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TERMS OF REFERENCE DEALING WITH VARIOUS ASPECTS OF ROAD FUNDS

(Compiled by Ian G. Heggie, revised March 1999)

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TERMS OF REFERENCE DEALING WITH VARIOUS ASPECTS OF ROAD FUNDS

I: SETTING UP A NEW ROAD FUND

[The example from Jordan, is probably the best sample TOR. It covers practically all the issues you would wish to examine in a road fund study.]

1. Paper to Set Out the Operating Modalities for a Proposed Road Fund

(Jordan)

Introduction

The Committee established under the chairmanship of the Ministry of Public Works and Housing (MPWH), to explore what might be involved in establishing a road maintenance fund, is seeking advice on the detailed operating modalities that might be used to set up and manage such a fund. The fund would be managed by a representative management board which would include members representing road users, the business community, and other constituencies with a keen interest in well-managed roads. The Committee is already estimating the annual maintenance needs for all roads under the jurisdiction of MPWH and will be using this information to prepare a 5-year road maintenance program. The intention is to finance the program through the proposed road fund which would derive its revenues from: (i) that proportion of vehicle license fees currently remitted to the Ministry of Finance (MOF); (ii) fines for overloading; (iii) international transit fees; and (iv) a levy on gasoline and diesel. The road fund must be set up in such a way that it: (i) does not abstract funds away from other public programs; and (ii) increases transparency and financial accountability. Although the road fund will initially only finance maintenance of the roads under MPWH, it should be set up so that it can eventually also extend assistance to City and Village Council roads.

Scope of Consulting Services

The tasks to be carried out by the consultant will include the following:

- (i) Review existing road user taxes and charges and estimate how much money is currently collected in the form of vehicle license fees (and the amount of this remitted to MOF), fines for overloading, and international transit fees (calculate the average amount collected during the past three years).
- (ii) Estimate how much money is currently allocated from the government's consolidated budget to support road maintenance (calculate the average amount allocated during the past three years).
- (iii) If the current revenues received by MOF from vehicle license fees and fines for overloading are transferred to the proposed road fund, what sort of levy on gasoline and diesel would be required to ensure that the total revenue transferred to the proposed road fund was equal to item (ii) above?
- (iv) Given that the board of the proposed road maintenance fund could be expected to actively work with the revenue collecting agencies to minimize avoidance, evasion and leakage,

estimate by how much the above revenues might increase once the road fund was fully operational.

- (v) By how much more would vehicle license fees and the fuel levy need to be increased to ensure: (a) all vehicle types cover their marginal (avoidable) costs; and (b) generate sufficient revenues to cover all road maintenance requirements (it is expected that this level would only be reached over a period of 5-7 years).
- (vi) Review the existing Finance Act to ascertain whether the Minister, by notice in the Government Gazette, can open a special account to finance road maintenance expenditures and, if so, what information should be included in the notice (e.g., purpose of the fund, source of revenues, eligible expenditures, method of managing the fund, etc.)? Based on this information, draft a Gazette notice for consideration by MOF.
- (vii) In case the Finance Act does not provide for the opening of a special account, recommend the nature and scope of the legislation needed to establish such a fund. Prepare a draft road fund Bill for consideration by MOF (the presumption is that the Bill would be a short enabling Bill which would be supported by legal regulations published in the government Gazette).
- (viii) Should the fund only finance routine and periodic maintenance, or should it also finance selected road safety programs, minor road improvements and some road rehabilitation? If it does finance these latter expenses, should they be subject to a ceiling (e.g., no more than 10-15 percent of annual revenues).
- (ix) Should the fund be entitled to borrow funds to meet short-term revenue needs (i.e., in the form of overdrafts) and should this facility be subject to a cap to ensure the fund remains solvent. Should the fund likewise be able to issue long-term revenue bonds – particularly to finance road rehabilitation – and, if so, on what basis should this be done and should the board be required to seek specific clearance from MOF each time such borrowing takes place?
- (x) Recommend the composition of the board of management, bearing in mind the need to include persons representing the main constituencies whose support is needed to win broad-based public support for introduction of a road fund and an eventual increase in user charges. The board should include representatives of the key ministries involved in decisions on road financing, together with representatives of the business community, road users, farming interests, etc.
- (xi) Recommend how board members should be nominated (e.g., by the organizations they represent) and appointed (e.g., by the Minister of Finance, or Council of Ministers). Also recommend procedures for selecting the Chairman and Vice-Chairman (e.g., by having the Minister appoint a Chairman after consultation with the board, or by leaving it up to the board to select the Chairman from amongst its members).
- (xii) Recommend whether the board should have any sub-committees and, if so, what they should do, their composition and their relationship to the main board.
- (xiii) Recommend a suitable structure for the road fund secretariat, including an Executive Secretary, and other professionally qualified accounting, planning and engineering staff. It is not expected that the secretariat would consist of more than about five persons, plus appropriate support staff. Also recommend how staff should be appointed (e.g., the

Executive Secretary to be appointed by the board, or in consultation with the board) and under what terms and conditions of service.

- (xiv) Draw up terms of reference for the board and recommend what the relationship should be between the board and the Ministry of Finance. Also outline how the establishment of the road fund and its board might affect the responsibilities of MPWH (note: it is envisaged that the road fund would be a financing mechanism and not an executing agency). Also draw up terms of reference for the Executive Secretary and the secretariat and indicate what sort of technical qualifications they should possess.
- (xv) In case it proves difficult to appoint suitable staff within the existing civil service framework, propose arrangements under which the necessary secretarial services might be provided under contract by a local Bank or Accounting firm. Outline the training and other human resource development required to ensure that staff from MPWH and other ministries can take over some, or all, posts from the contractor after a designated period of time. The costs of the contract and any allied training of ministry staff would initially be financed under the proposed Fourth Transport Project.
- (xvi) Since the revenues to be deposited into the road fund will be collected under the government's tax-making powers – and will continue to be collected under present arrangements for collecting taxes – recommend the procedures to be followed in collecting the charges, depositing them into the consolidated fund and transferring them into the road fund. The procedures should be designed to facilitate prompt transfer and deposit of all funds due to the road fund.
- (xvii) Following consultation with MOF, recommend: (a) whether the road fund account should be held at the Central Bank or at one or more commercial banks; and (b) how the road fund should be reflected in the government's budget (i.e., as a line item in the budget, as an off-budget item recorded in the notes appended to the budget statement, or in some other way).
- (xviii) Recommend procedures under which the board can apply – through the MOF and Council of Ministers – for increases in the level of the road user charges to ensure that revenues can be raised over a period of 5 years to maintain the real value of the revenues and to meet agreed revenue targets. Among other things, the procedures should include the board's outreach activities which should be designed to inform the public of the work of the road fund and the justification for any increases in charges.
- (xix) Recommend what role the board should play in deciding on the content of the annual road maintenance program (e.g., should the board require MPWH to operate an approved Maintenance Management System for preparing and prioritizing its maintenance needs and should they undertake regular audits to ensure MPWH is using the system correctly).
- (xx) Recommend whether the road fund should transfer funds to a designated maintenance account in the name of MPWH, or should pay for work directly after appropriate certification by MPWH (e.g., should funds be disbursed only for tendered work after certification that the work has been done according to specification, and should force account work be subject to inspection by an independent consultant)?
- (xxi) Recommend how the road fund should be managed on a day-to-day basis to ensure that funds are used effectively. The systems should include procedures for tracking funds collected by the tax authorities, the amounts transferred to the road fund, commitments

made by the board or transferred to MPWH, and the remaining balance to be reconciled with the road fund's bank account.

- (xxii) Recommend the indicators to be used by the board to measure its effectiveness (e.g., administrative costs/total funds disbursed, average time taken for payment of invoices or transfer of funds, actual/required maintenance funding, etc.).
- (xxiii) Recommend suitable financial reporting arrangements for the road fund, together with appropriate internal and external auditing arrangements. Also propose the nature of the regular reports to be published for submission to MOF and Parliament, together with an indication of the scope of such reports.
- (xxiv) Draft the legal regulations for publication in the government Gazette setting down the rules and regulations governing management of the road fund.
- (xxv) Prepare a realistic transition plan covering establishment of the road fund (whether under the Finance Act of new legislation), publication of the legal regulations, appointment of the board, recruitment of the secretariat, and preparation and approval of the first annual maintenance program to be financed through the road fund.
- (xxvi) Finally, identify any training needs (other than those already identified under item (iv) above) required to implement the road fund.

Reporting Arrangements

The consultant would be expected to work closely with MPWH and MOF for the duration of the study which is expected to last no more than 4 weeks. During this period, the consultant would prepare the following documents:

- (i) A draft notice establishing the road maintenance fund under the Finance Act, or draft Bill to establish it under new legislation.
- (ii) Draft legal regulations governing management of the road fund.
- (iii) A report of about 25 pages summarizing the operating modalities for the road fund.
- (iv) An Executive Summary of 2-3 pages summarizing the key features for consideration by Ministers.

2. Establishment Of A Road Fund (Zambia)

[This is part of a longer TOR which also covers management of roads.]

It is expected that the proceeds from the road tariff would be deposited into a special account at the Central Bank of Zambia. The special account will be referred to as the Road Fund and the consultants will be expected to outline detailed arrangements for managing the Road Fund and ensuring strict accountability for what is done with the proceeds from the Road Fund.

The task of the consulting services under this heading will therefore be to work out the detailed operating procedures for the Road Fund. This will include advising on:

- (i) The manner in which the road tariff is collected and deposited into the special account. In particular: should the fuel levy be paid directly into the account by the oil companies (perhaps with some ex post audit by the Customs Department), how should the proposed heavy vehicle license fee be handled (e.g., on a contractual basis by a private sector organization) and how should international transit fees be handled (bearing in mind the recommendations of the PTA/SATCC secretariat)?
- (ii) It is expected the Fund would be managed by a Board. Recommend an appropriate Board structure, the sort of people who should sit on the Board, how they should be appointed, terms of appointment, etc. Also advise on the post of Chief Executive Officer and the relationship between the Board and the CEO.
- (iii) Recommend procedures for altering the various elements of the road tariff to ensure the Board is able to raise and lower charges to meet agreed revenue targets and maintain the real value of the tariff. Outline the sort of guidance that MOF might offer regarding the setting of the road tariff and also define areas where the Board should be able to act on its own.
- (iv) Recommend the basic procedures to be used to decide how much of the Fund to allocate for roads under the jurisdiction of RD, those dealt with by urban district councils and those dealt with by rural district councils (preference is in favor of a simple formula which can be revised from time to time).
- (v) Recommend procedures for disbursing funds from the Road Fund. In particular, examine ways in which the Fund can use its disbursement arrangements to strengthen financial discipline at the district level (as is done in Tanzania). Should use of funds be audited during implementation, at least on large projects (as in Mozambique), or should the quality of work be audited ex post (as is done with most other Road Funds). Advise on ways in which the results of such audits should be reflected in subsequent budget allocations (to ensure that road agencies wasting the funds are suitably penalized).
- (vi) Advise on an appropriate staffing structure for the Road Fund. This should include the number of divisions/sections (e.g., finance & accounting, planning, auditing, etc.), the number of staff required for each division (accepting that any substantial work would be contracted out to local consultants and accountants), divisional structures, qualifications of key staff and relationship to the CEO.
- (vii) Recommend appropriate arrangements for auditing the overall activities of the Road Fund. Also propose the nature of the regular reports to be published for submission to concerned

ministries (e.g., MOF, MOW, MC & T and MLG) and the public, together with an indication of the sort of ground they should cover.

