Support Materials

Day-to-Day Management of an Independent Road Fund Administration

Contents

SETTING UP AN OVERSIGHT BOARD

Source: Based on the World Bank's Road Financing and Road Funds Knowledge Base at http://www.worldbank.org/transport. The advice set down in this note is based on a synthesis of experience gained from working with a wide variety of boards which were set up to oversee management of an independent road fund administration.

Introduction

The oversight arrangements are probably *the* most important elements associated with setting up an independent road fund administration. A strong oversight board can overcome many other impediments – including weak legislation, ministerial interference, etc. – while a weak board can fail in spite of having all the other required features. The oversight board performs three main functions: (i) it raises public awareness of the need for more revenues to support the annual road program (i.e., it has an important PR function); (ii) it helps to build public confidence in management of the road fund (i.e., it helps to ensure that funds are spent on roads and do not simply end up in an off-shore bank account); and (iii) it promotes effective management of the funds raised (i.e., it helps to ensure that the funds raised produce value-for-money).

The oversight board can either advise the minister on management of the road fund, or can manage the road fund in an executive capacity (see Box below for an explanation of the difference between advisory and executive roads boards). Although it is better to have an executive board, advisory boards have their place and can be highly effective – particularly on an interim basis – provided they have the right membership. Zambia has an unusual arrangement where an Advisory Board has been delegated responsibility for managing the road fund in a non-executive capacity. It is primarily the broad-based and representative composition of these boards that makes them work.

Difference Between Advisory, Non-Executive and Executive Roads Boards

Advisory boards generally advise the Minister on various matters pertaining to management [and financing] of roads. The board thus directs its advice to the Minister who is not obliged to accept it. However, boards with influential members can have considerable influence and Ministers are often reluctant to ignore the advice offered by the board for fear of repercussions from the organizations represented on the board. The Japan Road Council is reasonably influential and, on occasions, has had an important impact on policy (e.g., when it "saved" the road fund from being closed by the Ministry of Finance during the 1980s). The English Highways Agency Advisory Board, which is covered by the Official Secrets Act, does not appear to be particularly effective, since it does not provide the public with much information about what it does. The Zambia National Roads Board has been surprisingly effective within a very difficult country context.

Non-executive boards are made up of part-time members, including a chairman. They are the typical boards of directors that manage most commercial companies. The board usually appoints the Chief Executive (CEO), sets policy and oversees its implementation. Day-to-day management is delegated to the CEO who is generally not a member of the board.

Executive boards consist of full-time staff. They normally consist of the heads of major departments and are chaired by the CEO. The Highways Agency in England has both an advisory board and an executive board.

Membership of the Board

Oversight boards are typically made up of 9 to 12 members (see Table 1 below). Larger boards tend to become unmanageable, while smaller boards are unlikely to include all the interested parties who need to be represented on the board. The road fund can also be managed by a committee of a larger road management board (as was originally the case in Malawi and South Africa). The board should be able to appoint committees to help with its work, and the committees should be able to include people who are not members of the main board. Typically, committees are chaired by a member of the main board and may also include other members of the board. The main board should be able to invite outsiders to attend board meetings and to advise on special topics, but the outsiders should have no vote.

The board should include all the key constituencies with a strong vested interest in well-managed and well-financed roads. Some will come from central government, some from local government and the rest from the business community and civil society. The central government members normally include representatives from the ministries of transport, finance, and local government, and may include representatives from the ministries of works and agriculture. Local government should be directly represented on the board (i.e., they should not only be represented through the central government ministry of local government). There may need to be separate members representing large (metropolitan) and small (municipal) governments. Non-governmental members normally include representatives from the chamber of commerce, road transport industry, farmers (sometimes both commercial farmers and small-holders) and the professions (e.g., Institute of Engineers). Ideally, half or more of the members should be non-government, or from local government. The Director of Roads should *not* be an *ex officio* member of the board, but should attend board meetings (this avoids any conflict of interest, since the board may sometimes wish to criticize the Director). It is also advisable to provide for one or two *ad hoc* appointments to deal with any unexpected interest groups not otherwise represented on the board (i.e., members to represent the “public interest”). Board members should be paid sitting allowances to ensure that they spend enough time and effort on the work of the board.

Table 1: Characteristics of Selected Road Fund Boards

Country	Formed	Type	Members Total	Members Non govt	Chair	Notes
Benin	1996	Non-exec	9	5	Ex Officio	Minister ex officio chair 5 designated non govt members
Ghana	1997	Non-exec	13	8	Ex Officio	Minister ex officio chair 6 designated non govt members, plus 2 nominated by Minister from outside the Ministry
Ethiopia	1997	Non-exec	15	4	Ex Officio	Minister ex officio chair 4 designated non govt members, plus 6 members representing regions & municipalities
Guatemala	1997	Non-exec	6	3	Ex Officio	Minister ex officio chair 3 designated non govt members
Honduras	1993	Non-exec	7	3	Ex Officio	Minister ex officio chair 3 designated non govt members, plus 1 represents local govt
Kenya	1999	Non-exec	13	7	Appointed	Chairman appointed by President from non govt members 7 designated non govt members – each organisation submits 3 names and Minister chooses one
Laos	2001	Non-exec	7	4	Elected	Chair elected by board. 4 designated non govt members nominated by own organisation
Latvia	1994	Advisory	12	5	Ex Officio	Minister is ex officio chair since Board advises him/her 5 designated non govt members, plus 2 represent local govt
Namibia	1999	Non-exec	5 max	All	Appointed	Chairman appointed by Ministers of Finance and Transport from existing Board members Board not less than 3, nor more than 5 selected by both Ministers from amongst persons with relevant expertise
Nepal	2002	Non-exec	13	6	Ex Officio	Minister ex officio chair 4 designated non govt members, including one each representing Villages and Municipalities, plus 4 other non govt members nominated by the Board
New Zealand	1996	Non-exec	5	2	Appointed	Minister appoints chair from existing Board members 2 non govt nominated by Minister after consultation with land transport industry
Rwanda	1998	Non-exec	9	4	Elected	4 non govt members from designated organisations proposed by Minister
Tanzania	1998	Non-exec	9	5	Appointed	Chair appointed by President from outside civil service Minister calls for nominations from 6 designated sectors and picks 4 Board is also Advisory board for road authority
Zambia	1994	Non-exec	11	7	Elected	Chair elected by board. 7 designated non govt members; only non govt members can vote.

