MLQ 30-03	TRUCK	FIAT	602EN	7	1	1984	ITALIA	INHAMBANE	OPERATIONAL
MLQ 90-32	TRUCK	FIAT	330-26HT	25	1	1989	ITALIA	SOFALA	OPERATIONAL
MLQ-90-32	TRUCK	FIAT	IVECO 330	25	1	1990	ITALIA	ZAMBEZIA	OPERATIONAL
MLQ 89-66	TRUCK	FIAT	619 NIP	19	1	1989	ITALIA	CABO DELGADO	OPERATIONAL
MLQ 30-18	TRUCK	FIAT	602EN	7	1	1984	ITALIA	INHAMBANE	OPERATIONAL
MLQ 90-35	TRUCK	FIAT	330-26HT	25	1	1989	ITALIA	SOFALA	OPERATIONAL
MLQ 89-64	TRUCK	FIAT	619 NIP	19	1	1989	ITALIA	CABO DELGADO	OPERATIONAL
MLQ 90-33	TRUCK	FIAT	330-26HT	25	1	1989	ITALIA	SOFALA	OPERATIONAL
MQB 24-45	TRUCK	FIAT	IVECO	7	1	1987		ZAMBEZIA	OPERATIONAL
MQB 24-56	TRUCK	FIAT	110 NC	7	1	1987	ITALIA	NAMPULA	OPERATIONAL
MLQ-89-61	TRUCK	FIAT	IVECO 619	19	1	1990	ITALIA	ZAMBEZIA	OPERATIONAL
MLQ 90-34	TRUCK	FIAT	330-26HT	25	1	1989	ITALIA	SOFALA	OPERATIONAL
MLQ 88-30	TRUCK	FIAT	190.26 H	12	1	1989	ITALIA	NAMPULA	OPERATIONAL
MLQ 89-46	TRUCK	FIAT	619	13	1	1990	ITALIA	CABO DELGADO	OPERATIONAL
MLQ 88-36	TRUCK	FIAT	190.26 H	12	1	1989	ITALIA	NAMPULA	OPERATIONAL
MLQ 88-31	TRUCK	FIAT	190.26 H	12	1	1989	ITALIA	NAMPULA	OPERATIONAL
MLQ-89-47	TRUCK	FIAT	IVECO 135	13	1	1990	ITALIA	ZAMBEZIA	OPERATIONAL
MLQ 29-99	TRUCK	FIAT	602EN	7	1	1984	ITALIA	INHAMBANE	OPERATIONAL
MLQ-89-55	TRUCK	FIAT	IVECO 619	19	1	1990	ITALIA	ZAMBEZIA	OPERATIONAL
MLQ 89-60	TRUCK	FIAT	619 NIP	19	1	1989	ITALIA	CABO DELGADO	OPERATIONAL
MLQ 30-11	TRUCK	FIAT	602EN	7	1	1984	ITALIA	INHAMBANE	OPERATIONAL
MLQ 30-01	TRUCK	FIAT	602EN	7	1	1984	ITALIA	INHAMBANE	OPERATIONAL

MLQ 90-36	TRUCK	FIAT	330-26HT	25	1	1989	ITALIA	SOFALA	OPERATIONAL
MLQ 88-32	TRUCK	FIAT	190.26 H	12	1	1989	ITALIA	NAMPULA	OPERATIONAL
MLQ-90-38	TRUCK	FIAT	IVECO 330	25	1	1990	ITALIA	ZAMBEZIA	OPERATIONAL
MLQ 88-28	TRUCK	FIAT	190.26 H	12	1	1989	ITALIA	NAMPULA	OPERATIONAL
MLQ-90-29	TRUCK	FIAT	IVECO 330	25	1	1990	ITALIA	ZAMBEZIA	OPERATIONAL
MLQ-89-57	TRUCK	FIAT	IVECO 619	19	1	1990	ITALIA	ZAMBEZIA	OPERATIONAL
MLQ-89-56	TRUCK	FIAT	IVECO 619	19	1	1990	ITALIA	ZAMBEZIA	OPERATIONAL
MQB 24-46	TRUCK	FIAT	IVECO	7	1	1987	ITALIA	ZAMBEZIA	OPERATIONAL
MLQ-89-69	TRUCK	FIAT	IVECO 135	19	1	1990	ITALIA	ZAMBEZIA	OPERATIONAL
MLQ-89-65	TRUCK	FIAT	IVECO 619	19	1	1990	ITALIA	ZAMBEZIA	OPERATIONAL
MLQ-90-30	TRUCK	FIAT	IVECO 330	25	1	1990	ITALIA	ZAMBEZIA	OPERATIONAL
MLQ-89-50	TRUCK	FIAT	IVECO 619	19	1	1990	ITALIA	ZAMBEZIA	OPERATIONAL
MLQ 88-37	TRUCK	FIAT	190.26 H	12	1	1989	ITALIA	NAMPULA	OPERATIONAL
MLQ 89-62	TRUCK	FIAT	619 NIP	19	1	1989	ITALIA	CABO DELGADO	OPERATIONAL
MLQ 91-85	TRUCK	FIAT	619 NIP	19	1	1989	ITALIA	CABO DELGADO	OPERATIONAL
MQB 24-41	TRUCK	FIAT	IVECO	7	1	1987	ITALIA	ZAMBEZIA	OPERATIONAL
MLQ 88-35	TRUCK	FIAT	190.26 H	12	1	1989	ITALIA	NAMPULA	OPERATIONAL
MLQ 30-13	TRUCK	FIAT	602EN	7	1	1984	ITALIA	INHAMBANE	OPERATIONAL
MLQ 29-98	TRUCK	FIAT	602EN	7	1	1984	ITALIA	INHAMBANE	OPERATIONAL
MLQ-90-37	TRUCK	FIAT	IVECO 330	25	1	1990	ITALIA	ZAMBEZIA	OPERATIONAL
MLQ 88-34	TRUCK	FIAT	190.26 H	12	1	1989	ITALIA	NAMPULA	OPERATIONAL
MLQ 89-59	TRUCK	FIAT	619 NIP	19	1	1989	ITALIA	CABO DELGADO	OPERATIONAL
MLQ-89-63	TRUCK	FIAT	IVECO 619	19	1	1990	ITALIA	ZAMBEZIA	OPERATIONAL
MLQ-89-58	TRUCK	FIAT	IVECO 330	25	1	1990	ITALIA	ZAMBEZIA	OPERATIONAL
MLQ 90-31	TRUCK	FIAT	330-26HT	25	1	1989	ITALIA	SOFALA	OPERATIONAL
MLQ 30-14	TRUCK	FIAT	602EN	7	1	1984	ITALIA	INHAMBANE	OPERATIONAL
MQB 24-42	TRUCK	FIAT	IVECO	7	1	1987	ITALIA	ZAMBEZIA	OPERATIONAL
MLQ 88-29	TRUCK	FIAT	190.26 H	12	1	1989	ITALIA	NAMPULA	OPERATIONAL
MLQ 89-52	TRUCK	FIAT	135.14 H	19	1	1989	ITALIA	CABO DELGADO	OPERATIONAL
MLQ 88-33	TRUCK	FIAT	190.26 H	12	1	1989	ITALIA	NAMPULA	OPERATIONAL
MQB 24-54	TRUCK	FIAT	110NC	7	1	1987	ITALIA	ZAMBEZIA	NON-OPER
MQB 24-40	TRUCK	FIAT	IVECO	7	1	1987	ITALIA	ZAMBEZIA	NON-OPER
MQB 24-51	TRUCK	FIAT	110NC	7	1	1987	ITALIA	ZAMBEZIA	NON-OPER
MLQ 30-00	TRUCK	FIAT	602EN	7	1	1984	ITALIA	INHAMBANE	NON-OPER
MQB 24-48	TRUCK	FIAT	IVECO	7	1	1987	ITALIA	ZAMBEZIA	NON-OPER
MLQ 29-97	TRUCK	FIAT	602EN	7	1	1984	ITALIA	INHAMBANE	NON-OPER
MQB 24-53	TRUCK	FIAT	110NC	7	1	1987	ITALIA	ZAMBEZIA	NON-OPER
MQB 24-44	TRUCK	FIAT	110 NC	7	1	1987	ITALIA	NAMPULA	NON-OPER
MLQ 89-43	TRUCK	FIAT	IVECO 135	13	1	1989	ITALIA	MANICA	OPERATIONAL
MLQ 89-45	TRUCK	FIAT	IVECO 135	13	1	1989	ITALIA	MANICA	OPERATIONAL
MLQ 89-67	TRUCK	FIAT	IVECO 135	13	1	1989	ITALIA	MANICA	OPERATIONAL
MLQ 89-89	TRUCK	FIAT	IVECO 135	13	1	1989	ITALIA	MANICA	OPERATIONAL
MLQ 89-48	TRUCK	FIAT	IVECO 135	13	1	1989	ITALIA	MANICA	OPERATIONAL
MLQ 89-70	TRUCK	FIAT	IVECO 135	13	1	1989	ITALIA	MANICA	NON-OPER
MLQ 89-54	TRUCK	FIAT	IVECO 135	13	1	1989	ITALIA	MANICA	NON-OPER
MBB 93-29	TRUCK	FIAT INV	110NC	7	1	1985	ITALIA	SOFALA	OPERATIONAL
MBB 93-15	TRUCK	FIAT INV	110NC	7	1	1985	ITALIA	SOFALA	OPERATIONAL
MBB 93-24	TRUCK	FIAT INV	110NC	7	1	1985	ITALIA	SOFALA	OPERATIONAL
MBB 93-22	TRUCK	FIAT INV	110NC	7	1	1985	ITALIA	SOFALA	OPERATIONAL
MBB 93-18	TRUCK	FIAT INV	110NC	7	1	1985	ITALIA	SOFALA	OPERATIONAL
MBB 93-30	TRUCK	FIAT INV	110NC	7	1	1985	ITALIA	SOFALA	OPERATIONAL
MBB 93-27	TRUCK	FIAT INV	110NC	7	1	1985	ITALIA	SOFALA	OPERATIONAL
MBB 93-16	TRUCK	FIAT INV	110NC	7	1	1985	ITALIA	SOFALA	NON-OPER
MBB 93-17	TRUCK	FIAT INV	110NC	7	1	1985	ITALIA	SOFALA	NON-OPER
MBB 93-28	TRUCK	FIAT INV	110NC	7	1	1985	ITALIA	SOFALA	NON-OPER
MBB 93-23	TRUCK	FIAT INV	110NC	7	1	1985	ITALIA	SOFALA	NON-OPER
				1046	78				