II: RESTRUCTURING AN EXISTING ROAD FUND

1. Restructuring the Road Fund (Guinea-Bissau)

Introduction

The Government of Guinea-Bissau has agreed in the Transport and Urban Infrastructure Project to carry on a study to improve management and institutional arrangements of the Road Fund. Such a study is a condition for the proposed project.

On the current situation, only 20 percent of the required funding is allocated to periodic and routine maintenance through the Road Fund and the Road Fund set up to finance maintenance and rehabilitation is poorly managed. Therefore there is a need to improve sector resource mobilization and management.

One of the project component is a rehabilitation and maintenance program to consolidate a priority network of roads. This will be achieved by increasing sector resource mobilization and increase efficiency of resource use. To ensure the availability of the required funding for road maintenance it has been agreed that the Government would revise the fees collected by the existing Road Fund to strengthen road users cost recovery and proceed annually with price pegging to ensure that Road Fund's revenues would reach at least US\$555,000 in 1996, US\$580,000 in 1997, US\$595,000 in 1998 and US\$600,000 in 1999. To improve resource mobilization and increase efficiency of resource use it has also been agreed to carry on a study on management and institutional arrangements of the Road fund. The Road Fund's revenues would come from road user charges and gradually increase to reach the above targets. Towards that end a short term consultancy is required to identify the best charging instruments, to improve procedures for collection, control and use of funds.

Scope of Work

The Consultant will carry out all necessary investigations required to achieve the objective noted above. It is anticipated that the following steps will be necessary:

Review the existing structure of the Road Fund Board and recommend how it should evolve in the future to ensure the Board can manage the Road Fund efficiently. Among other things, the consultant should recommend the composition and functions of the Board. The functions of the Board should be clearly defined in its terms of references. The Consultant should also identify possible representatives of road users and of the private sector to sit on the Board. Also recommend procedures for appointing the Chairman of the Board and the Director of the Road Fund. The Director should ideally be appointed by the Board, or the Board should at least be committed over the appointment.

Review the existing structure of road user charges, including licenses for transportation of passengers and merchandise; Propose any adjustment of the structure of road user charges to constitute a separate road tariff, ensuring that the analysis makes a clear separation between the road user charges (the road tariff) and general revenue taxes. Recommend an appropriate level for the various charges to ensure they generate sufficient revenues to maintain the road network on a sustainable long-term basis, according to the above targets. Propose ways to exempt the main non road users from paying the road tariff (i.e. the diesel levy).” Recommend procedures for revising the road tariff to ensure it meets agreed revenue targets in dollar equivalent and also maintains its real value. Outline the sort of guidance that the Ministry of Finance might offer regarding the setting of the recommended road user charges and also define areas where the Board should be able to act on its own;

Recommend the best ways of collecting these fees and depositing them into the Road Fund. Propose how the proceeds should be transferred to the Road Fund account. To improve revenue collection, the consultant should also consider ways of having the fees collected on a contractual basis by private contractors, or taking other steps to avoid evasion and avoidance.

Provide details on how the Road Fund should be managed on a day-to-day basis to ensure that the funds are used efficiently; Recommend procedures for disbursing funds from the Road Fund;

Propose suitable financial reporting and accounting arrangements for the restructured Road Fund. Also propose an appropriate auditing system, in addition to existing controls, together with external audit arrangements (full financial audit and selective technical audit);

Review the actual legislation and provide an analysis of which actions can be implemented under existing legislation and recommend changes in the Road Fund legislation.

III. AUDIT OF AN EXISTING ROAD FUND

[The best example here is probably the one from Lesotho.]

1. Annual Audit of Road Fund (Lesotho)

Introduction

The Government of Lesotho has created a Road Fund as a separate administrative body. The objectives of this fund are to ensure that i.) sufficient resources are available for the maintenance of all roads in Lesotho; ii.) road users participate in the management of the sector to improve decision making and consumer willingness to pay iii.) financial discipline is strengthened to ensure that the public gets value for money iv.) the fiscal burden on the government is reduced to manageable proportions; and v.) road users pay more equitably for the damage they inflict on roads. The Road Fund, hereafter the Fund, has been established by Legal Notice published in the Government Gazette. This specifies its purpose, sources of revenues, its management by a representative board and the manner of its auditing. A copy is attached.

At present, revenues come from four main sources: (i) road toll-gate fees collected on all vehicles leaving Lesotho, including government vehicles; (ii) border fees/short-term SACU permits charged on all foreign trucks entering Lesotho; (iii) annual license fees collected from all types of vehicles; (iv) a road maintenance levy *added* to the price of all transport fuels, including the fuel consumed by government. Total annual revenues of the Fund are in the region of US\$11 million and are being paid directly into a special account at the Central Bank.

The Government has given road users an active role in the road sector by creating a representative Road Board, hereafter the Board. The members of the Board come from relevant institutions in both the public and the private sectors. Their role is to advise on the management of the Fund and monitor the use of the resources. The Board reports to the Ministry of Finance and is an advisory body only with Government retaining ultimate decision-making powers. The Board reviews the annual expenditure programs put forward by the various road agencies and decides, in light of these requests and in consultation with Ministry of Finance (MOF), on the overall size of the road program to be financed through the Fund. Based on these revenue requirements, it then recommends to MOF the required levels of road user charges.

A senior public officer has been appointed to be the Secretary to the Board who is the chief executive and accounting officer of the Fund. She is supported by a secretariat composing of five staff from a local firm of chartered accountants. The Board is required to publish an annual report within six months of the end of each financial year, dealing generally with the policies and activities of the Board during the year. It must further include a copy of the audited accounts and the auditors' report on the accounts. The Auditor General's Office is now seeking a firm of chartered accountants/management consultants, hereafter referred to as the auditor, to audit the Fund by fulfilling the following terms of reference, the costs of which will be borne by the Fund.

Audit Purpose

The purpose of this audit is to ensure that the Lesotho Road Fund has been operated over the period FY1997/98 in accordance with Legal Notice No. 16 of 1996, Finance (Roads Fund) Regulations 1996.

Audit Objectives

The objectives of the audit are as follows:

- (i.) to verify that income of the Fund from all sources is accurate and complete and that all disbursements made are properly supported and are in respect of expenditures allowed for by Legal Notice No.16 of 1996;
- (ii.) to review the road user charge collection, internal control and disbursement procedures of the Fund and make recommendations for improvements as necessary; and
- (iii.) to review the performance of the Board with respect to their obligations under Legal Notice No.16 of 1996.

Scope of the Audit

To achieve these three objectives the auditor will be required, as a minimum, to carry out the specific tasks outlined below.

Verification of the Road Fund's Financial Rectitude

Having reviewed the Fund's balance sheet, statement of income and expenditure, statement of cash flow and all other supporting documentation, and using International Auditing Standards, the auditor will be required to verify that, for the FY 1997/98:

- (i.) the various sources of income of the Fund are accurate and complete, especially that the actual receipts from the four main sources of income represent a complete and proper calculation of the income which should accrue to the road fund based on legislation in force. This will require investigation of the volume of leakage between collection points and the Fund account;
- (ii.) the moneys paid into the Fund account reconcile with records maintained by third parties which are responsible for collecting user charges. Such third parties include oil companies, the Customs Department and the Vehicle Licensing Department;
- (iii.) the payments made are supported by adequate documentation and have been made in accordance with the relevant legislation in force;
- (iv.) the payments recorded as road works have indeed been disbursed against completed works or works in progress in the field. This will require a technical audit of 20% of finished civil works by value and at least 5% of all requests for payment, to be chosen at random by the auditor, to verify *visually* the satisfactory completion (or ongoing conduct for routine maintenance) of works; and
- (v.) all transactions and balances of the various bank accounts maintained by the Fund reconcile with payment and receipt vouchers for the Fund.

Appropriateness of Operating Procedures

The review by the auditor of the operating procedures is to be tempered by the fact that the Fund and its secretariat have been in place for less than one year and are in the learning stage for this novel task as far as Lesotho is concerned. Nevertheless, in order to confirm that the Fund secretariat is progressing satisfactorily towards becoming an efficient and effective organization based on sound commercial principles, the auditor will be required to assess critically Fund operating procedures as at 31 March 1998. The areas for consideration are, as a minimum:

- (i.) the system of collecting, depositing and monitoring Fund revenues, against the following criteria: administrative simplicity, level of evasion, degree of accountability, speed of deposit;

and any other criterion deemed important by the auditor. The auditor is, as necessary, to make recommendations as to how to improve the collection system including: streamlining current procedures to reduce any delays; steps necessary to minimize evasion; and removal or addition of the imposition of returns.

- (ii.) the system of computer based financial control and management information against the following criteria: value for money, usefulness as a budgeting and planning tool, control mechanisms, quality of management information outputs, and disaster planning and recovery.
- (iii.) the system of disbursing moneys to both contractors and directly to road agencies, against the following criteria: administrative simplicity, degree of accountability, speed of payment; and any other criterion deemed important by the auditor.