How to Nominate Board Members

Members should be nominated by the organizations they represent, rather than being selected by government officials or the responsible minister, and should be formally appointed by the minister, president, or cabinet. Government departments are usually represented by the Permanent Secretary, or someone deputed by the PS, and it is advisable to specify that the person nominated should not be below the level of Director (or equivalent). The names of board members should ideally be published in the government gazette. Appointment should be for a period not exceeding three to four years, and members should generally be eligible for re-appointment for at least one more term. It is wise to stagger retirements to ensure that the entire board does not turn over completely every 3-4 years.

Choosing the Chairperson

There should be an independent chairperson. The procedure in Laos, Rwanda and Zambia, where the board elects its own chairperson, is unusual, although it appears to work well and strengthens the position of the chairperson. Normally, the minister either appoints one of the existing members of the board as chairperson (as in Kenya, Namibia and New Zealand), or appoints an outsider after consultation with the board. In Tanzania, the President appoints someone from outside the civil service. It is unwise to have the Director of Roads as *ex officio* chairperson of the board. It compromises the independence of the board and makes it look like a pressure group, rather than an independent board working in the national interest. It is also unwise to have the Minister as chairperson. It tends to stifle open discussion and makes it difficult to win public support. It is better to have the Minister nominally in the chair, but then to have him/her nominate someone else to act as chairperson in their place (this was done in South Africa — in their case, it was the Director General of Transport who was *ex officio* chairman). The vice chairperson is often elected by the board

Need for a Secretariat

It is extremely difficult for an oversight board to function effectively without a dedicated (and independent) Secretariat. When it is assisted by staff from the national road agency, who report to the Director of Roads, the Secretariat cannot independently deal with conflicts between the interests of the national road agency and local governments. This is one of the main reasons why the New Zealand road fund, which used to be managed by staff from Transit New Zealand, was separated from TNZ in 1996 and is now managed by an independent road fund administration (Transfund). The preferred solution is thus to have the road fund managed by a separate road fund administration with its own dedicated staff. The road fund administration – or its Secretariat -- generally consists of a Chief Executive, who is appointed by the board, together with a limited number of staff appointed by the Chief Executive. The Chief Executive should attend board meetings, but should not be a member of the board.

Terms of Reference for the Board

The board should have a clear (published) terms of reference spelling out its role concerning: (i) winning public support for more road spending (this is generally written into the regulations, rather than the basic legislation); (ii) which expenditures the road fund can finance; (iii) how it is expected to manage the road fund; (iv) its relationship with the minister; and (v) the basis on which the minister can issue directives to the board. The main functions of the board are generally spelled out in the legislation establishing the road fund administration and more detailed functions are then published in the accompanying regulations. As a minimum, the terms of reference should spell out the board's role in relation to:

(i) Winning Public Support for More Road Spending.
To be effective, the board needs to carry out some public relations. Individual members of the board play their part (by reporting back to their nominating organizations via newsletters, association meetings, etc.), but this usually needs to be supplemented by a formal outreach program. The board has to show the public what it is doing, assure them that they are getting value-for-money from road spending, persuade them to willingly pay for use of the road network, and to periodically increase the amount they pay (which requires feedback from road users on how much they are willing to pay).

(ii) Which Expenditures the Road Fund Can Finance.
This should clearly spell out what the road fund can and cannot finance.

(iii) How the Board is Expected to Manage the Road Fund.
This should include how funds are to be collected, how road user charges are to be revised from time to time, how work programs are to be prepared, how funds are disbursed, and the sort of auditing and reporting arrangements to be used.

(iv) The Relation Between the Board and the Minister.
This needs to spell out the procedures under which the board prepares its rolling Business Plan and annual performance plan (or equivalent) which becomes the basis for the annual work plan agreement between the board and the Minister.

(v) The Basis for Issuing Ministerial Directives.
To the extent possible, this should spell out the circumstances under which the Minister can, and cannot, over rule the board and issue directives that they are required to follow.

Example of Summary Terms of Reference in Legislation

Example 1: Namibia Road Fund Administration (1999 Act)

Subject to this Act, the functions of the Administration are -

(a) to manage the Fund;

(b) to impose road user charges, to determine the rates of those charges and to collect those charges;

(c) to determine the amount of the funding to be made available through the road user charging system;

(d) to determine the manner in which the funding referred to in paragraph (c) shall be allocated;

(e) to implement appropriate measures for the effective monitoring of compliance -

    (i) by the Roads Authority, with the provisions of a procedures agreement contemplated in the relevant section of the Roads Authority Act; and

    (ii) by an approved authority, with the conditions on which funding has been provided to it under this Act;

(f) to make recommendations to the Minister regarding the application of this Act, amendments to it and the making of regulations;

(g) to advise and assist, on such conditions as may be agreed upon, the Minister, the Minister responsible for Transport, the Roads Authority or any approved authority in regard to -

    (i) the financial aspects of the planning, design, construction, maintenance and safe and efficient use of roads; or

(ii) the exercise of any power or the performance of any duty which the Minister, the Roads Authority or approved authority may or is required to exercise or perform under this Act or any other law; and

(h) if so requested by any donor, to administer on behalf of such donor, and on such conditions as may be agreed upon, any funds granted or donated by the donor in respect of any project or programme to be undertaken by the Roads Authority or an approved authority.