MNB 82-34	TRUCK	IFA	W 50	4	1	1984		CABO DELGADO	OPERATIONAL
MNB 82-30	TRUCK	IFA	W 50	4	1	1984		CABO DELGADO	OPERATIONAL
MNB 82-32	TRUCK	IFA	W 50	4	1	1984		CABO DELGADO	OPERATIONAL
MNB 82-25	TRUCK	IFA	W 50	4	1	1984		CABO DELGADO	OPERATIONAL
MNB 82-29	TRUCK	IFA	W 50	4	1	1984		CABO DELGADO	OPERATIONAL
MNB 82-23	TRUCK	IFA	W 50	4	1	1984		CABO DELGADO	NON-OPER
MNB 82-18	TRUCK	IFA	W 50	4	1	1984		CABO DELGADO	NON-OPER
MNB 82-17	TRUCK	IFA	W 50	4	1	1984		CABO DELGADO	NON-OPER
MNB 82-33	TRUCK	IFA	W 50	4	1	1984		CABO DELGADO	NON-OPER
MNB 82-19	TRUCK	IFA	W 50	4	1	1984		CABO DELGADO	NON-OPER
MLP 73-90	TRUCK	IFA TANK		5	1			INHAMBANE	NON-OPER
				45	11				

MLQ 52-68	TRUCK	IVECO	130M7 FAL	4	1	1987	OXFAM	MAPUTO	OPERATIONAL
MLQ 52-67	TRUCK	IVECO	130M7 FAL	4	1	1987	OXFAM	MAPUTO	OPERATIONAL
MNB 68-38	TRUCK	IVECO	130M7 FAL	4	1	1987	OXFAM	NIASSA	OPERATIONAL
MBB 94-31	TRUCK	IVECO	130M7 FAL	4	1	1987	OXFAM	NIASSA	OPERATIONAL
MBB 94-28	TRUCK	IVECO	130M7 FAL	4	1	1987	OXFAM	NIASSA	OPERATIONAL
MBB 94-25	TRUCK	IVECO	130M7 FAL	4	1	1987	OXFAM	NIASSA	OPERATIONAL
MNB 68-46	TRUCK	IVECO	130M7 FAL	4	1	1987	OXFAM	NIASSA	OPERATIONAL
MNB 68-47	TRUCK	IVECO	130M7 FAL	4	1	1987	OXFAM	NIASSA	OPERATIONAL
MNB 68-41	TRUCK	IVECO	130M7 FAL	4	1	1987	OXFAM	NAMPULA	OPERATIONAL
MBB 94-24	TRUCK	IVECO	130M7 FAL	4	1	1987	OXFAM	NIASSA	OPERATIONAL
MBB 94-23	TRUCK	IVECO	130M7 FAL	4	1	1987	OXFAM	NIASSA	OPERATIONAL
MNB 68-44	TRUCK	IVECO	130M7 FAL	4	1	1987	OXFAM	NAMPULA	OPERATIONAL
MNB 68-43	TRUCK	IVECO	130M7 FAL	4	1	1987	OXFAM	NIASSA	OPERATIONAL
MLQ 52-73	TRUCK	IVECO	130M7 FAL	4	1	1987	OXFAM	MAPUTO	OPERATIONAL
MBB 94-27	TRUCK	IVECO	130M7 FAL	4	1	1987	OXFAM	NIASSA	OPERATIONAL
MNB 68-42	TRUCK	IVECO	130M7 FAL	4	1	1987	OXFAM	NAMPULA	NON-OPER
MLQ 52-71	TRUCK	IVECO	130M7 FAL	4	1	1987	OXFAM	MAPUTO	NON-OPER
MBB 94-22	TRUCK	IVECO	130M7 FAL	4	1	1987	OXFAM	NIASSA	NON-OPER
MLQ 52-69	TRUCK	IVECO	130M7 FAL	4	1	1987	OXFAM	MAPUTO	NON-OPER
MBB 94-30	TRUCK	IVECO	130M7 FAL	4	1	1987	OXFAM	NIASSA	NON-OPER
MBB 94-26	TRUCK	IVECO	130M7 FAL	4	1	1987	OXFAM	NIASSA	NON-OPER
MNB 68-39	TRUCK	IVECO	130M7 FAL	4	1	1987	OXFAM	NAMPULA	NON-OPER
MNB 68-45	TRUCK	IVECO	130M7 FAL	4	1	1987	OXFAM	NAMPULA	NON-OPER
MBB 94-29	TRUCK	IVECO	130M7 FAL	4	1	1987	OXFAM	NIASSA	NON-OPER
				96	24				