Performance of the Board

Again, the evaluation of the performance of the Board must bear in mind that the Board has only been in place for one year. However, it is anticipated that the Board should be evaluated against the following suggested indicators:

- (i.) Objective of adequate funds for maintenance and road safety
 - Disbursed funds/estimated requirements
 - Road condition trends
 - Road safety statistics
- (ii.) Objective of value for money
 - Cost per km of maintenance and rehabilitation
- (iii.) Objective of transparency
 - Qualitative assessment of road users' awareness of the Board's activities in the sector
 - Qualitative assessment of public awareness campaign
- (iv.) Objective of efficiency
 - Administration cost/disbursed funds over the year
 - Average time for processing of certificates for work
 - Road user charge structure in relation to damage done by different types of vehicles
 - Integration and coordination in road planning
- (v.) Objective of participation of key stakeholders and road users in management
 - number of meetings held, attendance record and private sector members' subjective assessment of their role in the Board

Outputs and Timescale

The auditor will produce the following two documents by no later than June 30 1998, providing copies to the Attorney General (5), Minister of Finance (5) and the Board Secretary (15):

- (i.) an audit report which will include, inter alia: (a.) a statement as to the auditing standards applied in the conduct of the audit; (b.) an opinion as to whether proper books of account have been maintained by the Board and whether the financial statements are in agreement therewith; (c.) an opinion as to whether the said financial statements give a true and fair view; and (d.) a statement as to whether the auditor has obtained all the information and explanations deemed necessary to enable him to fulfill his functions
- (ii.) a long form report detailing the following: (a.) a summary of matters which came to the auditors' attention during the course of the audit; (b.) a review of internal control procedures and the related accounting and financial management systems with recommendations for their improvement where appropriate; (c.) a review of the functions and responsibilities of the board as set out in paragraph 11 of Legal Notice No.16 of 1996, with recommendations for improvement where appropriate; (d.) the findings of the technical audit required; (e.) a review of the draft annual report on the activities of the

Fund during the year to ensure consistency with the audited financial statements and the preceding year's civil works program; (f.) a review of the procedures for allocating funds between different road agencies; and (g.) a summary report included as a one page annex which is to be in such form as to be suitable for publication in the local press and which will state, inter alia, that the audit has been independently conducted and from where a full copy of the auditors' report can be obtained. The auditor is to arrange for publication of this report on two days as a one page statement in a national newspaper of the Auditor General's choice, including in their financial proposal the additional cost for this.

Documents and Support to be Made Available to the Auditor

The secretariat will furnish the auditor by May 14 1998, a balance sheet, statement of income and expenditure, statement of cash flow and all other supporting documents and information necessary to ensure the successful conduct of the audit. The Board secretary, other member of the secretariat or senior officer from any appropriate road agency will make themselves available if required to attend any meetings or field visits deemed necessary by the auditor. No other logistical support will be provided by the Board or any government ministry.

Personnel Required and Qualifications

It is anticipated that the fulfillment of these terms of reference will require at least one chartered accountant, a management consultant and other supporting staff for a period of one month, some of whom may be provided on a part time basis. The firm chosen will have demonstrated extensive experience in financial audit of large-scale organizations. Experience with work in other infrastructural services such as water supply, telecommunications, power and regional development will add weight to any proposal. For the partial technical audit and evaluation of the Board's performance, the auditor will be expected to sub-contract the works to a firm of consulting engineers and an experienced road fund specialist respectively. CVs are to be provided for all staff being put forward for the task.

Attachment: Legal Notice No.16, 1996

2. Auditing the Road Fund: Financial Audit by Private Auditors (Mozambique)

Objective

The main purpose of the audit is to ensure that the income of the road fund from all sources is accurate and complete, and that the payments made are properly supported and are in respect of expenditures allowed for by the relevant road fund legislation in force. A further purpose of the audit is to ensure that the accounting and internal control procedures, and the records and accounts of the road fund are adequate. The auditor will be expected to use International Auditing Standards as Mozambique has not adopted auditing standards.

Scope of the Audit

The auditor will carry out an audit of the various sources of income of the road fund to determine their accuracy and completeness. The Administrative Council of the road fund is particularly interested to determine that the actual receipts of the road fund from the three main sources of income represent a complete and proper calculation of the income which should accrue to the road fund based on the relevant road fund legislation in force. It is envisaged that this audit work will include examining the records of third parties which are responsible for collecting monies at the many points of origin of the three main sources of income. Such third parties include Petromoc, Customs Authorities and Toll Bridge Officials.

The auditor will carry out an audit of the payments of the road fund to determine that the payments made are supported by adequate documentation and are in accordance with the purposes for expenditure as allowed for in the relevant road fund legislation in force. It is envisaged that this audit work will include examining the records of the road fund at provincial level. In this regard it is considered that field trips to the Provinces are essential.

The auditor will carry out an audit of transactions and balances of the various bank accounts maintained by the road fund.

The auditor will review the accounting and internal control procedures in operation at the road fund to determine their adequacy.

The auditor will undertake a review of the accounts, files, records and reports of the road fund to determine their adequacy.

Reports

The auditor will prepare a short-form report for the Administrative Council of the road fund which will give an opinion of the accuracy of the financial records and on the completeness of income of the road fund, and will include brief comments on any shortcomings. The auditor will also include comments indicating the degree to which he was unable to follow the auditing standards which he had adopted for his work.

The auditor will also prepare a long-form report or management letter which will inform the Administrative Council of the road fund of (i) the standards and procedures which the auditor used in the audit, and (ii) details of strengthening needed in accounting and financial management systems and practices and in internal control procedures.

IV. TECHNICAL ASSISTANCE TO SET UP/STRENGTHEN A ROAD FUND

[The first ToR is probably the shortest and most comprehensive.]

1. TA to Support Implementation of the Road Maintenance Fund (Jordan)

July 1, 1998

Terms of Reference for Technical Assistance

to Support Implementation of the Jordan Road Maintenance Fund

1. Background

In early 1997 a brief report was prepared entitled “Operating Modalities for the Proposed Road Fund in the Hashemite Kingdom of Jordan”. This was followed by a workshop in June 1997 which reviewed the recommendations of the report and also reviewed experience of road funds in Latvia, New Zealand and South Africa. The participants in the workshop, which included representatives of road users and the business community, strongly supported the idea of establishing a commercially managed road fund and offered suggestions as to how the fund might function. The outcome of the workshop was communicated to the Cabinet in a memo signed by the Minister of Public Works and Housing (MPWH). The Cabinet reviewed the memo and approved in principle the establishment of a road maintenance fund to finance road maintenance and road safety works, and also approved the idea of having the fund managed by a representative oversight board attached to the Minister of MPWH.

An interim board was appointed almost immediately to start preparing the detailed operating modalities for the road fund and the basic legislation needed to put it on a sound legal basis. The board has six members representing government, five representing road users (road transport, agriculture, commerce, industry and the Jordan Roads Society) and two appointed by the Minister following consultation with the Secretary General of MPWH. It was intended that the interim board should evolve into the executive board of the road fund. An Executive Secretary was also appointed to assist the board in its work.

The required legislation has now been drafted and is currently being reviewed with a view to submitting it to Parliament by the end of 1998. By the beginning of the next fiscal year (January 1 1999) it is expected that the board according to the legislation will be functional and existing allocations for maintenance from the consolidated fund will start to be deposited into the road fund.

The purpose of this Technical Assistance is to provide assistance to the board and to the secretariat to put in place arrangements for managing the road fund. The consultants are expected to work as assistants/advisers to the secretariat, to transfer skills and know-how to them and to recommend any needed training.

2. Objectives

The objectives of the Technical Assistance are to assist the board and the secretariat to:

- (i) establish, organize and manage the road fund during an initial two-year period;
- (ii) develop suitable systems and procedures for managing the road fund (on both the revenue and expenditure sides) and tracking expenditures to ensure the road fund gets value for money from any funds disbursed from the road fund;

- (iii) train the staff in the secretariat in the use of these systems and procedures and recommend any required staff training;
- (iv) prepare manuals setting down the recommended operating systems and procedures for use by the secretariat; and
- (iv) provide ongoing support on a part-time basis to resolve queries, amend operating systems and procedures and generally assist the secretariat with its work.

3. Scope

The consulting services described in this terms of reference shall include the following tasks:

- (1) Review the responsibilities of the board as laid down in the draft legislation, which day-to-day responsibilities should be delegated to the secretariat, and the relationship between the head of the secretariat and the board.
- (2) Define the relationship between the board, the parent ministry (MPWH) and other concerned ministries, and how these relationships might change once the municipalities become entitled to receive some money from the RMF.
- (3) Recommend what role the board might play in advising the Minister on control of overloaded vehicles and implementing vehicle weights and dimensions regulations.
- (4) Recommend the staffing of the secretariat, bearing in mind that the secretariat should not consist of more than about 4-5 technical staff and should have knowledge of highway engineering, transport planning and accounting. Prepare job descriptions for these staff.
- (5) Develop procedures for collecting and depositing the revenues assigned to the RMF into the road fund bank account. In consultation with ministry of finance, agree on whether the revenues can be deposited directly into the road fund account, or need to transit through the consolidated fund. Also agree on whether the funds can be deposited into a commercial bank account, or need to be deposited into an account with the Central Bank of Jordan.
- (6) In the case of commercial banks, recommend whether separate sources of revenues should be deposited into separate bank accounts (at the same or different banks) and how the commercial banks should be selected.
- (7) Recommend procedures to be followed by MPWH in preparing the Annual Road Program and the manner in which it should be reviewed and endorsed by the board. Since the RMF will only finance items forming part of the Annual Road Program, recommend the procedures to be followed when amending the Program to take account of unexpected changes in road maintenance requirements. Also suggest the procedures which might be followed by the municipalities when they become entitled to receive money from the RMF.
- (8) In consultation with ministry of finance, agree on procedures to be followed by the board when considering the desirability of raising the level of the road tariff. Also specify what information needs to be submitted to ministry of finance to support requests to raise the road tariff.
- (9) Recommend the type of out-reach program which should be adopted by the board to win public support for more road funding and to assure the public that the revenues from the RMF are

producing value-for-money. In this context, consider the use of press releases and press conferences, regular news letters and signs posted at work sites.

- (10) Develop and introduce appropriate financial accounting and control procedures which conform with acceptable international accounting principles. The systems should be capable of tracking changes in the RMF's revenue base, the revenues it should generate and reconcile this estimate with deposits made into the road fund bank accounts. The systems should also be able to project future revenues, expected disbursements and the RMF's overall cash balance.
- (11) Since revenues will not always match disbursements, recommend how short term borrowing should be handled and also what might be done with any cash surpluses, bearing in mind that they should only be invested in short-term, low-risk financial instruments.
- (12) Recommend how funds should be disbursed to MPWH to finance the Annual Road Program and whether this should be done: (i) in advance, based on MPWH estimates, and justified ex post before the next deposit was due (i.e., the RMF would operate a revolving fund); (ii) reimburse MPWH ex post after work has been completed; or (iii) at least for certain works, pay contractors directly after certification that work has been completed according to specification. In the case of force account work, recommend what steps might be taken to ensure that the work has been carried out to an acceptable standard.
- (13) Since it is expected that the municipalities will eventually become entitled to receive money from the RMF, recommend how these funds should be divided between the various municipalities. Also recommend whether the funds should be transferred to finance selected projects on a cost-share basis, or whether the municipalities should have freedom to use the funds on any road works. In the case of cost-sharing, recommend how this should be done to reflect, to the extent possible, the needs of each municipality and their ability to finance the counterpart contributions.
- (14) Recommend the type of internal audit procedures (both technical and financial) which might be used by the RMF to ensure, on an ongoing basis, that all work financed through the RMF conforms to the Annual Road Program and has been carried out according to the contract conditions and specifications.
- (15) In consultation with the Auditor General's Office, agree on the procedures to be followed in auditing the RMF, whether this should be done on a quarterly and annual basis and whether private sector auditors would have to be used to complete the audit within 3 months after the end of the fiscal year. Also prepare the terms of reference to be used for the audit.
- (16) Recommend the format for regular reports to be prepared by the secretariat, including the Annual Report and prepare sample layouts for use by the RMF staff.
- (17) Recommend and procure under this contract any equipment and other bought out services required to make the RMF operational. It is expected that this might include: (i) three computers; (ii) one printer; (iii) one photocopier; (iv) one fax machine, and (v) connection to a recognized email carrier compatible with that used by the Government of Jordan. MPWH for the time being will provide office space and furnishings for the secretariat.