Example 2: Ghana Road Fund (1997 Act)

The Fund shall be managed and administered by the Board.

For the purposes of this section the Board shall -

(a) arrange for the collection of monies assigned to the Fund;

(b) identify other sources of funding;

(c) co-ordinate and ensure total and timely accountability of the Fund;

(d) recommend to the Cabinet after consultation with the Minister of Finance the level of the road levy and other road user charges that shall be paid into the Fund;

(e) improve arrangements for the collection of road user charges by the Minister or agents assigned for the purpose;

(f) prepare and publish procedures for the disbursement of the Fund;

(g) determine the certification necessary to ensure that work is completed according to specification; and

(h) review the annual expenditure programmes of the road implementing department and bodies;

(i) determine how much of the financing of the expenditure programmes of the road agencies should come from the Fund, taking into consideration any cost-sharing formula there may be; and

(j) perform such other functions as may be incidental to its functions under this Act.

Example 3: New Zealand National Roads Fund (1996 Act)

The principal task of the board is to allocate resources to maintain a safe and efficient roading system. The detailed functions of the board include:

(i) Approve and purchase a national roading program that prioritizes funding consistently on the basis of expected national benefits for a given cost.

(ii) Pursue efficiency in delivering roading and alternatives to roading through contestability and through promoting enhanced administrative and technical systems and processes.

(iii) Establish contracts with road-controlling authorities and regional councils for the delivery of their respective programs.

(iv) Audit all road-controlling authorities and regional councils on a timely basis to provide assurance as to the efficient and effective use of resources.

(v) Establish the process for evaluating and funding efficient alternatives to the provision or maintenance of roading.

COLLECTING THE ROAD TARIFF UNDER CONTRACT

Source: Based on the World Bank's Road Financing and Road Funds Knowledge Base at http://www.worldbank.org/transport. This document describes a limited number of examples where countries either already collect the road fund revenues under contract, or where they have put forward a well thought out proposal for doing so.

Introduction

Road user charges are generally collected under the government's tax-making powers and they typically suffer from relatively high levels of *avoidance* (i.e., using legal loopholes to avoid payment), *evasion* (i.e., illegally failing to pay), or *leakage* (i.e., the taxes are collected, but "disappear" before reaching the Ministry of Finance). There are various reasons for this. They include unduly complicated tax structures, weak tax administration and lax enforcement (i.e., lack of incentives to collect all the revenues owed). Strategies to improve revenue collection include:

Rate levels. Keep rate levels as low as possible to reduce incentives for evasion/avoidance, corruption and under-declaration.

Base Broadening. Broaden the tax base by limiting exemptions, reducing rate variations, and avoiding large differences in tax rates on similar items.

Simplification. Simplify the tax structure to reduce administrative costs, simplify tax administration, minimize ambiguities and reduce the costs of compliance.

Enforcement and Penalties. Increase the probability of detection by improving record-keeping, monitoring compliance, reducing negotiated payments, and speeding up and enforcing the penalty system.

Contracting out. Collect the taxes and charges under contract to improve tax administration.

This note focuses on the option of contracting out the collection of some, or all, road user taxes and charges.

Contracting Out

It is desirable to collect all road user taxes and charges under some form of contract, even when they are collected by a government agency. The contract document does not need to be unduly complicated and might vary from a simple Aide Memoir, through an exchange of letters, to a fully-fledged contract. The minimum requirement is that it should be in writing. Beyond that it should specify: (i) the procedures for collecting the revenues and depositing them into the government or road fund account; (ii) the expected time lag between collection and deposit; (iii) the minimum data to be provided to the road agency, or road fund, so that they can check that all funds have been collected and deposited into the correct accounts. All such agreements should provide for payment of an appropriate fee for collecting the road user charges.

Examples of Road User Charges Collected Under Contract

Example of New Zealand

In New Zealand, all road user charges are collected under contractual agreements as follows:

(i) The fuel excise is collected under contract by the New Zealand Customs which charges a fee equivalent to 0.02 percent of revenues. Evasion is negligible, since funds are collected at source at New Zealand's only refinery, or at ports of entry.