MLQ 93-24	TRUCK	LEYLAND	S.COMET 1	12	1	1990	ODA/CARE	ZAMBEZIA	OPERATIONAL
MLQ 93-26	TRUCK	LEYLAND	S.COMET 1	12	1	1990	ODA/CARE	ZAMBEZIA	OPERATIONAL
MQB 24-75	TRUCK	LEYLAND	SUPER COM	16	1	1987	SCF/UK	ZAMBEZIA	OPERATIONAL
MLQ 93-21	TRUCK	LEYLAND	S.COMET 1	12	1	1990	ODA/CARE	ZAMBEZIA	OPERATIONAL
No.1	TRUCK	LEYLAND	CLYDES	10	1	1986	OXFAM	NIASSA	OPERATIONAL
MTB 03-60	TRUCK	LEYLAND	CL 410	10	1	1984	CARE	TETE	OPERATIONAL
MLQ 37-93	TRUCK	LEYLAND	CL TANKER	11	1	1986	USA/AFR	OPERACOES	OPERATIONAL
MQB 24-57	TRUCK	LEYLAND	SUPER COM	16	1	1987	SCF/UK	ZAMBEZIA	OPERATIONAL
MBB 99-91	TRUCK	LEYLAND	16:14	10	1	1989	ODA/CARE	TETE	OPERATIONAL
MLQ 93-28	TRUCK	LEYLAND	S.COMET 1	12	1	1990	ODA/CARE	ZAMBEZIA	OPERATIONAL
MLQ 93-20	TRUCK	LEYLAND	S.COMET 1	12	1	1990	ODA/CARE	ZAMBEZIA	OPERATIONAL
MTB 03-56	TRUCK	LEYLAND	CL 411	15	1	1984	CARE	TETE	OPERATIONAL
MQB 24-80	TRUCK	LEYLAND	SUPER COM	16	1	1987	SCF/UK	ZAMBEZIA	OPERATIONAL
MBB-98-82	TRUCK	LEYLAND	S.COMET 1	12	1	1989	ODA/CARE	ZAMBEZIA	OPERATIONAL
MLQ 93-25	TRUCK	LEYLAND	S.COMET 1	12	1	1990	ODA/CARE	ZAMBEZIA	OPERATIONAL
MTB 02-78	TRUCK	LEYLAND	CL 410	10	1	1984	UK	TETE	OPERATIONAL
MLQ 38-51	TRUCK	LEYLAND	CL 410	10	1	1985	UK	MAPUTO	OPERATIONAL
MLQ 38-52	TRUCK	LEYLAND	CL 410	10	1	1986	UK	OPERACOES	OPERATIONAL

MBB 98-77	TRUCK	LEYLAND	S.COMET 1	12	1	1989	ODA/CARE	ZAMBEZIA	OPERATIONAL
MTB 03-58	TRUCK	LEYLAND	CL 411	15	1	1984	CARE	TETE	OPERATIONAL
MQB 24-29	TRUCK	LEYLAND	CHIEFTAN	8	1	1986	SCF/UK	ZAMBEZIA	OPERATIONAL
MLQ 93-27	TRUCK	LEYLAND	S.COMET 1	12	1	1990	ODA/CARE	ZAMBEZIA	OPERATIONAL
MLQ 93-19	TRUCK	LEYLAND	S.COMET 1	12	1	1990	ODA/CARE	ZAMBEZIA	OPERATIONAL
MLQ 93-17	TRUCK	LEYLAND	S.COMET 1	12	1	1990	ODA/CARE	ZAMBEZIA	OPERATIONAL
MTB 02-65	TRUCK	LEYLAND	LM 12;1	7	1	1984	UK	TETE	OPERATIONAL
MLQ 37-94	TRUCK	LEYLAND	SUPER ELA	16	1	1986	USA/AFR	OPERACOES	OPERATIONAL
MLQ 93-23	TRUCK	LEYLAND	S.COMET 1	12	1	1990	ODA/CARE	ZAMBEZIA	OPERATIONAL
MTB 03-57	TRUCK	LEYLAND	CL 411	15	1	1984	CARE	TETE	OPERATIONAL
MLQ 38-54	TRUCK	LEYLAND	CL 410	10	1	1985	UK	MAPUTO	OPERATIONAL
MTB 03-61	TRUCK	LEYLAND	CL 410	10	1	1984	CARE	TETE	OPERATIONAL
MBB-98-78	TRUCK	LEYLAND	S.COMET 1	12	1	1989	ODA/CARE	ZAMBEZIA	OPERATIONAL
MLQ 38-44	TRUCK	LEYLAND	CL 410	10	1	1986	UK	OPERACOES	OPERATIONAL
MLQ 37-88	TRUCK	LEYLAND	SUPER ELA	16	1	1986	USA/AFR	OPERACOES	OPERATIONAL
MBB 99-92	TRUCK	LEYLAND	16:14	10	1	1989	ODA/CARE	TETE	OPERATIONAL
MBB-98-75	TRUCK	LEYLAND	S.COMET 1	12	1	1989	ODA/CARE	ZAMBEZIA	OPERATIONAL
MBB 93-58	TRUCK	LEYLAND	SUPER ELA	16	1	1987	SCF/UK	ZAMBEZIA	OPERATIONAL
MQB 24-27	TRUCK	LEYLAND	CHIEFTAN	8	1	1986	SCF/UK	ZAMBEZIA	OPERATIONAL
MBB 99-94	TRUCK	LEYLAND	16:14	10	1	1989	ODA/CARE	TETE	OPERATIONAL
MLQ 93-22	TRUCK	LEYLAND	S.COMET 1	12	1	1990	ODA/CARE	ZAMBEZIA	OPERATIONAL
MTB 03-21	TRUCK	LEYLAND	CLYDES	10	1	1986	OXFAM	NIASSA	OPERATIONAL
MQB 25-25	TRUCK	LEYLAND	COMMET 12	9	1	1989	SCF/UK	ZAMBEZIA	OPERATIONAL
MBB 99-93	TRUCK	LEYLAND	16:14	10	1	1989	ODA/CARE	TETE	OPERATIONAL
MBB-98-80	TRUCK	LEYLAND	S.COMET 1	12	1	1989	ODA/CARE	ZAMBEZIA	OPERATIONAL
MQB 24-32	TRUCK	LEYLAND	CLYDESDAL	10	1	1986	SCF/UK	ZAMBEZIA	OPERATIONAL
MLQ 38-51	TRUCK	LEYLAND	CL 410	10	1	1986	UK	OPERACOES	OPERATIONAL
MLQ 30-26	TRUCK	LEYLAND	CL 410	10	1	1985	UK	GAZA	OPERATIONAL
MBB-98-81	TRUCK	LEYLAND	S.COMET 1	12	1	1989	ODA/CARE	ZAMBEZIA	OPERATIONAL
MLQ 38-53	TRUCK	LEYLAND	CL 410	10	1	1986	UK	OPERACOES	OPERATIONAL
MTB 03-63	TRUCK	LEYLAND	LM 12;1	7	1	1984	CARE	TETE	OPERATIONAL
MBB 98-74	TRUCK	LEYLAND	16:16	10	1	1989	ODA/CARE	TETE	OPERATIONAL
MLQ 38-48	TRUCK	LEYLAND	CL 410	10	1	1986	UK	OPERACOES	OPERATIONAL
MBB 99-95	TRUCK	LEYLAND	16:14	10	1	1989	ODA/CARE	TETE	OPERATIONAL
MQB 24-76	TRUCK	LEYLAND	SUPER COM	16	1	1987	SCF/UK	ZAMBEZIA	OPERATIONAL
MLQ 37-91	TRUCK	LEYLAND	CL TANKER	11	1	1986	USA/AFR	OPERACOES	OPERATIONAL
MQB 25-24	TRUCK	LEYLAND	COMMET 12	9	1	1989	SCF/UK	ZAMBEZIA	OPERATIONAL
MQB 24-72	TRUCK	LEYLAND	SUPER COM	16	1	1987	SCF/UK	ZAMBEZIA	OPERATIONAL
MLQ 38-50	TRUCK	LEYLAND	CL 410	10	1	1986	UK	OPERACOES	OPERATIONAL
MLQ 37-95	TRUCK	LEYLAND	SUPER ELA	16	1	1986	USA/AFR	OPERACOES	OPERATIONAL
MLQ 37-92	TRUCK	LEYLAND	SUPER ELA	16	1	1986	USA/AFR	INHAMBANE	OPERATIONAL
MLQ 30-27	TRUCK	LEYLAND	CL 410	10	1	1985	UK	GAZA	OPERATIONAL
MLQ 38-46	TRUCK	LEYLAND	CL 410	10	1	1986	UK	OPERACOES	OPERATIONAL
MBB-98-73	TRUCK	LEYLAND	COMET 1	9	1	1989	ODA/CARE	ZAMBEZIA	OPERATIONAL
MBB 93-59	TRUCK	LEYLAND	SUPER ELA	16	1	1987	SCF/UK	ZAMBEZIA	OPERATIONAL
MQB 24-26	TRUCK	LEYLAND	CHIEFTAN	8	1	1986	SCF/UK	ZAMBEZIA	OPERATIONAL
MQB 24-63	TRUCK	LEYLAND	SUPER COM	16	1	1987	SCF/UK	ZAMBEZIA	OPERATIONAL
MTB 03-76	TRUCK	LEYLAND	CL TANK	11	1	1986	CARE	TETE	OPERATIONAL
MQB 24-78	TRUCK	LEYLAND	SUPER COM	16	1	1987	SCF/UK	ZAMBEZIA	OPERATIONAL
MVT 01-13	TRUCK	LEYLAND	CLYDES	10	1	1986	OXFAM	NIASSA	OPERATIONAL
MTB 03-75	TRUCK	LEYLAND	CL 410	10	1	1984	CARE	TETE	OPERATIONAL
MLQ 93-16	TRUCK	LEYLAND	S.COMET 1	12	1	1990	ODA/CARE	ZAMBEZIA	OPERATIONAL
MQB 24-65	TRUCK	LEYLAND	SUPER COM	16	1	1987	SCF/UK	ZAMBEZIA	OPERATIONAL
MTB 03-62	TRUCK	LEYLAND	CL 410	10	1	1984	CARE	TETE	OPERATIONAL
MAB 01-03	TRUCK	LEYLAND	CL. TANKE	11	1	1986	CARE	MANICA	OPERATIONAL
MQB 24-74	TRUCK	LEYLAND	SUPER COM	16	1	1987	SCF/UK	ZAMBEZIA	OPERATIONAL
MLQ 93-18	TRUCK	LEYLAND	S.COMET 1	12	1	1990	ODA/CARE	ZAMBEZIA	OPERATIONAL
MLQ 37-84	TRUCK	LEYLAND	SUPER ELA	16	1	1986	USA/AFR	INHAMBANE	OPERATIONAL
MVT 01-15	TRUCK	LEYLAND	CLYDES	10	1	1986	OXFAM	NIASSA	OPERATIONAL
MQB 24-68	TRUCK	LEYLAND	SUPER COM	16	1	1987	SCF/UK	ZAMBEZIA	OPERATIONAL