The above tasks should be undertaken in close cooperation with the staff of the RMF. Since this is an evolving institution, the consultants are not expected to slavishly follow the above terms of reference. The Executive Secretary of the RMF may request the consultant to reduce the effort on some items, to increase it on others, or to study new issues as they arise. In other words, the consultants are expected to work as advisers to the RMF and are not simply being recruited to write a report.

The consultants are also expected to recommend training for RMF staff required to fill any identified skill gaps noted during the course of the assignment. It is expected that at least four persons from the RMF and the board would attend the one-week course on "Road Financing and Road Fund Management" offered by Birmingham University, UK. The course is held in April each year and one group could attend in 1999 and the other in 2000.

4. Staffing

It is expected that the consultants team would include persons with experience in road fund management, accountancy and financial analysis, and transport planning and economics. It is a specific requirement of this terms of reference that the consultant includes in the team one person with a detailed knowledge of road fund management, either by virtue of having worked for a (second generation) road fund, or by virtue of having studied and visited such road funds. It is expected that the consultants would work intensively with the RMF staff for about 3 months and then provide intermittent support, at the request of the Executive Secretary of the RMF, over the next 21 months.

5. Timing

The services described in this terms of reference are expected to start within 4 weeks of signing the contract for this assignment. The major inputs to the assignment are expected to be made early on during the assignment which will stretch over a period of 2 years from the starting date.

6. Reporting

A brief inception report should be presented 4 weeks after starting the assignment, listing any additional comments on the terms of reference, problems encountered and steps taken to overcome these problems. Thereafter, the consultant will be expected to submit operating manuals for use by RMF staff. The titles of the manuals and their proposed dates of submission should be listed in the inception report.

In addition, the consultant should submit an Action Plan for implementing the procedures covered in the operating manuals prepared under this assignment. The consultant may also be required to submit other reports, or draft regulations, etc., at the request of the Executive Secretary of the RMF.

7. Resource Requirements

It is proposed to let this contract on a fixed fee basis of \$300,000, including a contingency of \$30,000 to cover unforeseen items not included in the consultants proposal. The net sum, \$270,000 should cover the following items:

- (i) Fees, service travel and allowances for the consultant's staff, plus a small budget for literature, training equipment (if any), preparation of reports/manuals and any other documentation.
- (ii) Costs of equipment and other bought out services required to support the RMF secretariat.
- (iii) The costs of 4 persons attending the Birmingham University training course on road fund management. Course fees during 1998 were \$3,000 and covered accommodation, lectures, reception and course materials. Travel is additional.

2. TA to Establish Administrative Arrangements for a Road Maintenance Fund and Provide Operational Support (Yemen)

Background

1. Attached as Annex I is a Technical Memorandum on the background for the establishment of a Road Maintenance Fund (RMF) for Yemen. The memorandum presents the rationale for establishing the RMF and describes the institutional arrangements proposed for the management of the funds. Attached as Annex II is also Law No (22) for 1995 regarding the Road Maintenance Fund and its board called the Yemen Board for Management of the Road Maintenance Fund (the Board). The Law calls for the creation of the RMF and its Board as an autonomous entity. The Law also calls for the Board to have an Executive Body consisting of administrative and technical units, and that the Minister of Construction shall propose regulations governing this Executive Body and other outstanding issues for approval by the Cabinet. The Law precludes any provision being made in the Government's budget for maintenance of roads under the responsibility of the Minister of Construction since all road maintenance expenditures will now be financed by the RMF.

2. The RMF, the Board and its Executive Body and all road maintenance related expenditures are to be financed through a system of Road User Charges comprised of the following sources:

- (i) monthly remittances of annual vehicle license fees;
- (ii) monthly remittances of truck overloading penalties collected by GCRB on behalf of the Board;
- (iii) monthly remittances of Road Use Surcharge on petrol and diesel collected by the petroleum company on behalf of the Board; and
- (iv) grants, credit or loans received by the Board from domestic and foreign entities for the purpose of maintaining and restoring the condition of the road network, and for the repayment of credits or loans for which the Board has approved and signed an agreement with the entity providing the funds.

Objectives

3. The objectives of this technical assistance support are:

- (i) to work out the operating modalities of the Board and the RMF in the form of detailed regulations to be approved by the Minister of Construction for enactment by the President;
- (ii) prepare an action plan with timed steps for implementing the RMF and to make the Board and its Executive Body operational in a very short time period. The action plan shall include steps to expedite the undertaking of high priority maintenance work in the build up period to make use of the funds already available;
- (iii) provide technical assistance as needed to implement the action plan after it has been approved;

- (iv) provide support to the Executive Body's technical and administrative units over a period of two years to provide training of the regular staff; and
- (v) provide also support to GCRB and the local road contracting industry over the same time period to improve their performance according to the action plan.

4. The main elements of the support program are listed below:

A. Institutional Development Technical Assistance:

- (i) work out the detailed organizational arrangements and contracting procedures of the Board and its Executive Body, and define the Board's relationship to and role of GCRB (the Highway Agency) for maintenance of the road network GCRB is responsible for, and the role of the RMF and its Board in funding maintenance for other roads than those that GCRB is responsible for;
- (ii) prepare and implement a support program for GCRB to improve the capability and capacity to manage the road system under their authority. Among others such a program is expected to include improvements to their: routine maintenance operation; management capabilities; management and accounting of plant and equipment; and possibly support to commercialize their force account operation to enable them to bid for works in competition with the private sector;
- (iii) prepare and implement a program to facilitate the development of private sector contractors, in particular small size contractors, in the field of road maintenance; and,
- (iv) technical assistance to support the implementation of the above main elements and other tasks deemed necessary to fulfill the objectives of this consultancy.

B. Maintenance Planning, Programming and Budgeting: In this context, the system proposed should relate mainly to the roads under the jurisdiction of the central government (about 5000 km of paved highways and 10,000 km of gravel roads).

- (i) propose and set up a simple maintenance management system, and train the staff in its use;
- (ii) propose and supply all necessary equipment needed for the maintenance management system including pavement condition survey equipment, computers and software;
- (iii) based on the outcome of a separate highway maintenance study to plan and prioritize maintenance needs, develop a multi-year maintenance, rehabilitation and improvement program on the rolling plan concept based also on the above proposed system and equipment;
- (iv) train maintenance staff at local level in determining and reporting maintenance needs, and train staff and consultant at the central level to analyze data and provide plans, budgets and multi-year programs for highway maintenance; and,
- (v) advise on how the municipalities and local district governments should establish and document their maintenance needs for the purpose of submitting requests for funds (on a cost sharing basis to be agreed) to the RMF.

Scope of Work.

5. To carry out the above Objectives, the consultant shall include but not necessarily be limited to the following tasks:

A. Institutional Development and Operating Procedures .

- (i) The consultant would recommend a set of “executive regulations” with rules and detailed operating procedures, and “organizational regulations” with details of the organizational structure, staffing, remuneration of staff etc. all according to the Law. The consultant shall also assist the Board and its Executive Body in implementing these regulations to promote value-for-money and to ensure strict accountability for what is done with the proceeds from the RMF. The proposed regulations are expected to strengthen the management of road maintenance and put in place appropriate institutional and human resources development plans. To achieve all this the consultant will have to carry out the following tasks:
- (ii) The RMF and its Executive Body is controlled by a Board made up exclusively by civil servants. The consultants would recommend whether existing members adequately represent concerned government departments (including local government agencies) and which other stakeholders from the private sector should be added to the Board. They should also recommend how Board members are nominated and appointed, terms of appointment, etc. Also the consultants would advise on how the Chief Executive Officer (General Director of the Executive Body) is appointed (i.e., should he be appointed by the Board), his role on the Board and the relationship between the Board and the Executive Body and its CEO (i.e. delegation of powers to the CEO and under what terms).
- (iii) Under the current Law, the Board recommends changes in the road use charges/fuel levy to the Cabinet. Recommend how the Board should go about this in terms of assessing the need for additional revenues and how they should consult with MOF to ensure the recommended charges are consistent with the government’s macro-economic policies.
- (iv) Re-classify the road network into functional classes, and recommend basic procedures to be used to decide how much of the RMF to allocate for various classes including the main roads through urban areas under the control and authority of the municipalities. Also recommend procedures to be used to allocate funds to the municipalities and local district councils and the basis of any proposed cost sharing arrangements which might be used for such roads.
- (v) Recommend procedures for disbursing funds from the RMF for work carried out by contractors, as well as that carried out by force account, including any auditing of quality of works to be done during implementation. Disbursement procedures should also be recommended for the funding of maintenance of roads not under the authority of GCRB/Ministry of Construction.
- (vi) Develop operating procedures that clearly define the roles and relationships between the Ministry designated to safeguard the governments interest (MOCHUP) , the Highway Authority (GCRB) responsible for the highway network, and the new RMF and its Board. Should the Board negotiate an annual contract plan with the parent ministry, based on their rolling business plan? How should the Board finance routine and periodic maintenance of highways carried out as force account work by the Highway Authority GCRB? Who should award and manage contracts with private contractors and supervision consultant for routine and periodic maintenance work on the highway system under the authority of the GCRB? Should similar procedures be used for highways as for municipal roads?
- (vii) Propose suitable financial accounting arrangements for the new administration (the RMF, the Executive Body and the Board). The proposals should include recommended formats for an Income Statement, Balance Sheet and Source & Application of Funds Statements. Also advise on the most appropriate way of reflecting shortfalls in regular maintenance in the accounts and the resulting accumulated loss of capital assets. In addition, propose arrangements for establishing cost

accounts and linking them to a performance budgeting system for planning, implementing and monitoring road maintenance.