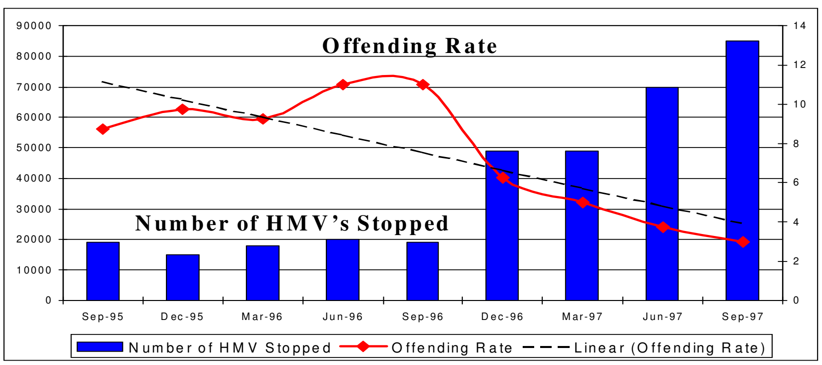
(ii) The sale of weight-distance charges is managed by a unit within the Land Transport Safety Authority (LTSA) under a contract with the Ministry of Transport. The fee amounts to just over

4.5 percent of revenues – about two-thirds is spent on collection and the balance on enforcement. The certificates are sold through the NZ Post, BP petrol stations, Vehicle Testing NZ, NZ Automobile Association and AMI Insurance. Operators can also buy licenses through remote terminals. Evasion causes the loss of about 12 percent of revenues (9.4 percent from heavy vehicles and 2.8 percent from light vehicles) and legal avoidance for about 7 percent of revenues. In recent years, attempts have been made to reduce the extent of evasion by stepping up enforcement efforts. The following graph shows how increased spending on enforcement has reduced the offending rate.

(iii) The collection of motor vehicle registration fees is also managed under contract by the LTSA on a similar basis at a cost of about 16 percent of revenues. Registration certificates are sold through the same types of agency as the weight-distance charges. Extent of evasion is unknown.

Increased Road User Charges Enforcement and Reduced Offending

Thousands Percent



Source: New Zealand MOT Report, December 97

Example from Yemen

This is a fairly old example, but it nevertheless illustrates the way in which a simple Memorandum of Understanding – instead of a formal contract -- can be used to capture the way the fuel levy is supposed to be collected and deposited into the Road Fund's bank account. The original example has been translated from the Arabic. The memorandum is not particularly well drafted, but appeared to work reasonably well in practice. On the 20th of each month, the National Petroleum Company has to send the road fund a statement showing deliveries of gasoline and diesel oil to all its distribution depots, the fuel levy is applied to these figures, and a cheque for the total amount is then supposed to be sent to the road fund bank account.

YEMEN PETROLEUM COMPANY

HEAD OFFICE
SANA'A

MINUTES OF THE MEETING

On Wednesday 5-15-1996, a meeting between the representatives of the Yemeni Petroleum Company (YPC) and the Directors of the Road Maintenance Fund met at the YPC Headquarters.
The YPC Team was composed of:

1.	ANOther	Financial Director
2.	ANOther	Deputy Finance Director
3.	ANother	Head of the Government Accounting Office
4.	ANOther	Head of General Accounting Office

The representatives of the Road Maintenance Fund were:

1.	ANOther	Director of the Road Fund Board

2. ANOther General Manager of the Road Fund

The two Parties agreed to:
1. A request was made for the statements of fuel sold from 16-1 to 30-4-1996. Once these statements have been received, the funds payable to the road fund will be disbursed. Thereafter, transfer of the funds due to the road fund will be made on the 20th of the following month, starting in June.
2. Payments for the period mentioned in (1), cover the period up to the end of May 1996.
3. The administrative expenses incurred by YPC, will be settled following the same procedures used for the Agriculture Promotion Fund, and will be deducted before transferring the funds to the Road Maintenance Fund Central Bank Account No. ????.

The memorandum is signed by the members of the two teams.

Example from Mozambique

This example has been translated from the Portuguese and relates to the contractual arrangements used to collect international transit certificates, before the road agency and road fund were restructured.. The initial contractual arrangement used by the road fund did not work well, because the contractor continued to sell some of the transit certificates at the border and this led to significant evasion and leakage. To avoid evasion and leakage, it is important to ensure that certificates have to be purchased in advance so that no money changes hands at remote border sites where governance is weak and supervision almost non-existent. A sample of the bank-note quality transit certificates is attached at the end of this contract.

Fund for Maintenance of Roads and Bridges

Contract No. 02/FUN/95

This contract for rendering of services has been made and signed between the Fund for Maintenance of Roads and Bridges (FMEP), the “client,” represented by its president and the National Agency for Navigation and Freight (AFRENA), and the “contractor” represented by its Director General.

1. Object of the Contract

It is intended with this contract that the contractor be responsible for the procedure of sale of coupons for payment of international transit fees to the foreign transporters that use the Mozambican roads, and such procedure is hereby named “services.”.

2. Obligations of the Client

2.1 To supply regularly to the contractor the coupons to be sold in agreed upon quantities;
2.2 Indicate the routes used by the transporters for which the contractor will sell the coupons;
2.3 Control, using its own means or third parties, the effectiveness of the sale and all other factors associated with the charging of foreign vehicles;
2.4 Pay to the contractor 3 percent of the total revenues resulting from the sale of coupons and duly deposited in the account of the client, within 45 days of reporting the sale of coupons by the contractor;

3. Obligations of the Contractor

3.1 Sell the coupons to the foreign transporters that use the Mozambican roads, on the routes previously established by the client and listed in an Annex to this contract;
3.2 Fulfill all its contractual obligations in the rendering of these services and guarantee efficiency through the adoption of techniques and equipment acceptable to the client. The contractor should , in light of this contract, act as a counselor to the client and safeguard the rightful interest of the client in its relationship with third parties;
3.3 Deposit daily into the Local Accounts of the FMEP, to be opened by the contractor in name of the client, the revenues of the day. These local accounts should be opened with the condition that the deposits can only be transferred to the Central Account of the FMEP;
3.4 Fill daily the “daily map” (returns) corresponding to the sold coupons (bilhetes);

3.5 Present monthly a status of the executed work, including the monthly summary, the daily maps, and the bordereaux (slips) and the deposits in the local accounts;

3.6 The situation of the work will only be paid if it includes the documents listed in the previous item.

4. Duration of the Contract

4. This contract will have a duration of one year, counted from the date of signature, and will be automatically renewed if the partners do not express the wish to terminate it.