MTB 02-90	TRUCK	LEYLAND	CLYDES	10	1	1986	OXFAM	NIASSA	OPERATIONAL
MTB 02-66	TRUCK	LEYLAND	LM 12:1	7	1	1984	UK	TETE	NON-OPER
MQB 24-71	TRUCK	LEYLAND	SUPER COM	16	1	1987	SCF/UK	ZAMBEZIA	NON-OPER
MQB 24-73	TRUCK	LEYLAND	SUPER COM	16	1	1987	SCF/UK	ZAMBEZIA	NON-OPER
MLQ 30-21	TRUCK	LEYLAND	CL 410		1	1985	UK	GAZA	NON-OPER
MTB 03-59	TRUCK	LEYLAND	CL 410	15	1	1984	CARE	TETE	NON-OPER
MTB 03-78	TRUCK	LEYLAND	SUPER EL	16	1	1986	WVUSA	TETE	NON-OPER
MQB 24-58	TRUCK	LEYLAND	SUPER COM	16	1	1987	SCF/UK	ZAMBEZIA	NON-OPER
MQB 24-31	TRUCK	LEYLAND	CLYDESDAL	10	1	1986	SCF/UK	ZAMBEZIA	NON-OPER
MQB 24-70	TRUCK	LEYLAND	SUPER COM	16	1	1987	SCF/UK	ZAMBEZIA	NON-OPER
MTB 02-68	TRUCK	LEYLAND	LM 12:1	7	1	1984	UK	TETE	NON-OPER
MLQ 30-28	TRUCK	LEYLAND	CL 410		1	1985	UK	GAZA	NON-OPER
MLQ 30-25	TRUCK	LEYLAND	CL 410		1	1985	UK	GAZA	NON-OPER
MQB 25-23	TRUCK	LEYLAND	COMMET 12	9	1	1989	SCF/UK	ZAMBEZIA	NON-OPER
MLQ 38-49	TRUCK	LEYLAND	CL 410	10	1	1986	UK	OPERACOES	NON-OPER
MTB 02-74	TRUCK	LEYLAND	CL 410	10	1	1984	UK	TETE	NON-OPER
MLQ 24-75	TRUCK	LEYLAND	H 912	7	1	1983	UK	OPERACOES	NON-OPER
MTB 03-77	TRUCK	LEYLAND	CL TANK	11	1	1986	CARE	TETE	NON-OPER
MLQ 37-83	TRUCK	LEYLAND	SUPER ELA	16	1	1986	USA/AFR	INHAMBANE	NON-OPER
MLQ 30-35	TRUCK	LEYLAND	LM 12:1	7	1	1985	UK	GAZA	NON-OPER
MBB-98-76	TRUCK	LEYLAND	S.COMET 1	12	1	1989	ODA/CARE	ZAMBEZIA	NON-OPER
MQB 24-79	TRUCK	LEYLAND	SUPER COM	16	1	1987	SCF/UK	ZAMBEZIA	NON-OPER
MLQ 38-57	TRUCK	LEYLAND	LM 12:1		1	1986	UNC/USA/AFR	GAZA	NON-OPER
MLQ 38-55	TRUCK	LEYLAND	CL 410	10	1	1986	UK	OPERACOES	NON-OPER
MLQ 38-60	TRUCK	LEYLAND	LM 12:1		1	1986	UNC/USA/AFR	GAZA	NON-OPER
MBB 93-57	TRUCK	LEYLAND	SUPER ELA	16	1	1987	SCF/UK	ZAMBEZIA	NON-OPER
MLQ 38-59	TRUCK	LEYLAND	LM 12;1		1	1985	UNC/USA/AFR	GAZA	NON-OPER
MTB 03-65	TRUCK	LEYLAND	LM 12:1	7	1	1984	CARE	TETE	NON-OPER
MLQ 38-58	TRUCK	LEYLAND	LM 12:1		1	1985	UNC/USA/AFR	GAZA	NON-OPER
MLQ 45-62	TRUCK	LEYLAND	LM 12:1	7	1	1986	OXFAM	GAZA	NON-OPER
MQB 24-66	TRUCK	LEYLAND	SUPER COM	16	1	1987	SCF/UK	ZAMBEZIA	NON-OPER
MLQ 37-87	TRUCK	LEYLAND	SUPER ELA	16	1	1986	USA/AFR	INHAMBANE	NON-OPER
MLQ 30-29	TRUCK	LEYLAND	CL 410		1	1985	UK	GAZA	NON-OPER
MQB 24-30	TRUCK	LEYLAND	CHIEFTAN	8	1	1986	SCF/UK	ZAMBEZIA	NON-OPER
MVT 01-14	TRUCK	LEYLAND	CLYDES	10	1	1986	OXFAM	NIASSA	NON-OPER
MLQ 38-56	TRUCK	LEYLAND	LM 12:12	7	1	1986	CARE	ZAMBEZIA	NON-OPER
MLQ 38-45	TRUCK	LEYLAND	LM 12:12	7	1	1986	CARE	ZAMBEZIA	NON-OPER
MVT 01-16	TRUCK	LEYLAND	CLYDES	10	1	1986	OXFAM	NIASSA	NON-OPER
MQB 24-67	TRUCK	LEYLAND	SUPER COM	16	1	1987	SCF/UK	ZAMBEZIA	NON-OPER
MLQ 37-89	TRUCK	LEYLAND	SUPER ELA	16	1	1986	USA/AFR	INHAMBANE	NON-OPER
MLQ 37-90	TRUCK	LEYLAND	SUPER ELA	16	1	1986	USA/AFR	INHAMBANE	NON-OPER
MTT 00-15	TRUCK	LEYLAND	CL 411	15	1	1984	CARE	TETE	NON-OPER
MMB 98-79	TRUCK	LEYLAND	16:16	10	1	1989	ODA/CARE	TETE	NON-OPER
MLQ 30-31	TRUCK	LEYLAND	CL 410		1	1985	UK	GAZA	NON-OPER
MTT 00-26	TRUCK	LEYLAND	LM 12:1	7	1	1984	CARE	TETE	NON-OPER
MLQ 30-22	TRUCK	LEYLAND	LM 410		1	1985	UK	GAZA	NON-OPER
MTB 02-70	TRUCK	LEYLAND	LM 12:1	7	1	1984	UK	TETE	NON-OPER
MTB 03-64	TRUCK	LEYLAND	LM 12:1	7	1	1984	CARE	TETE	NON-OPER
				1359	126				