- (viii) Recommend appropriate auditing arrangements including internal audit and control procedures, together with independent external audit arrangements and their relationship to the Government's General Auditor. Also propose the nature of regular reports to be published for submission to concerned ministries and the public and an indication of the areas they should cover.
- (ix) Advise on the appropriate staffing structure of the Executive Body of the Board, institutional structure and divisional responsibilities, the number of staff required for each division, qualification of each staff and relationship to the CEO, with job descriptions. The remuneration arrangements should be sufficiently attractive to ensure the Board can attract and retain qualified Yemeni staff. The consultant should also provide Terms of References for all staff in key positions including CEO, managers and technical staff. Advise on whether certain skills—for example accounting skills—should be hired under contract from local auditing/consulting firms, or if certain tasks such as axle load control should be farmed out to GCRB under annual contracts.
- (x) The consultants should recommend appropriate terms and conditions of appointment of Board members, and on issues such as frequency of meetings, secretariat functions, and the remuneration of the Board members, and other matters which may affect the effective functioning of the Board.
- (xi) The consultants will provide qualified technical staff on a short term basis to: (i) assist in the establishment, organization and operation of the Executive Body; (ii) build capacity through training of local staff and counterparts; (iii) clearly define objectives for maintenance of the road system, with emphasis on carrying out the work by contract; (iv) assist in establishing procedures for annual work programming based on assessments of work priority and availability of funding; (v) establish an effective means of control over the work and the organization; (vi) assist in establishing a headquarters for the Executive Body; (vii) establish adequate management information systems; (viii) develop and implement suitable manpower development plans and ensure effective transfer of skills and know-how; and (ix) develop and implement support programs for commercialization of GCRB and development of the private road contracting industry.

B. Planning, Programming and Budgeting for the Existing Road Network

- (i) The proposed services are expected to focus on: (i) procuring all necessary equipment and software for the use of the Executive Body; (ii) administrative reclassification of the road network; (iii) estimate the costs associated with maintaining the roads in a stable long-term condition; (iv) prepare a long term maintenance, rehabilitation and improvement program in order to bring the road network into a stable long-term condition, and budgets for the next three years using the rolling plan concept; (v) estimate the benefits and suggest strategies for budgeting under funding constraints; and, (vi) consider and recommend options for supplemental financing, such as borrowing, in case of a financing gap. The following activities are included:
 - (ii) Administrative reclassification of the road network is necessary before a full road inventory is carried out on all roads under the Executive Body. The road inventory including pavement condition data could be carried out by local consulting firms under guidance by the consultant.
 - (iii) Estimate the annual costs of maintaining the trunk roads and other inter-urban roads both in terms of routine and periodic maintenance. The consultant should also estimate the road

rehabilitation needs and estimate the annual average cost of undertaking limited improvement work on some sections of the road network.

- (iv) Examine to what extent the urban authorities can be expected to contribute towards road maintenance of urban roads, and the same applies for roads under the Ministry of Local Administration.
- (v) Prepare a financing plan showing the required revenues and the proposed system of RUC to meet the costs. In the case of a financing gap the consultants should recommend strategies for how the gap can be closed.
- (vi) Multi-year Programming of Works. The consultants are expected to set up a simple road pavement management system, which will include the following elements:
 - ◆ a maintenance program designating specific goals and objectives in terms of type and frequency of routine and periodic maintenance of roads;
 - ◆ a budget and allocation of resources consistent with funding capabilities;
 - ◆ communication of program objectives and authorization for specific work in ways that will effectively guide the Executive Body staff in their day-to-day management of work; and
 - ◆ reporting of work accomplished with periodic summarization and evaluation of actual performance as related to program objectives and standards for appropriate management action to be taken.
- (vii) The pavement management system should allow: (i) determination of the remaining life of the pavements on a systematic basis; (ii) determination of how much is being spent on maintenance on specific sections of the road; (iii) life-cycle costing and improving pavement design of new roads and pavement strengthening works based on performance data of existing road sections . After calibration, the World Bank HDM-model is expected to be used in evaluating different maintenance strategies, life-cycle costing and multi-year programs of works.

Suggested Staffing

6. The consultancy is expected to be carried out by a multi-member TA team coming on short term (possibly multiple) visits under specific individual TORs having specific outputs or deliverables. Only one expert (Project Manager) is expected to stay in Yemen for the entire duration of this consultancy (two years).

7. The specialties expected to be required are listed below together with job descriptions:

- (i) Chief Technical Advisor (CTA)
- (ii) Transport Economist (TE)
- (iii) Roads Planning and Design Specialist (RPDS)
- (iv) Roads Maintenance Specialist (RMS)

- (v) Chief Financial Adviser & Accountant (CFAA)
- (vi) Manpower Development & Organizational Planning specialists (MDS)
- (vii) Management Information System Specialist (MISS)
- (viii) Mechanical Engineering/Equipment Specialist (MEES)
- (ix) Construction Industry Specialist (CIS)

8. At least one of the experts above should have experience from the setting up of or working in a road fund organization. We are, therefore, recommending the shortlisted consulting firms to team up with one of the existing road fund organizations (such as the ones in New Zealand or South Africa) in order to draw on staff with such background. Two or more of the shortlisted firms may team up with the same road fund as long as the road fund staff are not taking actively part in preparing any of the proposal.

9. Below are the proposed job descriptions. The consultants may suggest other combinations of experts as long as the overall objectives of the consultancy and the duties of the experts below are covered.

Chief Technical Advisor (CTA)

Objective

The objectives of services to be provided by Chief Technical Advisor (CTA) are to:

- (i) coordinate and manage all services provided by the consultants under this technical assistance;
- (ii) provide management and administrative support to the Executive Body so as to ensure that it becomes fully operational in accordance with an agreed schedule;
- (iii) assist in the determination of the type and extent of technical assistance needed by Executive Body when established; and
- (iv) provide professional and administrative support to the Executive Body in the preparation and implementation of proposed donor-assisted projects.

Duties

The CTA shall be the Chief Advisor to the Director General in the execution of his responsibilities. He shall also act as the team leader of the group of experts, whom he will help to engage, providing technical assistance to the Executive Body. The CTA shall, inter alia, carry out the following duties:

- (i) monitor the progress of establishing the Executive Body and provide management support to expedite this and provide refinements needed to ensure that Executive Body is established and fully operational in accordance with an agreed schedule;
- (ii) provide needed inputs to develop and put in place operations, procurement, and administrative manuals required for effective performance of Executive Body;
- (iii) provide management support and appropriate inputs in determining resource requirements for the effective implementation of the roads infrastructure program;

- (iv) provide support for the development of procedures and guidelines in the effort to introduce a system whereby road maintenance is carried out by private contractors and GCRB under performance based contracts;
- (v) provide professional support to Executive Body senior staff to develop short- and long-term staff training program;
- (vi) provide support to Executive Body to develop procedures, guidelines and formats for fieldwork performance reporting by supervision staff and consultants;
- (vii) prepare draft project documents for donor assistance; and
- (viii) monitor and report the performance of the technical assistance, particularly with regard to achievement of stated objectives, developmental impacts and transfer of skills.

Qualification

The expert shall have the minimum of a M.Sc. Degree in Civil Engineering and experience of at least 20 years, of which at least 10 years should be working in a public highway agency. He must be fluent in English and Arabic. He must have adequate working experience in all the tasks specified above. Experience in processing procurement of works, goods and services through competitive bidding according to World Bank and other donor agencies' procurement guidelines is of vital importance.

Transport Economist (TE)

Objectives

The Transport Economist (TE) shall be the chief technical advisor to the Director, Road Tariff Policy & Financial Planning, and will provide economic policy advice on the services received by road users and the charges they pay for those services.

Duties

The TE will assist the Director, Road Tariff Policy and Financial Planning to:

- (i) prepare and update estimates of vehicle operating costs (using the Highway Design and Maintenance Standards Model–HDM) for various vehicle classes and road conditions existing on the road network, and calibrate the model;
- (ii) develop and update annually traffic forecasts for various sections of the road network based on anticipated developments in the economy of the various areas served by the road network;
- (iii) carry out economic and financial evaluations of proposed expenditure programs to allow prioritizing and scheduling within projected budget constraints;
- (iv) assess the impact and revenue potential of various road user charges, and recommend based on assessments of expenditure needs appropriate changes to user charges such as the road user surcharge on fuel, the heavy vehicle fee, etc., and on the need for new user charges; and

- (v) develop/review proposals for external debt financing of capital improvements such as road rehabilitation/reconstruction and geometric improvements to the road network, and analyze the implications for future debt service.

Qualifications

Applicants must have the following minimum qualifications: M.A. degree in Economics; 15 years professional experience as an economist of which at least 5 should have been in Transport Economics; strong familiarity with the concepts and use of the HDM III model and road pricing methodologies; experience in public finance and expenditure budgeting; candidates should have worked in developing countries preferably in the Middle East, be fluent in English and knowledge of Arabic will be considered a distinct advantage.

Roads Planning & Design Specialist (RPDS)

The Roads Planning & Design Specialist (RPDS) shall be the chief technical advisor to the Director (Planning, Programming and Budgeting) and provide professional and administrative support to help him perform his functions.

Duties

Specifically, the RPDS will be required to:

- (i) systems for carrying out traffic counts and axle load surveys on a regular basis. provide support in planning functions by helping to design and implement systems for the preparation of long-, medium- and short-term road preservation programs for the main road network utilizing the Highway Design and Maintenance Standard Model (HDM-III);
- (ii) help to establish and review design standards for all classes of roads;
- (iii) provide professional support in contract management by assisting in the review and clearance of engineering designs;
- (iv) help in developing detailed project implementation schedules;
- (v) assist in the preparation of guidelines to be used in preparing monthly and quarterly contract supervision reports for development and major rehabilitation projects; and
- (vi) develop procedures.

Qualification

Applicants must have the following qualifications: a M.Sc. degree in civil engineering with specialization in transportation planning; a minimum of 15 years working experience of which 10 years must have been spent in highway engineering with specific responsibility for highway planning, designing and highway contracting and contract management; candidates should have worked in developing countries preferably in the Middle East and be fluent in English. Knowledge of Arabic will be a plus.

Roads Maintenance Specialist (RMS)

The Roads Maintenance Specialist (RMS) is to be the chief technical advisor to the Director (Operations) of Executive Body and provide professional engineering support to help him perform his functions.

Duties

The RMS shall be required to do the following:

- (i) help develop a professional, sound and effective road maintenance management system;
- (ii) provide professional support in carrying out an inventory and condition survey of all roads under maintenance, applying technically sound procedures. The consultants shall help to develop an appropriate and technically acceptable format and procedure for road inventory and condition survey;
- (iii) help to develop annual quantity and performance standards for each activity considering such factors contributing to the frequency of maintenance as: age and condition of roads; climatic condition; average daily traffic, etc.;
- (iv) advise in identifying the types of contracts which are appropriate for different maintenance activities and group the total work program into contract packages for execution; and
- (v) provide professional support to establish a one-man contractor system or other systems for the execution of specific routine maintenance activities.

Qualification

Applicants must have the following qualifications: a M.Sc. degree in civil engineering; a minimum of 15 years working experience of which 10 years must have been spent in highway maintenance with specific responsibility for design, implementation and operation of a road maintenance management system; must be familiar with international contracting procedures for highway construction and maintenance works; candidates should have worked in developing countries preferably in the Middle East and be fluent in English. Knowledge of Arabic will be a plus.