5. Infractions by the Client to the Contractor

5.1 If the contractor does not achieve the objectives of this document, the client will orally call this to its attention. If, in the opinion of the client, the contractor does not adequately respond, it will be advised in writing;

5.2 Finally, if the response to the above is not adequate, the client has the right to send a letter terminating the contract. The termination of the contract will be in effect one month after the reception of the letter.

6. Termination of the Contract

6.1 The contract can be terminated in the event of force majeure, and in this case the interested party shall send in writing to the other part, 30 days prior to the knowledge of the intention to terminate the contract. (very confusing in the original).

6.2 It is considered force majeure:

- (a) If the contractor do not rectify the errors, detected and notified according to clause 5, in 30 days;
- (b) Insolvency, bankruptcy or liquidation of the contractor;
- (c) The default by one of the parties on any of the clauses of this contract;
- (d) Political or social changes that results in changes in the strategy of the Government in relation to the international transit fees;
- (e) If the client is in default on the payment of the work situation presented by the contractor, in the period stated in clause 2 of this contract;

6.3 Any of the parties can terminate the contract by its own initiative, outside the clauses 4, 6.1 and 6.2 (force majeur), if it advises the other part by giving not less than 60 days notice.

7. Payment after the Termination

7. After the termination of the contract by clause 6, the client shall proceed to pay all bills due to the contractor, after all the deposits of the receipts has been done, and after the process of the accounts (or counting) of the coupons and after the unsold coupons are returned to the client, according to clauses 2 and 3.

8. Coupons

8.1 The client will supply the coupons to be sold by the contractor. The contractor shall, in no less than 30 days, request in writing for more supplies, and the client shall supply them in not more than 30 days of the date of its reception;

8.2 Such coupons will be the basis of the calculation of the revenues. For this purpose the contractor shall prepare a monthly accounting of the sale of coupons, as stated in clause 3. This accounting will be subject to annual auditing by the client;

8.3 The contractor is responsible for the conservation and safety of the coupons once they are delivered by the client, and it shall have a safe place to keep the coupons. In case coupons are lost or wrongfully damaged, the client has the right to be indemnified by the contractor.

9. Inspections and Auditing

9.1 The client has the right to inspect all the procedures of sale of coupons. The contractor shall organize a filing system for the documents, namely:

- Copies of deposits slips
- Balances of the accounts of the Fund
- Copies of the daily maps of sale of coupons and the monthly summary
- Copies of the correspondence with the client

9.2 The sale of coupons is subject to the annual auditing of FMEP by an independent auditor.

10. Disputes and Conflicts

10. The disputes and conflicts and other situations that may hurt the relationship of the parties will be resolved in a friendly manner between them, and the recourse to the judicial instance will only be made in case of disagreement.

11. Effectiveness

11. The contract is effective 15 days after the signature by both parties.

[An attachment to the contract shows transit fees payable on different routes]

Bank Note Quality Certificates Used for Transit Fees

REPÚBLICA DE MOÇAMBIQUE
MINISTÉRIO DA CONSTRUÇÃO E ÁGUAS
FUNDO para MANUTENÇÃO de ESTRADAS e PONTES

CUPÃO A

TAXA RODOVIÁRIA
ROAD FEE

75 US$
SETENTA E CINCO DÓLARES AMERICANOS

CUPÃO A No 00035010

☐ BEIRA - MACHIPANDA
☐ MACHIPANDA - BEIRA
• VÁLIDO SÓ PARA UM DOS TRAJECTOS (MARCAR)

☐ ZÓBUÈ - CUCHAMANO
☒ CUCHAMANO - ZÓBUÈ
• VALID ONLY FOR ONE OF THE TRIPS (MARK)

VIATURA:
MATRÍCULA / PLATE No: TXR 768 T
PAÍS DE REGISTO / COUNTRY OF REGISTRATION: R.S.A.
MARCA/MODELO / MAKE/MODEL: INTER.

ATRELADO:
MATRÍCULA / PLATE No: GMT 832 T
PROPRIETÁRIO / OWNER OF VEHICLE: WESTERN ROSE

CARIMBO DA ENTRADA / ENTRY STAMP
ORIGINAL PARA ALFÂNDEGA À ENTRADA
ORIGINAL FOR CUSTOMS AT ENTRY POST

CARIMBO DO POSTO DO CONTROLO
CÓPIA BRANCA PARA POSTO DO CONTROLO
WHITE COPY FOR CONTROL POST

CARIMBO DA SAÍDA / EXIT STAMP
CÓPIA VERMELHA PARA ALFÂNDEGA À SAÍDA
RED COPY FOR CUSTOMS AT EXIT POST

CÓPIA AZUL PARA TRANSPORTADOR / BLUE COPY FOR TRANSPORTER

Example from Zambia

This example is based on a proposal put forward by the National Roads Board in Zambia. It was not implemented, but represents a well-worked out way of collecting international transit fees. Since these are usually paid in foreign exchange, or at least in a convertible currency, they typically suffer from high levels of evasion, avoidance and "leakage."