MNB 81-37	TRUCK	MAN	LZA	10	1	1960	A.A.A.	CABO DELGADO	OPERATIONAL
MNB 81-40	TRUCK	MAN	LZA	10	1	1960	A.A.A.	CABO DELGADO	OPERATIONAL
MNB 81-38	TRUCK	MAN	LZA	10	1	1961	A.A.A.	CABO DELGADO	OPERATIONAL
MNB 81-39	TRUCK	MAN	LZA	10	1	1960	A.A.A.	CABO DELGADO	OPERATIONAL
MBB 98-52	TRUCK	MAN		10	1	1989	A.A.A.	MANICA	OPERATIONAL
MNB 81-41	TRUCK	MAN	LZA	10	1	1961	A.A.A.	CABO DELGADO	OPERATIONAL
MBB 98-53	TRUCK	MAN		10	1	1989	A.A.A.	MANICA	NON-OPER
				70	7				

MBB 95-87	TRUCK	M-BENZ		7	1	1987		MANICA	OPERATIONAL
MLQ 47-85	TRUCK	M-BENZ	1513	7	1	1987	CARE	GAZA	OPERATIONAL
MLQ 47-80	TRUCK	M-BENZ	1513	7	1	1987	CARE	GAZA	OPERATIONAL
MLQ 47-81	TRUCK	M-BENZ	1513	7	1	1987	CARE	GAZA	OPERATIONAL
MBB 95-86	TRUCK	M-BENZ	911	7	1	1987	CARE	MANICA	OPERATIONAL
MLQ 47-86	TRUCK	M-BENZ	1513	7	1	1987	CARE	GAZA	OPERATIONAL
MPB 04-87	TRUCK	M-BENZ	LA1113 SW	7	1	1989	OXFAM	CABO DELGADO	OPERATIONAL
MBB 95-82	TRUCK	M-BENZ	921	15	1	1987	CARE	SOFALA	OPERATIONAL
MLX 03-93	TRUCK	M-BENZ	1523	8	1	1990		OPERACOES	OPERATIONAL
MLX 03-94	TRUCK	M-BENZ	1523	8	1	1990		OPERACOES	OPERATIONAL
MLQ 47-82	TRUCK	M-BENZ	1513	7	1	1987	CARE	INHAMBANE	OPERATIONAL
MBB 95-89	TRUCK	M-BENZ	328	7	1	1987	CARE	MANICA	OPERATIONAL
MBB 96-49	TRUCK	M-BENZ	911	15	1	1988	CARE	SOFALA	OPERATIONAL
MBB 95-81	TRUCK	M-BENZ	921	15	1	1987	CARE	SOFALA	OPERATIONAL
MPB 04-86	TRUCK	M-BENZ	LA1113 SW	7	1	1989	OXFAM	CABO DELGADO	OPERATIONAL
MBB 90-12	TRUCK	M-BENZ	L113	7	1	1984	LWF	SOFALA	NON-OPER
MBB 95-84*	TRUCK	M-BENZ	328	7	1	1987	CARE	MANICA	NON-OPER
MBB 96-48	TRUCK	M-BENZ	911	15	1	1988	CARE	SOFALA	NON-OPER
sem mat.	TRUCK	M-BENZ	911	7	1	1987	CARE	MANICA	NON-OPER
MLQ 47-83	TRUCK	M-BENZ	1513	7	1	1987	CARE	INHAMBANE	NON-OPER
				174	20				

MLQ 67-78	TRUCK	NISSAN	TK20LHN	9	1	1989	COCAMO	NAMPULA	OPERATIONAL
MLQ 46-87	TRUCK	NISSAN	TK20	9	1	1986	JAPAN	TETE	OPERATIONAL
MLQ 47-29	TRUCK	NISSAN	UG780	7	1	1986	JAPAN	NAMPULA	OPERATIONAL
MLQ 47-52	TRUCK	NISSAN	UG780	7	1	1986	JAPAN	NIASSA	OPERATIONAL
MLQ 46-93	TRUCK	NISSAN	UG780	7	1	1986	JAPAN	NAMPULA	OPERATIONAL
MLQ 46-75	TRUCK	NISSAN	UG780	7	1	1986	JAPAN	MAPUTO	OPERATIONAL
MNB 83-28	TRUCK	NISSAN	TK20LHN	9	1	1989	COCAMO	NAMPULA	OPERATIONAL
MLQ 46-95	TRUCK	NISSAN	UG780	7	1	1986	JAPAN	NAMPULA	OPERATIONAL
MLQ 48-58	TRUCK	NISSAN	UG780	6	1	1986	JAPAN	SOFALA	OPERATIONAL
MLQ 47-03	TRUCK	NISSAN	UG780	7	1	1986	JAPAN	NAMPULA	OPERATIONAL
MLQ 46-74	TRUCK	NISSAN	TK20	9	1	1986	JAPAN	NAMPULA	OPERATIONAL
MLQ 47-37	TRUCK	NISSAN	TK20	9	1	1986	JAPAN	NIASSA	OPERATIONAL
MLQ 67-80	TRUCK	NISSAN	TK20LHN	9	1	1989	COCAMO	NAMPULA	OPERATIONAL
MLQ 47-49	TRUCK	NISSAN	TK20	9	1	1986	JAPAN	NAMPULA	OPERATIONAL
MLQ 47-27	TRUCK	NISSAN	UG780	7	1	1986	JAPAN	ZAMBEZIA	OPERATIONAL
MLQ 67-75	TRUCK	NISSAN	TK20LHN	9	1	1989	COCAMO	NAMPULA	OPERATIONAL
MLQ 47-26	TRUCK	NISSAN	TK20	9	1	1986	JAPAN	ZAMBEZIA	OPERATIONAL
MLQ 47-51	TRUCK	NISSAN	TK 20	9	1	1986	JAPAN	CABO DELGADO	OPERATIONAL
MLQ 46-71	TRUCK	NISSAN	UG780	7	1	1986	JAPAN	NIASSA	OPERATIONAL
MLQ 46-99	TRUCK	NISSAN	UG780	7	1	1986	JAPAN	SOFALA	OPERATIONAL
MLQ 47-28	TRUCK	NISSAN	TK20	9	1	1986	JAPAN	NIASSA	OPERATIONAL
MLQ 47-31	TRUCK	NISSAN	TK20	9	1	1986	JAPAN	NIASSA	OPERATIONAL
MLQ 46-96	TRUCK	NISSAN	N10 6X4	7	1	1987	JAPAN	OPERACOES	OPERATIONAL
MLQ 47-32	TRUCK	NISSAN	TK20	9	1	1986	JAPAN	NIASSA	OPERATIONAL
MLQ 46-89	TRUCK	NISSAN	TK 20	9	1	1986	JAPAN	MAPUTO	OPERATIONAL
MLQ 46-69	TRUCK	NISSAN	UG780	7	1	1986	JAPAN	SOFALA	OPERATIONAL
MLQ 46-38	TRUCK	NISSAN	UG780	7	1	1986	JAPAN	SOFALA	OPERATIONAL
MLQ 47-48	TRUCK	NISSAN	TK20	9	1	1986	JAPAN	NAMPULA	OPERATIONAL
MLQ 47-04	TRUCK	NISSAN	UG780	7	1	1986	JAPAN	TETE	OPERATIONAL
MLQ 46-73	TRUCK	NISSAN	TK 20	9	1	1986	JAPAN	MAPUTO	OPERATIONAL
MLQ 46-98	TRUCK	NISSAN	UG780	6	1	1987	JAPAN	INHAMBANE	OPERATIONAL
MLQ 47-43	TRUCK	NISSAN	UG780	7	1	1986	JAPAN	ZAMBEZIA	OPERATIONAL
MLQ 47-02	TRUCK	NISSAN	UG780	7	1	1986	JAPAN	ZAMBEZIA	OPERATIONAL
MLQ 47-77	TRUCK	NISSAN	UG780	7	1	1986	JAPAN	ZAMBEZIA	OPERATIONAL