Chief Financial Adviser & Accountant (CFAA)

The Chief Financial Adviser & Accountant (CFAA) will lead in the development and implementation of financial and accounting system for Executive Body and be the Chief Financial Advisor to the Executive Body and function as Executive Body's Chief Accountant.

Duties

- (i) design and implement computer-based financial systems which can share data-bases. Systems should include: budget system; accounting system; disbursement system; procurement system; cost accounting and management reporting; and audit rules and procedures;
- (ii) assist in preparation of a 5-year rolling road maintenance and rehabilitation plan for the Executive Body, being responsible for the financial analyses;

- (iii) work with Ministry of Finance to ensure smooth implementation of the RMF;
- (iv) supervise keeping of all project accounts;
- (v) direct training in the use of the computer systems and work with the Auditor and MIS specialist in designing security plans for the systems and databases; and
- (vi) prepare cost accounting systems for GCRB and give advice and assist in implementing the systems.

Qualification

Senior financial executive with certificates or degrees appropriate to financial system development, with at least 10 years experience in developing, implementing and managing financial system operations as well as financial planning and budgeting in developing countries, preferably in the Middle East. Candidates should have experience in both the public and private sectors, should have significant knowledge of computer, hardware and software options for financial and accounting operations, and should have knowledge of taxation, user fee or road fund financing, privatization and international donor institutions and policies. Candidates should have experience in disbursement and voucher systems, contracting and procurement systems, cost accounting and performance monitoring system, and audit. Candidate should have experience in arranging financing for major capital projects. He must be fluent in English and Arabic.

Manpower Development Specialist (MDS)

The Manpower Development Specialist (MDS) will provide technical and administrative support to the chief of training in the performance of his functions.

Duties

- (i) design and implementation of training policy and programs for Executive Body;
- (ii) assist in establishment of departmental procedures and installation of training program management systems;
- (iii) based on a training needs assessment, design curriculum, identify training sources, assist in development of training materials, identify personnel for training and schedule training of staff in such a way as to cause least disruption to normal Executive Body operations;
- (iv) prepare plans and cost estimates for a road training center in Sana'a; and
- (v) establish a system for monitoring and evaluating all training systems whether in-house, intra-regional, overseas or by contract with other institutions.

Qualification

Would be a human resource development specialist with a degree in education, management or administration, and specific experience in design and implementation of training programs. Candidate should have background in institutional development for public works training departments. Candidates who are familiar with highway training programs will have an advantage. Candidates should have worked in developing countries preferably in the Middle East and be fluent in English. Knowledge of Arabic will be a plus.

Management Information System Specialist (MISS)

Duties

Prepare and/or adapt software required for: road inventories; traffic data; maintenance management; financial budgeting control; procurement and store inventory. The expert would work with other officers to design integrated systems and databases. He/she will direct software development efforts, training counterparts to design, develop and maintain required software.

Qualification

Management Information System Specialist with degree in computer applications and related fields. At least 10 years of experience in design, development and implementation of computerized management systems for financial and operational control. Must have experience working with highway or other public works agency in developing countries preferably in the Middle East and be fluent in English. Knowledge of Arabic will be a plus.

Mechanical Engineering and Equipment Specialist (MEES)

Duties

- (i) to assist in establishing a comprehensive plant and equipment management and control system which would meet the specific requirements of GCRB;
- (ii) provide professional support to the GCRB (Director for Equipment & Supplies) to maintain an inventory and control all plant, equipment and vehicles;
- (iii) formulate policies and procedures for the establishment and operation of a plant and equipment pool also for the use of private contractors at commercial rates; and
- (iv) assist in planning and controlling the maintenance and repair of all plant, equipment and vehicles of GCRB.

Qualification

Candidates must have the following qualifications: a degree or diploma in mechanical engineering; a minimum of 15 years working experience as plant and equipment manager in a public works organization; should have worked in developing countries preferably in the Middle East and be fluent in English and Arabic.

Construction Industry Specialist (CIS)

The Construction Industry Specialist (CIS) is to create a corp of local (domestic) contractors technically and managerially competent to execute most periodic and routine maintenance works and emergency repairs within the shortest possible time.

Duties

- (i) investigate, evaluate and propose procedures concerning pre-qualification of contractors, bidding and awarding of contracts, payment procedures of contractors;

- (ii) assist Executive Body to establish a register of local contractors for road works based on a sufficient number of financial categories to satisfy Executive Body's program of roads construction and maintenance and help in setting up procedures for upgrading the register;
- (iii) provide technical and managerial assistance to local contractors to develop their abilities in works preparation and execution and certificate preparation;
- (iv) prepare indices and formulae for systematic price adjustments of works items carried out by road contractors and set out procedures for regular publication; and
- (v) prepare a training program for local road contractors including GCRB and facilitate training as needed.

Qualification

Candidates are expected to have the following qualifications: a degree in civil engineering; at least 15 years experience in civil works, site management, costing, bidding and quality control; work experience in the Middle East is essential and be fluent in English and Arabic.

Reporting Of TA Team

10. The consultants shall prepare summary (3 pages) monthly progress reports (6 copies) and detailed quarterly reports (10 copies), and shall submit inception and final reports. The report submission, review schedules and copies to be provided are as follows:

- (i) **Inception Report** (10 copies): within three months of commencement of work in Yemen. In the report, the consultants should outline his preliminary findings, and an outline of proposed approach and schedule for the remainder of his assignment;
- (ii) **Final Inception Report** (10 copies): within one months after receiving comments on the Inception Report; and
- (iii) **Final Report** (10 copies): within 3 months of the end of the assignment outlining results accomplished and with recommendation of any further initiative needed to accomplish the objectives of the consultancy. This report should include proposed terms of reference for possible follow-up technical assistance to help implement the recommendations contained in the Final Report. Comments will be provided on the Draft Final Report within three weeks after submission.

Services to be Provided by the Government

11. The Board and its Executive Body will provide some office space to the consultant. This will be discussed during the site visits of the consultants. But except for part of the regular office space of the Board and the Executive Body, no other services will be provided to the consultants.

- Annexes:**
- 1. Technical Memorandum on the Road Maintenance Fund (not included)
 - 2. Law on the Establishment of a Road Maintenance Fund (not included)

V. DIVIDING FUNDS BETWEEN DIFFERENT ROAD AUTHORITIES

[The best example here is probably the first one dealing with Mozambique. It deals both with how to divide road fund revenues between the different municipalities AND how to ensure that the funds allocated are actually spent on roads and are spent in an efficient manner.]

1. Study to Examine Ways of Channeling Funds for Maintenance of Local Government Roads (Mozambique)

1. Introduction

The government has decided that up to 10 percent of the Road Maintenance Fund established under Decreto No. 45/89 should in future be channeled to selected municipalities to help them maintain the municipal roads under their jurisdiction. Maintenance supported by the Fund will include routine, periodic and emergency maintenance. This transfer is not designed for expenditure on road rehabilitation and construction, which is expected to be financed separately under one or more donor-financed rehabilitation programs.

The initial number of municipalities to be supported under this arrangement is still to be decided. It is expected that once a system to channel funds to the municipalities is well established the mechanism will be increasingly extended to include rural district councils.

There are at least four ways of channeling funds for road maintenance:

- (i) Responsibility for maintaining municipal roads could be vested in the National Directorate of Roads and Bridges (DNEP) until such time as the local authorities attained sufficient capacity to carry out the work themselves. This option would not build local capacity and would work against the stated intention to decentralize more responsibilities to local government.
- (ii) The funds could simply be transferred into the bank account of each municipality which would then be left to decide what to do with the funds. This option is unlikely to improve maintenance of municipal roads, since it would not be possible to ensure that the funds were spent on road maintenance (rather than being spent on other programs or on paying salaries).
- (iii) Each municipality could be requested to submit an annual maintenance program, funds could be transferred to the municipalities to finance the program, the outcome could be audited, and the results of the audit could be used to decide on any future allocation of funds. This is unlikely to succeed at the present time, since the municipalities do not currently have the technical capacity to prepare acceptable maintenance programs.
- (iv) The proposed National Roads Board could specify how the municipal maintenance programs are to be prepared, it could review and approve the programs prepared by (or for) the municipalities, and could disburse funds to finance the approved expenditure programs.

2. Purpose

The purpose of this study is to devise and help implement an effective, efficient and equitable mechanism for disbursing a portion of the Road Fund to selected municipalities with a view to improving the maintenance of all Mozambique's local government roads.

3. Objectives

It has been decided that option (iv) is most likely to produce satisfactory results and consultants are now being recruited to:

- (a) advise on how the available funds should be allocated between the various municipalities;
- (b) work out the detailed procedures to be used to prepare the annual road maintenance programs;
- (c) prepare an implementation program to implement the procedures in two pilot municipalities (probably Maputo and Nampula) to be decided by the National Road Board, based on recommendations submitted by the Ministry of State Administration (MAE);
- (d) monitor implementation of the program in the two pilot municipalities;
- (e) use the results of the pilot program to revise and finalize the procedures to be used by the municipalities;
- (f) organize a workshop to explain the procedures to all qualifying municipalities prior to introducing the procedures throughout the country; and
- (g) advise on the application of the methodology to support the maintenance of rural district roads.

The study will be managed by the National Directorate of Roads and Bridges (DNEP) and will be financed under ROCs II. DNEP will nominate a responsible officer to liaise with the consultant.

4. Scope of Work

The World Bank funded Local Government Reform and Engineering Project (PROL) managed by the MAE is likely to be able to provide a great deal of background information for the study. The consultant will be expected to carry out the following tasks:

For all Municipalities

- (i) Review to what extent central government is transferring funds from the consolidated budget to municipal authorities and what formula, if any, determines the level of support to each authority.
- (ii) Review the current nominal and actual role of municipal authorities in providing infrastructure services to their constituents, including their sources of revenue, expenditure patterns, methods of prioritizing expenditure between and within sectors and their accountability to the public. Advise on the scope for municipalities to share the costs of road maintenance with the road fund. Suggest ways in which cost sharing with the private

sector or community organizations might be achieved for road improvement and construction.

- (iii) Estimate the length of classified and unclassified roads under the jurisdiction of all municipal authorities. By using the actual condition of municipal roads identified in the pilot authorities, estimate the broad order of magnitude of the rehabilitation and maintenance needs for all municipal roads in Mozambique.
- (iv) Establish whether municipal authorities are currently undertaking any road maintenance. If so, identify what kind and how much is being done, by whom and what supervisory mechanisms exist.
- (v) Devise a simple formula [taking into account any existing mechanism identified in (i) above] for allocating that money set aside for local roads between the selected municipalities and the level of matching funds, and how the level of matching funds might be estimated for each municipality. The formula should endeavor to reconcile the needs of a locality with the capacity of that same locality to spend the funds effectively. Minimizing data requirements is to be a key consideration. Reference should be made to methods of allocating funds to local authorities currently in use in other SSA countries, such as South Africa and Tanzania. Recommend a mechanism for reviewing and changing this formula in the light of experience, whereby actual need rather than other more general criteria becomes the dominating factor.
- (vi) Advise on how the proposed National Roads Board should oversee the municipal authorities, consultants and contractors and what technical and financial auditing procedures should be used.