A recent report on harmonizing international transit fees, prepared by the PTA Secretariat and the SATCC Technical Unit, had recommended that these fees should, in the future, be paid by coupon. At the time, they were paid in cash and many staff manning the border posts had refused to accept anything other than hard currency (i.e., travellers checks and PTA units of account were not accepted). Not only was this a security risk for drivers who had to carry large sums of hard currency, there is ample evidence of widespread evasion and leakage. International vehicles stopped at weigh-bridges in Zambia were frequently found without receipts showing payment of transit fees (the driver used part of the funds to pay off staff at the border post and then pocketed the balance), and the actual collections remitted to the Ministry of Finance were well below their potential. In Zambia, collections fell sharply when responsibility for collecting international transit fees was transferred from British Petroleum (who collected them under contract) to the Customs Department. In Tanzania, a spot check in the middle 1990s showed that the treasury had only received about $150,000 of the estimated $3.0 million transit fees that should have been collected that year.

To deal with this problem, the Federation of Regional Road Freight Associations, which includes representatives of the transport industries in Lesotho, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia, and Zimbabwe, had resolved that a coupon system should be implemented in the region. To this end, the Federation of Zambian Road Hauliers Association (Fedhaul), prepared a scheme that they hoped would be piloted in Zambia. A similar scheme was to be piloted in Mozambique (see Mozambique example above). The basic elements of the scheme proposed by FedHaul were as follows:

- In the future, all transit fees would be paid by coupon. Coupons would be printed in bank note quality—with watermarks and other security devices—and collecting agencies would be issued with equipment to detect counterfeits.
- Coupons would be issued through regional transporters associations who indicated willingness to purchase quantities in bulk and distribute them to their members.
- Coupons consisted of three parts which would be used as follows: (i) stub retained by the issuing authority (Fedhaul), (ii) part II retained by collecting agency at the border (border collection in Zambia would be carried out by one of the commercial banks which has branches at all border posts), and (iii) part III would be retained by the transporter as proof of payment and would be canceled on exit by the collecting agency as proof of payment (to ensure that vehicles which do not pay on entry do so on exit).
- The payment cycle would involve four main steps: (i) transporter purchases the coupons for cash, (ii) driver hands the coupons to the collecting agency at the border post, (iii) collection agency returns the coupons to Fedhaul, and (iv) Fedhaul transfers the funds used to purchase the coupons into the road fund account.
- Fedhaul proposed to charge a 5 percent commission for its services, and it was expected that the commercial bank collecting coupons at the border would do the same. The cost of printing coupons was estimated at $200,000, and this would be financed through a commercial bank loan to be repaid from revenues over 3 years.

Annual revenues for Zambia alone were expected to exceed $1.8 million gross, or $1.55 million net of coupon printing and administration costs.

ENSURING NON-ROAD USERS DO NOT HAVE TO PAY THE FUEL LEVY

Source: Based on the World Bank's Road Financing and Road Funds Knowledge Base at http://www.worldbank.org/transport. The compensation systems – mentioned under item (v) in the Introduction below – tend to be the easiest mechanisms to administer in developing and transition countries.

Introduction

When significant amounts of gasoline or diesel are used for off-road purposes (e.g., for the railways, construction., mining, agriculture, etc.), and the fuel levy is perceived to be high, efforts need to be made to ensure that non-transport users do not have to pay the fuel levy (these problems apply primarily to diesel). Failure to address this problem may generate strong public pressure to suspend the fuel levy. There are six main ways in which different countries attempt to ensure that non-road users do not have to pay the fuel levy destined for the road fund. They include: (i) replacing the diesel levy with weight-distance charges; (ii) offering exemptions; (iii) colouring un-taxed diesel; (iv) reimbursing non-road users who have already paid the diesel levy (i.e., rebate systems); (v) compensating non road users *ex post*; and (vi) devising special ways of compensating farmers (usually the most difficult group to deal with).

Method (v) tends to be the easiest to implement in developing and transition economies. However, the best strategy is to:

(i) only offer special treatment for off-road usage of fuel when it is essential (i.e., when the levy is greater than $0.03-0.05/liter);
(ii) keep the system as simple as possible (to keep costs down and discourage avoidance and evasion);
(iii) search for an acceptable solution which satisfies the most important off road users of fuel (usually the railways and farmers).

Weight-Distance Charges

New Zealand and Iceland use weight-distance fees to charge diesel vehicles for usage of roads. Norway and Sweden used weight-distance fees until the early 1990s, but have now abolished them. Namibia is planning to introduce them at some time in the near future, and a weight-distance fee, the Euro Vignette, is used in parts of the European Union for charging foreign vehicles travelling through member countries (for example, Russian trucks travelling through Finland).

The basic principle is that all diesel vehicles must buy a supplementary distance license (in New Zealand they are issued in multiples of 1,000 km) graduated according to axle configuration and gross vehicle weight. The charges are administered through sealed hub odometers or other certified distance meters. The charge is lower for vehicles with multiple axles and increases with gross vehicle weight.

The weight-distance fee is administered separately from the general tax system, and all revenues collected from the sale of weight-distance licenses are paid into a special account set aside to support spending on roads. In addition to the weight-distance fees, Iceland and New Zealand also levy a special charge on gasoline. The revenues from this charge are also paid into the special account.

Weight-distance fees can be difficult to administer. There is considerable scope for evasion—mainly by understating vehicle weight—unless the sale of licenses can be checked for consistency and linked to an active enforcement program. In New Zealand it is estimated that collection and enforcement absorb 3.2 and 2.0 percent respectively of gross revenues, evasion accounts for about 12 percent of net revenues (9.4 percent from heavy vehicles and 2.8 percent from light vehicles), and legal avoidance for 7 percent of net revenues. The system works satisfactorily when it is effectively administered—with fees collected under contract—and vigorously enforced. But the collection technology is now somewhat dated and countries should perhaps wait until electronic systems are available before introducing weight-distance fees. New Zealand is currently piloting such electronic (GIS-based) systems.