MLQ 47-44	TRUCK	NISSAN	UG780	7	1	1986	JAPAN	MAPUTO	OPERATIONAL
MLQ 47-50	TRUCK	NISSAN	TK20	9	1	1986	JAPAN	NAMPULA	OPERATIONAL
MLQ 46-81	TRUCK	NISSAN	TK 20	9	1	1986	JAPAN	MAPUTO	OPERATIONAL
MLQ 47-25	TRUCK	NISSAN	UG780	7	1	1986	JAPAN	NIASSA	OPERATIONAL
MLQ 47-42	TRUCK	NISSAN	UG780	7	1	1986	JAPAN	MAPUTO	OPERATIONAL
MLQ 46-82	TRUCK	NISSAN	UG780	7	1	1986	JAPAN	MAPUTO	OPERATIONAL
MLQ 47-39	TRUCK	NISSAN	UG780	7	1	1986	JAPAN	NIASSA	OPERATIONAL
MLQ 47-41	TRUCK	NISSAN	UG780	7	1	1986	JAPAN	NIASSA	OPERATIONAL
MLQ 47-47	TRUCK	NISSAN	TK20	9	1	1986	JAPAN	NIASSA	OPERATIONAL
MLQ 46-70	TRUCK	NISSAN	UG780	7	1	1986	JAPAN	NAMPULA	OPERATIONAL
MLQ 46-78	TRUCK	NISSAN	UG780	7	1	1986	JAPAN	TETE	OPERATIONAL
MLQ 67-73	TRUCK	NISSAN	TK20LHN	9	1	1989	COCAMO	NAMPULA	OPERATIONAL
MLQ 47-00	TRUCK	NISSAN	UG780	7	1	1986	JAPAN	MAPUTO	OPERATIONAL
MLQ 67-76	TRUCK	NISSAN	TK20LHN	9	1	1989	COCAMO	NAMPULA	OPERATIONAL
MLQ 46-91	TRUCK	NISSAN	UG780	7	1	1986	JAPAN	NAMPULA	OPERATIONAL
MLQ 67-74	TRUCK	NISSAN	TK20LHN	9	1	1989	COCAMO	NAMPULA	OPERATIONAL
MLQ 46-83	TRUCK	NISSAN	UG780	7	1	1986	JAPAN	MAPUTO	OPERATIONAL
MLQ 46-92	TRUCK	NISSAN	TK20	9	1	1986	JAPAN	NIASSA	OPERATIONAL
MLQ 47-45	TRUCK	NISSAN	UG780	7	1	1986	JAPAN	ZAMBEZIA	NON-OPER
MLQ 47-01	TRUCK	NISSAN	TK 20	9	1	1986	JAPAN	MAPUTO	NON-OPER
MLQ 67-77	TRUCK	NISSAN	TK20LHN	9	1	1989	COCAMO	NAMPULA	NON-OPER
MLQ 47-40	TRUCK	NISSAN	UG780	7	1	1986	JAPAN	TETE	NON-OPER
MLQ 46-84	TRUCK	NISSAN	UG780	7	1	1986	JAPAN	NAMPULA	NON-OPER
MLQ 47-35	TRUCK	NISSAN	TK20	9	1	1986	JAPAN	ZAMBEZIA	NON-OPER
MLQ 46-72	TRUCK	NISSAN	TK 20	9	1	1986	JAPAN	MAPUTO	NON-OPER
MLQ 47-53	TRUCK	NISSAN	UG780	7	1	1986	JAPAN	ZAMBEZIA	NON-OPER
MLQ 47-24	TRUCK	NISSAN	TK20	9	1	1986	JAPAN	ZAMBEZIA	NON-OPER
MLQ 46-90	TRUCK	NISSAN	UG780	7	1	1986	JAPAN	NIASSA	NON-OPER
MLQ 46-79	TRUCK	NISSAN	UG780	7	1	1986	JAPAN	TETE	NON-OPER
MLQ 47-34	TRUCK	NISSAN	TK 20	9	1	1986	JAPAN	CABO DELGADO	NON-OPER
MLQ 67-79	TRUCK	NISSAN	TK20LHN	9	1	1989	COCAMO	NAMPULA	NON-OPER
MLQ 46-86	TRUCK	NISSAN	UG780	7	1	1986	JAPAN	MAPUTO	NON-OPER
				520	66				

MLQ 60-12	TRUCK	RENAULT	JE13 AC	8	1	1988	FRANCA	NAMPULA	OPERATIONAL
MLQ 35-53	TRUCK	RENAULT	GLM280	8	1	1985	UNICEF	MAPUTO	OPERATIONAL
MLQ 35-51	TRUCK	RENAULT	GLM280	8	1	1985	UNICEF	MAPUTO	NON-OPER
MLQ 30-80	TRUCK	RENAULT	SM 8		1	1985	FRANCE	GAZA	NON-OPER
MLQ 35-52	TRUCK	RENAULT	GLM280	8	1	1985	UNICEF	MAPUTO	NON-OPER
				32	5				

MLP 58-65	TRUCK	SCANIA	81	7	1	1987	NARLM	MANICA	OPERATIONAL
MLQ 74-87	TRUCK	SCANIA	93	9	1	1989	C.C.MOC.	MANICA	NON-OPER

MLX 04-00	TRUCK	VOLVO	F.617	10	1	1990	ASDI-SUECIA	MAPUTO	OPERATIONAL
MBB 92-88	TRUCK	VOLVO	N10 4X2	13	1	1986	UNDRO	ZAMBEZIA	OPERATIONAL
MLQ 46-12	TRUCK	VOLVO	N10 6X4	18	1	1986	CARE	OPERACOES	OPERATIONAL
MLX 03-98	TRUCK	VOLVO	F.617	10	1	1990	ASDI-SUECIA	MAPUTO	OPERATIONAL
MBP 09-03	TRUCK	VOLVO	F.617	10	1	1991	ASDI-SUECIA	MANICA	OPERATIONAL
MLQ 46-13	TRUCK	VOLVO	N10 6X4	18	1	1986	CARE	OPERACOES	OPERATIONAL
MLX 04-02	TRUCK	VOLVO	F.617	10	1	1990	ASDI-SUECIA	MAPUTO	OPERATIONAL
MBB 92-87	TRUCK	VOLVO	N10 4X2	13	1	1986	UNDRO	ZAMBEZIA	OPERATIONAL
MLQ 82-06	TRUCK	VOLVO	N 10	10	1	1990		INHAMBANE	OPERATIONAL