For the pilot municipalities

- (i) Collect data on the length and condition of all roads under the nominal jurisdiction of the selected local authorities, traffic use and engineering costs of routine, periodic and emergency maintenance.
- (ii) Assess the technical and professional capacities of the municipal authorities to prepare and manage the maintenance of roads for which they are responsible. Advise on whether it would be feasible and cost-effective to strengthen their capacity to prepare and manage their road maintenance programs.
- (iii) Evaluate the technical and professional capacities of existing locally based consulting firms in relation to their ability to manage municipal roads on behalf of the selected local authorities. Suggest ways in which such consultants might be strengthened to act on behalf of the selected municipalities, particularly in terms of broadening their professional skills outside the purely engineering field.
- (iv) In the light of (ii) and (iii), recommend whether the management of the road maintenance in each of the two pilot authorities should be conducted by the authority itself or by a firm of consultants
- (v) Suggest procedures for disbursing funds to finance the approved road maintenance program. Should the road fund pay contractors directly after certification by the municipality and/or consultant that the work had been completed satisfactorily, or should

funds be placed in a municipal bank account from which it can only be drawn when cheques have been signed by both the municipality and the consultant.

- (vi) Evaluate the technical and professional capacities of existing locally based contracting organizations. Contractors might be parastatals (ECMEP and CETA), or private enterprises already dealing in roads or from the building industry in general. The ability of such organizations to provide labor based works for routine and recurrent maintenance should be examined. How might the role of contractors be strengthened in terms of training or improving access to resources? Comment on the suitability of the standard contract document devised under ROCS I for use on the maintenance of municipal roads.
- (vii) Advise on the possibility of applying a similar model for the road fund to support rural district councils to effect maintenance of rural roads.

For Rural District Roads

- (i) By examining three to five rural districts as examples (location and exact number to be decided by the MAE), evaluate the scope for employing the same methodology to support rural road maintenance.
- (ii) Identify any additional constraints to ensuring that funds are used efficiently and effectively and suggest how the mechanism recommended for use in the municipalities might be adapted to overcome these additional constraints.
- (iii) Comment on the extent of unclassified network in the chosen districts and the scope for cost sharing for construction and maintenance with community based organizations.

5. *Timing and Reporting Arrangements*

The study is expected to begin as soon as possible. The duration of the pilot project is to be decided in consultation with the proposed National Roads Board and the municipalities themselves. It is thought likely that the pilot phase will last for a year as other municipalities will rightly feel aggrieved if funding is not made more widespread as soon as possible. Work on the examination of rural district roads is to begin during the monitoring of pilot municipalities phase only.

The following outputs are required :

- (i) hard copies of a draft report on the recommended procedures for disbursing and accounting for the transfer of roads user charges to the municipalities together with a detailed implementation plan for the pilot studies within 45 days after commencement of work. The report is to have an executive summary. The client will review and return the document within 14 days.
- (ii) hard copies and diskettes (MS word) of six monthly and draft final monitoring reports for the pilot municipality projects. The draft final report is to make recommendations for the incremental scaling up of the system and a proposed program for the workshop. The client will review and return the final report and workshop program only within 14 days.
- (iii) hard copy workshop programs to be disseminated to participants at least one week prior to workshop.
- (iv) Production and dissemination of minutes of the workshop to participants within one month.

- (v) hard copies of a separate draft report on the recommended procedures for disbursing and accounting for the transfer of roads user charges to rural district councils by the time of the workshop. The report is to have an executive summary. The client will review and return the document within 14 days.

6. Staff Skills and Resources Required for the Assignment

Included within the consultant's proposal is to be the number and type of personnel to be used on the study, together with their curricula vitae. The provision of the same personnel throughout the study period is to be guaranteed. If the consultant is foreign, he is strongly urged to associate with a local consulting firm for purposes of doing the work. The consultants' expertise will include local government planning, road sector reform and a thorough understanding of the institutional framework for the provision of infrastructure in Mozambique.

The objectives identified for the study in para 3 above are expected to require the following inputs:

- | | | |
|-------|------------------------|-------------------|
| (i) | objectives (a) and (b) | 8 to 10 man weeks |
| (ii) | objective (c) | 4 man week |
| (iii) | objective (d) | 4 man weeks |
| (iv) | objective (e) | 2 man week |
| (v) | objective (f) | 2 to 4 man weeks |
| (vi) | objective (g) | 2 to 4 man weeks |

7. Services to be Provided by DNEP

DNEP will provide all relevant reports and data to the consultant but the consultant will remain responsible for the interpretation of that information.

Further, DNEP will provide introductions to, and liaise with, other relevant central and local government departments to facilitate the consultant's work.

2. How to Divide Funds Between Urban and Rural District Councils (Tanzania)

Background

1. By the mid-1980s, Tanzania's severely deteriorated road network emerged as one of the most critical constraints to the sustainability of the Government's economic recovery program. In response the Government formulated a comprehensive strategy designed to rehabilitate and improve priority trunk and rural roads; strengthen their administration and management in order to maintain the rehabilitated roads in good condition; enhance road maintenance capacity in the country through promotion and use of local contractors; and improve resource mobilization and allocation in order to increase the overall size of the road budget and allocate adequate funds for road maintenance. To implement this strategy, the Government of Tanzania formulated a ten-year integrated roads program, which clearly defined physical and financial targets for rehabilitation and upgrading of roads and for Government funding of maintenance.

2. To improve resource mobilization and allocate adequate funds for rehabilitation and maintenance of trunk and regional roads, the Government created a Roads Fund, with effect from July 1, 1991, funded by fuel taxes. Subsequently, in 1992, a second, Local Government Roads Fund, was established to finance the rehabilitation and maintenance of town and district roads. In October 1993 a third fund was established specifically for roads in Dar es Salaam. As of now, of the TSh 30 per liter fuel toll, TSh 20 go to trunk and regional roads, TSh 5 to roads in Dar es Salaam, and Tsh 5 to other urban council and rural district and feeder roads. This study is concerned with the methodology for the allocation and use of the funds for the last category. It will focus in particular on the criteria for evaluating and prioritizing investments in low volume rural roads in Tanzania.

Objectives of Proposed Study

3. Agreement is to be reached during negotiations with IDA on the Second Integrated Roads Project (IRP II) that the allocation of funds from the Local Government Roads Fund to the districts will be based on needs and capacity criteria. This study will provide the information necessary to implement such an agreement. It will review how funds are presently allocated; suggest objective criteria for allocation based on need and capacity and for which reasonable data are available; examine the capacity of and training and field assistance needs for district planners and engineers to administer a new system; and develop a system of monitoring that can feed back into the allocation process in subsequent years.

Scope of the Study

4. The study will begin by reviewing the allocations that have been made so far from the Local Government Roads Fund. It will describe (with copies of relevant documents) the system for inviting requests, the criteria used for selecting among the requests, and the existing audit and control mechanisms. The study should also seek to determine the capacity of the districts to request and use funds, i.e. what staff are available, with what training; and the extent to which private contractors are already being used in rural districts.

5. In order to allocate funds appropriately, the districts need a method of ranking their roads according to criteria which reflect their priorities, as well as those of the national government. The ranking could result in district road network plans, which could then be used in determining the allocations from the Local Government Roads Fund. The study will review criteria already in use in Tanzania and evaluate their usefulness. It will also explore various other criteria that could be used and review the availability of the data their use would require. Based on these considerations, the study will recommend a set of criteria to be used for allocations under the Local Government Roads Fund (as well as for other investments).

6. In FY1992/1993 one-quarter of the Local Government Road Fund went to rural districts, and three-quarters to towns, including Dar es Salaam. The latter now has its own fund. Given the difficulty of identifying criteria that would permit the ranking of urban and rural roads on the same scale, this study should make a recommendation as to the advisability of splitting the Local Government Roads Fund into two parts, urban and rural.

7. The rest of these terms of reference refer largely to rural roads, although the same process of finding criteria for ranking roads, developing a road network, and establishing procedures should be applied to town council roads as well.

8. Criteria already developed for ranking road projects in Tanzania include those already in use for trunk and regional roads (which, however, while based on readily available data, rely heavily on traffic counts, which may not be relevant for low volume roads); the methodology presented in Annex 4-4 of the appraisal report for IRP; the method used to develop the road network plan in Makete district; and methods used by other donors active in the roads sector in Tanzania, particularly NORAD, DANIDA, FINNIDA, SDC, the Irish Bilateral Aid Program and GTZ, as well as by the ILO. Of particular interest is how they deal with the potential impact of the road on agricultural output and whether they make an effort to involve the local community in setting priorities. This study should describe how the other methods set priorities, indicate how they differ from the Economic Index already in use by MWCT ($EI = [ADT * \text{expected change in roughness}]/\text{cost}$) for determining regional road rehabilitation and upgrading priorities, and comment on whether they are simple and robust enough to be used at the district level.

9. The study will also review, on a selective basis, methods used successfully in other parts of the world (e.g., in Colombia, Philippines and Indonesia) and examine how they deal with the impact of the roads on agricultural productivity, as well as ways in which they attempt to involve local communities in setting priorities.

10. An overriding consideration in choosing criteria is to keep them simple, in terms of both data requirements and ease of understanding their meaning. Different criteria will be needed for urban and rural roads. Criteria to be considered could include the following:

(i) Extent of the road network:

- ◆ No. of km of district roads.
- ◆ No. of km of district roads per square km (road density).
- ◆ Links to the rest of the road network.

(ii) Accessibility constraints:

- ◆ No. of structures (culverts, bridges) at bottleneck points.
- ◆ Condition of roads (e.g. no. of months during which road is passable).

(iii) Measures of use:

- ◆ Vehicle km (trucks, cars)
- ◆ Marketable agricultural output and potential output.
- ◆ Area of cultivated land.

- (iv) Engineering costs of rehabilitation.
- (v) Socio-economic factors:
 - ◆ Population.
 - ◆ Population density.
 - ◆ Importance of road for links to education, health and administrative services.
- (vi) Capacity of districts:
 - ◆ to raise revenue for possible cost sharing, as an incentive for self reliance (what are sources and collection rates?).
 - ◆ to apply for, use and account for funds.
 - ◆ to undertake maintenance by contract (number of firms available to bid).
 - ◆ to provide appropriately priced labor for labor intensive maintenance.

The study will recommend a feasible set of criteria and a point system or formula for weighting them, in consultation with PMO and MWCT.

11. The study should also investigate ways in which local communities could be involved in the setting of rural road priorities. This involvement could take the form of locally established priorities, as an index, or as one of several considerations set out in the form of a multi-criteria impact table.