Exempting Non-Road Users

Under this arrangement, non-road users of diesel fuel obtain the fuel without having to pay the fuel levy that goes into the road fund. Diesel fuel is made available to non-road users either tax-free or at a reduced rate of taxation. The system is generally applied only to large users of diesel (e.g., coastal shipping or power generation). In such cases, there are few users which makes it easier to administer. When the exemption applies to a category that includes a large number of users, the users are required to file an exemption certificate or other documentation certifying that the diesel being purchased will not be used to power road vehicles. The exemption certificates are costly to administer when there are a large number of exempted users. Both methods (large users and small users) suffer from extremely high levels of evasion, avoidance and leakage. Road users are generally able to obtain untaxed or reduced-tax diesel very easily, and there is no simple enforcement mechanism to ensure compliance. Such exemption systems were used in USA up until the early 1990s, but resulted in widespread evasion. The estimated tax evasion losses in the USA were between 15 and 25 percent. To prevent this, the USA started to dye untaxed diesel fuel (see below). However, the USA continues to exempt certain types of buses. Other countries that used such exemption systems in the past included Central African Republic (for river transport and power generation), Chad (national power company), Sierra Leone (mining industry) and Ghana (fishing industry). Japan also uses a (rather complicated) exemption system at the prefectural level (see box below for a summary of the system used in Japan).

Japan: Exempting Selected Users from Paying Local Fuel Taxes

The entire gasoline tax is deposited into the Road Improvement Special Account. This tax is collected from wholesalers and, since there are very few exempt users (mainly chemical manufacturers), it is relatively easy to exempt them.

The diesel tax is a local government tax and is collected at the prefectural (provincial) level. The entire diesel tax is earmarked for spending on local government roads. Diesel is sold to end users through wholesalers (original sellers), special assigned traders and retailers. Wholesalers are designated by the Ministry of Autonomy (local government), while special assigned traders are designated by the prefectures. Wholesalers and special assigned traders are responsible for paying taxes to the prefectures and also for collecting the diesel tax from retailers. A number of users are exempted from paying this tax, including: (i) boat users with diesel engines; (ii) the Maritime Safety Agency and the Self Defence Force (only for off road usage of diesel – power generation, operation of tanks, etc.); (iii) railway and tramway operators; (iv) farmers using diesel equipment; and (v) pottery manufacturers and wood processors who use diesel for drying and baking.

Users who are exempted from paying the diesel tax apply for a certificate from the prefectural government. They are required to submit evidence on which of their machinery uses diesel fuel and how much they are likely to consume during the year for which exemption is sought. Based on this information, the prefecture issues a Certificate of tax Exempted Diesel Fuel User. To purchase fuel tax free, the user must then obtain a Tax Exemption card from the prefecture. The cards are issued to cover purchase of 18, 100, 1,000 or 10,000 liters of fuel and are valid for one year. Complementary cards for 1,5 and 10 liters are also issued. The user submits the card to the seller when purchasing diesel and the seller submits the card back to the prefectural office when accounting for the total taxes to be paid on their sales of diesel. As a check on this, end users of diesel are required to submit a monthly report to the prefectural office stating the amount of fuel purchased/used during the month and the name of the trader from whom the fuel was purchased.

The Ministry of Agriculture, Forestry and Fishery (MAFF), which is responsible for provision of agricultural and fishery roads, has successfully argued that the above exemption scheme does not fully compensate farmers and fishermen for the taxes paid on diesel fuel. As a result, the Ministry of Finance allocates some hundreds of millions of dollars a year from the general budget to support operation and maintenance of these roads. The roads financed under this program are called "agricultural exemption and fishery exemption roads". Their status is usually indicated on a sign at the side of the road.

Colouring Un-Taxed Diesel

Some countries colour untaxed diesel fuel and road vehicles are periodically inspected for use of untaxed fuel. Road vehicles are prohibited from having dyed diesel in their fuel tanks, with substantial penalties for non-compliance. Documentation to purchase dyed, untaxed fuel may or may not be required, depending on the country. There can be one or several colours used in a single country (e.g. one colour is sufficient to distinguish taxed from untaxed fuel, but if different categories of diesel users are taxed at different rates, there may be different-coloured dyes for diesel used in agriculture, the railways, boats, heating oil, aviation kerosene, etc.). Sometimes, this is combined with a limited exemption system whereby certain categories of road vehicles are exempt from taxation or levies (such as vehicles owned by the Government) and are allowed to purchase tax-exempt un-dyed diesel fuel if they can provide certain documentation. Such systems are used quite widely, although they can be difficult to administer. However, in recent years, the technology has improved considerably and it is no longer necessary to check the colour of the fuel in the vehicle's fuel tank. Instead, the dye stains the fuel pump and fuel lines, and this can be checked during the annual safety inspection. Colouring requires significant resources for enforcement and prosecution of violators. In some countries, the system has also been shown to be susceptible to infiltration and domination by organized crime groups (e.g., the USA). Countries using this system include Finland, France, Pakistan, United States and United Kingdom. The system used in the USA is summarised in the box below.