MNB 83-30	TRUCK	VOLVO	F.617	10	1	1991	ASDI-SUECIA	NAMPULA	OPERATIONAL
MNB 83-33	TRUCK	VOLVO	F.617	10	1	1991	ASDI-SUECIA	NAMPULA	OPERATIONAL
MBP 09-07	TRUCK	VOLVO	F.617	10	1	1991	ASDI-SUECIA	MANICA	OPERATIONAL
MLQ 46-16	TRUCK	VOLVO	N10 6X4	18	1	1986	CARE	OPERACOES	OPERATIONAL
MLX 03-96	TRUCK	VOLVO	F.617	10	1	1990	ASDI-SUECIA	MAPUTO	OPERATIONAL
MLX 03-95	TRUCK	VOLVO	F.617	10	1	1990	ASDI-SUECIA	MAPUTO	OPERATIONAL
MLQ 82-43	TRUCK	VOLVO	N 10	10	1	1990		INHAMBANE	OPERATIONAL
MLQ 24-81	TRUCK	VOLVO	N1033	17	1	1983	ASDI/SUECIA	INHAMBANE	OPERATIONAL
MBP 09-13	TRUCK	VOLVO	F.617	10	1	1991	ASDI-SUECIA	SOFALA	OPERATIONAL
MBB 92-83	TRUCK	VOLVO	N10 4X2	13	1	1986	UNDRO	ZAMBEZIA	OPERATIONAL
MNB 83-38	TRUCK	VOLVO	F.617	10	1	1991	ASDI-SUECIA	NAMPULA	OPERATIONAL
MNB 83-32	TRUCK	VOLVO	F.617	10	1	1991	ASDI-SUECIA	NAMPULA	OPERATIONAL
MNB 83-34	TRUCK	VOLVO	F.617	10	1	1991	ASDI-SUECIA	NAMPULA	OPERATIONAL
MLQ 46-18	TRUCK	VOLVO	N10 6X4	18	1	1986	CARE	OPERACOES	OPERATIONAL
MLQ 46-20	TRUCK	VOLVO	N10 6X4	18	1	1986	CARE	OPERACOES	OPERATIONAL
MLQ 70-07	TRUCK	VOLVO	N10 6x4R	20	1	1989	ASDI	OPERACOES	OPERATIONAL
MLQ 70-11	TRUCK	VOLVO	N10 6x4R	20	1	1989	ASDI	OPERACOES	OPERATIONAL
MLQ 46-14	TRUCK	VOLVO	N10 6X4	18	1	1986	CARE	OPERACOES	OPERATIONAL
MBP 09-10	TRUCK	VOLVO	F.617	10	1	1991	ASDI-SUECIA	MANICA	OPERATIONAL
MLQ 82-01	TRUCK	VOLVO	N10 42R	10	1	1990	ASDI	TETE	OPERATIONAL
MLQ 82-05	TRUCK	VOLVO	N10 42R	10	1		ASDI	GAZA	OPERATIONAL
MLQ 46-11	TRUCK	VOLVO	N10 6X4	18	1	1986	CARE	OPERACOES	OPERATIONAL
MLQ 46-19	TRUCK	VOLVO	N10 6X4	18	1	1986	CARE	OPERACOES	OPERATIONAL
MLQ 81-99	TRUCK	VOLVO	N10 42R	10	1	1990	ASDI	TETE	OPERATIONAL
MLQ 70-08	TRUCK	VOLVO	N10 6x4R	20	1	1989	ASDI	OPERACOES	OPERATIONAL
MNB 83-29	TRUCK	VOLVO	F.617	10	1	1991	ASDI-SUECIA	NAMPULA	OPERATIONAL
MLQ 70-06	TRUCK	VOLVO	N10 6x4R	20	1	1989	ASDI	OPERACOES	OPERATIONAL
MLQ 25-68	TRUCK	VOLVO	N 1033	18	1	1985		OPERACOES	OPERATIONAL
MLQ 82-02	TRUCK	VOLVO	N10 42R	10	1		ASDI	GAZA	OPERATIONAL
MBP 09-09	TRUCK	VOLVO	F.617	10	1	1991	ASDI-SUECIA	SOFALA	OPERATIONAL
MLQ 46-09	TRUCK	VOLVO	N10 6X4	18	1	1986	CARE	OPERACOES	OPERATIONAL
MLX 03-99	TRUCK	VOLVO	F.617	10	1	1990	ASDI-SUECIA	MAPUTO	OPERATIONAL
MLQ 70-10	TRUCK	VOLVO	N10 6x4R	20	1	1989	ASDI	OPERACOES	OPERATIONAL
MBP 09-04	TRUCK	VOLVO	F.617	10	1	1991	ASDI-SUECIA	SOFALA	OPERATIONAL
MLQ 82-01	TRUCK	VOLVO	N10 42R	10	1		ASDI	GAZA	OPERATIONAL
MBP 09-11	TRUCK	VOLVO	F.617	10	1	1991	ASDI-SUECIA	SOFALA	OPERATIONAL
MLQ 81-97	TRUCK	VOLVO	N10 42R	10	1	1990	ASDI	TETE	OPERATIONAL
MNB 83-37	TRUCK	VOLVO	F.617	10	1	1991	ASDI-SUECIA	NAMPULA	OPERATIONAL
MLQ 46-15	TRUCK	VOLVO	N10 6X4	18	1	1986	CARE	OPERACOES	OPERATIONAL
MLQ 70-13	TRUCK	VOLVO	N10 6x4R	20	1	1989	ASDI	OPERACOES	OPERATIONAL
MLQ 70-15	TRUCK	VOLVO	N10 6x4R	20	1	1989	ASDI	OPERACOES	OPERATIONAL
MLQ 81-98	TRUCK	VOLVO	N10 42R	10	1		ASDI	GAZA	OPERATIONAL
MLQ 82-03	TRUCK	VOLVO	N10 42R	10	1		ASDI	GAZA	OPERATIONAL
MBP 06-81	TRUCK	VOLVO	N 10	10	1	1989		SOFALA	OPERATIONAL
MLQ 70-05	TRUCK	VOLVO	N10 6x4R	20	1	1989	ASDI	OPERACOES	OPERATIONAL
MBP 09-01	TRUCK	VOLVO	F.617	10	1	1991	ASDI-SUECIA	MANICA	OPERATIONAL
MLQ 82-44	TRUCK	VOLVO	N 10	10	1	1990		INHAMBANE	OPERATIONAL
MBP 06-29	TRUCK	VOLVO	N 10	10	1	1989		SOFALA	OPERATIONAL
MLQ 82-00	TRUCK	VOLVO	N10 42R	10	1	1990	ASDI	TETE	OPERATIONAL
MBP 06-27	TRUCK	VOLVO	N 10	10	1	1989		SOFALA	OPERATIONAL
MLQ 81-98	TRUCK	VOLVO	N10 42R	10	1	1990	ASDI	TETE	OPERATIONAL
MLQ 81-99	TRUCK	VOLVO	N 10	10	1	1990		INHAMBANE	OPERATIONAL
MLQ 82-04	TRUCK	VOLVO	N10 42R	10	1		ASDI	GAZA	OPERATIONAL
MBP 06-30	TRUCK	VOLVO	N 10	10	1	1989		SOFALA	OPERATIONAL
MLQ 46-10	TRUCK	VOLVO	N10 6X4	18	1	1986	CARE	OPERACOES	OPERATIONAL
MBP 08-98	TRUCK	VOLVO	F.617	10	1	1991	ASDI-SUECIA	SOFALA	OPERATIONAL
MLQ 70-09	TRUCK	VOLVO	N10 6x4R	20	1	1989	ASDI	OPERACOES	OPERATIONAL
MBP 09-05	TRUCK	VOLVO	F.617	10	1	1991	ASDI-SUECIA	MANICA	OPERATIONAL
MLQ 82-46	TRUCK	VOLVO	N10 42R	10	1		ASDI	GAZA	OPERATIONAL
MLQ 24-60	TRUCK	VOLVO	N1033	17	1	1983	ASDI/SUECIA	INHAMBANE	OPERATIONAL