12. Next the study will suggest detailed procedures to be used in allocating the Local Government Roads Fund, including the preparation of road network inventories, call for proposals, the review process, the allocation process (based on the criteria selected, as well as the quality of the proposals), and the monitoring and audit process (including the role of the Regional Roads Boards). Samples should be prepared of any new forms or tables to be required. The study should also identify any legislation which must be passed or other actions that would be needed to implement its recommendations.

13. The study should specify the training needs in order for the recommended program to be carried out in the field. It should also estimate the need for support in the field once the system is implemented.

14. The study should also make a recommendation on whether a fixed amount of the Local Government Roads Fund allocations should be used to carry out the initial road network inventory once the districts have the capacity to undertake this work.

Conduct and Timing of the Study

15. The consultant should seek advice from people knowledgeable about the condition and financing of Tanzania's transport sector, as suggested by the Prime Minister's office and Ministry of Works, Communications, and Transport. He or she should also visit some representative districts in order to obtain the views of local government councils, citizens' groups and district engineers and planners. Contact should also be made with regional engineers and planners. The recommended methodology should be discussed with the PMO and the MWCT, as well as with a selection of regional and district engineers to confirm that it is feasible in the framework of existing data availability and staffing constraints. The findings of the study should be presented in detail and summarized in a short report with an executive summary.

16. An interim report, listing the main recommendations, should be ready by mid-December, 1993. The final draft report with diskette (WP5.1) should be submitted by January 14, 1994.

17. Once approved, the recommended methodology will be prepared by MWCT (in conjunction with PMO) in the form of “guidelines” or “directives” to be used for soliciting funds.

Qualifications of Consultant

18. The consultant selected to carry out this study should have a background in transport economics, with an understanding of finance and engineering issues as relevant to the management of the Local Government Roads Fund and the measurement of road conditions. The consultant should be familiar with the local government system in Tanzania and with the duties and responsibilities of the various actors involved.

VI. IMPROVING ADMINISTRATION OF THE ROAD TARIFF TO INCREASE REVENUES

1. Working Out Arrangements for Paying Vehicle License and International Transit Fees into the Road Fund (Tanzania)

[There is only one TOR in this section.]

Introduction

The Parliamentary Resolution which established the Road Fund , stated that the revenues of the Fund should include “various levies and duties from motor vehicles such as licenses, registration and transferring of vehicles, ...” None of these charges are currently being paid into the Fund and the sole source of Road Fund revenue remains the road toll which is administered as a surcharge added to the price of diesel and gasoline. Following consultations with the Ministry of Finance, it has now been agreed that a supplementary heavy vehicle license fee and international transit fees should in future be paid into the Fund. The purpose of the present consulting assignment is therefore to: (i) propose an appropriate fee structure for the heavy vehicle license fees, based on GVW or axle-weight; (ii) work out the administrative arrangements which need to be put in place to enable the heavy vehicle license fee and international transit fees to be paid into the Road Fund account; and (iii) suggest ways in which collection of the fees might be improves to reduce evasion, avoidance and leakage.

Scope of Work

The consultant is expected to carry out the following tasks:

- (ii) Review existing arrangements for collecting both license fees and international transit fees and transferring the proceeds into the MOF Bank account in Dar es Salaam.
- (iii) Propose an appropriate structure for the heavy vehicle license fees which would only be paid by trucks with GVWs over 3.0 tons.
- (iv) Evasion and avoidance of license fee payments is known to be high. The consultant should therefore propose ways of administering the new fees. To improve revenue administration, the consultant should also consider ways of strengthening the existing collection system, having the fees collected on a contractual basis, or taking other steps to minimize evasion and avoidance.
- (v) Propose how the proceeds from the heavy vehicle license fees should be transferred to the MOF account in Dar es Salaam and from there to the Road Fund account.
- (vi) Review the fees collected from international vehicles entering Tanzania and comment on: (a) their consistency with the harmonized fee structure laid down by PTA/SATCC; and (b) whether there is scope for reducing/simplifying the number of fees payable in the context of the PTA/SATCC agreements.
- (vii) It is also known that the revenue collected from international transit fees is well below the levels suggested by current traffic levels. The consultant should therefore attempt to identify the main reasons for loss of revenue and should examine the effectiveness of arrangements used in Zambia, Zimbabwe, Malawi and other countries to improve revenue

collection (until 1992 Zambia used BP to collect these fees, the Confederation of Industries collects them in Zimbabwe and the Chamber of Commerce does so in Malawi).

- (viii) Based on (vi) above, bearing in mind the proposals put forward by the recent PTA/SATCC study group on international transit fees, recommend practical arrangements for collecting international transit fees and transferring the proceeds to the MOF account in Dar es Salaam and from there into the Road Fund account.

Work Methods

The study will be carried out by a team of three persons. There will be a lead consultant who will be an individual consultant recruited in Tanzania. The lead consultant would be responsible for preparing the final report for presentation to government. The other two members of the team would include one person seconded from the Revenue Division of MOF and another supplied by Fedhaul in Zambia and conversant with transit fee arrangements throughout the PTA region. The lead consultant would be responsible for preparing the detailed work program.

The study is expected to take two months and could start within four weeks. The study would be financed by the RMI program which would also be responsible for supervising the work of the consultants.

VII. STUDIES OF ROAD USER CHARGES

1. Standard Format for a Study of Road User Charges

Background

Background on country and sector issues requiring a study on road use charges (RUCs).

Study Objectives

Road user charges are no more than a means to achieve various ends. They are not intended only to promote economic efficiency. They are used to mobilize fiscal revenues, control pavement damage, ease congestion, conserve energy, and equalize competition with the railways. Part of the purpose of this study is to clarify these competing and conflicting objectives, identify the trade-offs to be made among them, and establish the various weights each concerned ministry attaches to them.

More specifically, the objectives of the study are to ensure that: (i) the fees and taxes paid by road users are clearly separated from the road use charges they pay for use of the road network; (ii) all service fees are appropriate, well structured, effectively administered, and cover the costs of providing these services (e.g., driver license fees, vehicle inspection fees, registration fees, etc.); (iii) all taxes paid by road users are consistent with the taxes paid on comparable consumables and equipment, are well structured, and are effectively administered to minimize avoidance and evasion; (iv) the taxes on fuel reflect the government's objectives regarding fuel conservation, vehicle emissions, etc. and also promote economic efficiency; (v) RUCs are set so that each class of vehicle covers the costs it imposes on the road network; and (vi) all vehicles collectively generate sufficient revenue to finance the overall road program, taking into account the levels of government (national, regional, or municipal) at which revenues accrue and expenditures are incurred.

Scope of Work

The consultant will be expected to carry out the following tasks:

- (i) Review all the fees, taxes and charges paid by road users and, in consultation with the Ministry of Finance, separate them into service fees, general taxes, and RUCs (import duties, sales taxes and excise taxes rarely include any elements representing RUCs; fuel taxes may include an additional RUC element but, if so, it can usually be identified by looking at the way the tax structure has been built up, by comparing it with the taxes on comparable items – e.g., heating oil – and by discussing it with the MOF officials who set the tax rates). In case fuel taxes include an RUC element, identify whether this is also paid by non-road users. Service fees generally cover services which establish title to property (to facilitate law enforcement), check vehicles for mechanical soundness (to promote road safety), and ensure drivers are competent (also to promote road safety).
- (ii) Examine the nature and structure of the service fees, and the costs of providing the services they cover. Advise on whether any fees are redundant or unenforceable (e.g., vehicle transfer fees), whether the structure could be improved to minimize avoidance and evasion, their administration could be strengthened (e.g., by contracting services out to the private sector), and they cover the costs of the services provided. Recommend appropriate changes.

- (iii) Review all taxes paid by road users and compare them with the taxes paid on similar consumables and equipment. Recommend changes to bring them into line with other tax rates and suggest what steps might be taken to simplify the tax structure and strengthen administration of transport taxes to minimize avoidance and evasion (to enhance the government's general tax revenues and reduce inter-modal distortions).
- (iv) Review the taxes imposed on transport fuels and identify the objectives underlying these tax rates. In particular, examine whether they reflect any energy conservation objectives, environmental objectives, trade and industrial policy objectives, or income distribution objectives, particularly with regard to the taxation of kerosene (which can be substituted for diesel). Also examine whether any attempt has been made to impose an optimal tax, based on the low price elasticity of demand for transport fuels. Recommend appropriate changes that would enable fuel taxes to better reflect the government's objectives and that would also contribute towards an optimal tax structure. Also recommend relative price levels that would minimize substitution between different transport fuels (particularly kerosene and diesel) or, in case wide differentials are unavoidable, recommend what other administrative steps might be taken to minimize substitution between different transport fuels.
- (v) Examine the structure of existing RUCs for each main vehicle class and compare the annual payments by each vehicle class with the estimated costs each class imposes on the road network. Also examine how well the RUCs are administered. Recommend changes in the number and structure of the RUCs, and the way they are administered, to ensure that evasion and avoidance are minimized and each vehicle class covers the avoidable costs it imposes on the road network. The resulting RUCs should be simple, readily recognizable by road users, and easy to administer (they will usually consist of an element added to the price of fuel – a fuel levy, vehicle license fees – and/or heavy vehicle license fees, international transit fees, ferry and bridge tolls, and fines for overloading). Advise on whether any should be collected under contract.
- (vi) In congested urban areas, examine the feasibility of imposing some form of urban congestion charge to be added to the regular RUCs. These recommendations should be formulated in consultation with the concerned municipalities and should focus on charging systems which are acceptable, can be administered by the municipalities, and are easily enforceable.
- (vii) Review the financing plan for the overall road network and, based on planned expenditures and proposed cost-sharing arrangements with local governments, recommend a level of RUCs which would generate sufficient revenues to fully-finance the overall expenditure plan. These recommendations should bear in mind that the final expenditure plan must be affordable and that some programs may have to be scaled back (or cost-sharing arrangements revised) to produce an acceptable level of RUCs.
- (viii) Compare the final price of fuel with prices in neighboring countries and, if large price differentials would result, propose an upper level for such prices to avoid fuel smuggling, or recommend what actions might be taken to minimize fuel smuggling if the price differentials are retained. Also consider the feasibility of replacing the diesel levy with a graduated weight-distance charge administered through sealed hub-odometers.
- (ix) In the absence of weight-distance charges, examine what steps might be taken to ensure that a high diesel levy does not adversely affect non-transport users of diesel. Among other things, the options examined should include coloring non-transport diesel (as in UK),

exempting large users (e.g., power generation), and returning some of the diesel levy to the government's agriculture budget (as in Mozambique).

Staffing

I would suggest a team of about 3 consultants (depending on the size and complexity of the country) covering transport planning, transport economics, and financial/fiscal analysis.

Reporting Arrangements and Time Schedule

It should also be included.