MNB 83-31	TRUCK	VOLVO	F.617	10	1	1991	ASDI-SUECIA	NAMPULA	OPERATIONAL
MBP 06-28	TRUCK	VOLVO	N 10	10	1	1989		SOFALA	OPERATIONAL
MBP 06-82	TRUCK	VOLVO	N 10	10	1	1989		SOFALA	OPERATIONAL
MBB 92-85	TRUCK	VOLVO	N10 4X2	13	1	1986	UNDRO	ZAMBEZIA	OPERATIONAL
MNB 83-35	TRUCK	VOLVO	F.617	10	1	1991	ASDI-SUECIA	NAMPULA	OPERATIONAL
MBP 09-06	TRUCK	VOLVO	F.617	10	1	1991	ASDI-SUECIA	MANICA	OPERATIONAL
MLQ 70-14	TRUCK	VOLVO	N10 6x4R	20	1	1989	ASDI	OPERACOES	OPERATIONAL
MLX 03-97	TRUCK	VOLVO	F.617	10	1	1990	ASDI-SUECIA	MAPUTO	OPERATIONAL
MLQ 82-03	TRUCK	VOLVO	N 10	10	1	1990		INHAMBANE	OPERATIONAL
MLQ 24-85	TRUCK	VOLVO	N1033	17	1	1983	ASDI/SUECIA	INHAMBANE	OPERATIONAL
MBP 06-31	TRUCK	VOLVO	N 10	10	1	1989		SOFALA	OPERATIONAL
MLX 04-01	TRUCK	VOLVO	F.617	10	1	1990	ASDI-SUECIA	MAPUTO	OPERATIONAL
MBP 09-00	TRUCK	VOLVO	F.617	10	1	1991	ASDI-SUECIA	MANICA	OPERATIONAL
MLQ 24-35	TRUCK	VOLVO	N0133	17	1	1983	ASDI/SUECIA	INHAMBANE	OPERATIONAL
MBP 09-02	TRUCK	VOLVO	F.617	10	1	1991	ASDI-SUECIA	SOFALA	OPERATIONAL
MLQ 24-40	TRUCK	VOLVO	N1033	17	1	1983	ASDI/SUECIA	INHAMBANE	OPERATIONAL
MNB 83-36	TRUCK	VOLVO	F.617	10	1	1991	ASDI-SUECIA	NAMPULA	OPERATIONAL
MLQ 24-57	TRUCK	VOLVO	N1033	17	1	1983	ASDI/SUECIA	INHAMBANE	NON-OPER
MLQ 24-38	TRUCK	VOLVO	N1033	17	1	1983	ASDI/SUECIA	INHAMBANE	NON-OPER
MLQ 24-39	TRUCK	VOLVO	N1033	17	1	1983	ASDI/SUECIA	INHAMBANE	NON-OPER
MLQ 70-04	TRUCK	VOLVO	N10 6x4R	20	1	1989	ASDI	OPERACOES	NON-OPER
MLQ 24-52	TRUCK	VOLVO	N1033	17	1	1983	ASDI/SUECIA	INHAMBANE	NON-OPER
MLQ 70-12	TRUCK	VOLVO	N10 6X4R	20	1	1989	ASDI	OPERACOES	NON-OPER
MLQ 24-82	TRUCK	VOLVO	N1033	17	1	1983	ASDI/SUECIA	INHAMBANE	NON-OPER
MLQ 24-46	TRUCK	VOLVO	N1033	17	1	1983	ASDI/SUECIA	INHAMBANE	NON-OPER
				1245	94				
MBB 98-23	TRUCK				1			MANICA	NON-OPER
MLQ 00-03	TRACTOR	IMT	560		1		YUGUSLAVIA	MAPUTO	OPERATIONAL
MLQ 00-02	TRACTOR	IMT	560		1		YUGUSLAVIA	MAPUTO	OPERATIONAL
MLQ 00-04	TRACTOR	IMT	560		1		YUGUSLAVIA	MAPUTO	NON-OPER
MLQ 49-18	TRACTOR	MASSEY-FER	298		1		CARE BRIT.	GAZA	OPERATIONAL
MLQ 49-12	TRACTOR	MASSEY-FER	298		1		CARE BRIT.	GAZA	OPERATIONAL
MLQ 49-83	TRACTOR	MASSEY-FER	298		1		CARE BRIT.	MAPUTO	OPERATIONAL
MLQ 00-06	TRACTOR	MASSEY-FER	240		1		UNDP	GAZA	OPERATIONAL
MLQ 50-85	TRACTOR	MASSEY-FER	240		1		UNDP	MAPUTO	OPERATIONAL
MLQ 49-21	TRACTOR	MASSEY-FER	298		1			INHAMBANE	OPERATIONAL
MLQ 00-00	TRACTOR	MASSEY-FER	298		1		CARE BRIT.	MAPUTO	OPERATIONAL
MLQ 00-05	TRACTOR	MASSEY-FER	240		1		UNDP	GAZA	OPERATIONAL
MLQ 34-97	TRACTOR	MASSEY-FER	240		1		UNDP	GAZA	OPERATIONAL
MLQ 49-25	TRACTOR	MASSEY-FER	298		1		CARE BRIT.	GAZA	OPERATIONAL
MLQ 34-96	TRACTOR	MASSEY-FER	240		1		UNDP	GAZA	OPERATIONAL
MLQ 49-20	TRACTOR	MASSEY-FER	298		1			INHAMBANE	OPERATIONAL
MLQ 45-19	TRACTOR	MASSEY-FER	365		1		CARE BRIT.	GAZA	OPERATIONAL
MLQ 49-14	TRACTOR	MASSEY-FER	298		1			INHAMBANE	OPERATIONAL
MLQ 00-01	TRACTOR	MASSEY-FER	298		1		CARE BRIT.	MAPUTO	OPERATIONAL
MLQ 49-15	TRACTOR	MASSEY-FER	298		1			INHAMBANE	OPERATIONAL
MLQ 49-30	TRACTOR	MASSEY-FER	298		1			INHAMBANE	OPERATIONAL
MLQ 49-23	TRACTOR	MASSEY-FER	298		1		CARE BRIT.	GAZA	OPERATIONAL

MLQ 45-20	TRACTOR	MASSEY-FER	365	1		GAZA	OPERATIONAL
MLQ 49-26	TRACTOR	MASSEY-FER	298	1	CARE BRIT.	GAZA	OPERATIONAL
MLQ 34-89	TRACTOR	MASSEY-FER	240	1	UNDP	GAZA	OPERATIONAL
S/MATRIC.	TRACTOR	MASSEY-FER	298	1		INHAMBANE	OPERATIONAL
				22			

TOTAL NUMBER OF TRACTORS

		1		
MLN 20=35	LIGHT TRUCK	1	INHAMBANE	UNKNOWN
MLT 29-97	LIGHT TRUCK	1	INHAMBANE	UNKNOWN
MLQ 42-35	LIGHT TRUCK	1	INHAMBANE	UNKNOWN
MAA 01-45	LIGHT TRUCK	1	INHAMBANE	UNKNOWN
MLL 73-32	LIGHT TRUCK	1	INHAMBANE	UNKNOWN

TOTAL NUMBER OF LIGHT TRUCKS 5