United States: Colouring Un-taxed Diesel

Farmers are exempted from paying federal tax destined for the Highway Trust Fund on the motor fuel they use in farm vehicles. Briefly, the fuel sold to farmers is dyed and does not include the tax. The vendor of the fuel has to pay the tax up front and must file for a refund from the Internal Revenue Service (IRS) to recover tax paid on tax-exempt payments. The detailed mechanisms used can be downloaded from the IRS publication "Farmer's Tax Guide." The web address for IRS publications is – "http://www.irs.ustreas.gov/forms_pubs/index.html" Once there look for Publication 225, which is the Farmer's Tax Guide. The guide is over 100 pages long. The relevant information on agricultural exemptions is on pages 88-92.

Reimbursement of Taxes Paid

Some countries have chosen to make everyone pay the diesel levy and to permit non-road users to apply for subsequent reimbursement. The non-road user therefore pays the fuel levy and then submits a request for a refund, together with the receipt to which the refund applies. The extent of documentation varies. In some countries, a tax-exemption card is issued and used for reimbursement, while other countries require complete documentation. The system requires a great deal of documentation and checks to prevent fraud are costly and absorb a great deal of staff time. This system is used in New Zealand for gasoline rebates where the scheme is administered under contract by the Land Transport Safety Authority who, in turn, employ New Zealand Post Ltd. as their agents. Applications for refunds have to be accompanied by invoices covering the purchases on which refunds are being claimed and random audits are undertaken by the Land Transport Safety Authority Audit Unit to discourage fraud. In 1996, refunds amounted to about 3 percent of total revenues. The small proportion of fuel affected by the rebates made it manageable in New Zealand. The United States uses the same system for certain categories of fuel users.

Compensating Non-Road Users Ex Post

Instead of offering exemptions or rebates – that can be difficult to administer – some countries compensate selected non-transport users of diesel for having to pay the diesel levy. Latvia used to operate such a system (see box below), while Mozambique still operates one. The system used in Mozambique is simple and easy to administer and is used to compensate farmers. Twenty percent of the diesel levy collected by the Ministry of Finance is paid into a special fund that provides financial support for agriculture. The farmers appear to be quite satisfied with this arrangement.

Latvia: Exempting Non-Transport Users From Paying the Diesel Levy

The system used in Latvia worked in the following way:

Agriculture: Owners of agricultural land, or persons leasing such land, were entitled to claim a refund of the fuel levy, provided they had at least one hectare of land under cultivation. The refund was equal to the levy paid on 100 liters of diesel fuel per hectare of cultivated land. This figure represented the estimated amount of diesel fuel used to cultivate one hectare of land. Supportive documents required included: (i) an application for refund of the diesel levy; (ii) a certified copy of the area of applicable land (certified by the head or deputy head of the regional municipality); and (iii) invoices showing purchases of diesel fuel during the year for which reimbursement was claimed. The refund was issued within 2 weeks by the regional State Revenue Service office and was paid from the government budget (not the road fund).

Fisheries: Fishery enterprises and individual fishermen could claim a refund of the diesel levy equal to the levy paid on 500 liters of diesel fuel for each ton of fish caught during the year. This figure represented the estimated amount of diesel fuel used to land one ton of fish. The refund took effect from 1st January 1998. The refund was issued by the State Revenue Service and paid from the government budget.

Industry: The government proposed to extend the exemption system to industry to cover use of diesel as a raw material in the manufacturing process.

Railways: The railways were entitled to claim a refund of the levy paid on diesel used to operate and maintain the railways. The rebate was based on actual monthly purchases of diesel and was reimbursed from the road fund.

Public Transport: Rural bus services were able to claim a refund of the diesel levy used to operate their services and wee also entitled to a subsidy to cover operating losses. The rebate was administered by the Ministry of Transport and the subsidy was administered by the Regional Subsidy Commission. Payment was made from the road fund.

Special Arrangements for Dealing With Farmers

Zambia does not exempt any users, although their road fund board recognizes that commercial farmers are penalized by the levy on diesel fuel. The levy is still fairly low (i.e., about $0.03 to $0.05

per liter) and the problem may get more difficult as the levy rises towards the planned long-term level of $0.10 per liter. The board has nevertheless addressed the concerns of the farming community in two ways: (i) the farmers are represented on the board and participate actively in all decisions about the level of the fuel levy and how the proceeds are to be spent; and (ii) the funds nominally allocated for spending on rural roads (i.e., to rural district councils) is higher than might otherwise have been the case. Funds are currently divided nominally between national, urban and rural roads in the ratio 20:40:40. Typically, most other countries only allocate 20 to 25% of road fund revenues to rural roads. Hence, instead of offering exemptions, the board in Zambia compensates farmers indirectly by allocating more funds for maintenance of the rural road network than might otherwise be the case.

PROCEDURES FOR DIVIDING MAINTENANCE FUNDS BETWEEN DIFFERENT ROAD AGENCIES

Source: Based on the World Bank's Road Financing and Road Funds Knowledge Base at: http://www.worldbank.org/transport

Introduction

A simple and consistent procedure is needed to divide funds between the different agencies entitled to receive money from the road fund. The procedures should be transparent, fair and related to need. There are two basic approaches. The road fund can either allocate the funds based on a direct assessment of needs or, when that is not possible, by estimating needs indirectly using formulas related to road length, traffic and other variables which are thought to affect road maintenance needs.

Measuring Maintenance Needs Directly

The direct needs-based approach allocates maintenance funds according to a careful assessment of network needs. The methods can be more or less complicated, depending on the technical capacity of the road agencies, particularly at the local government level. One of the simplest methods is to base the estimates on average maintenance costs. This procedure used to be used at the local government level in South Africa (see box below).

South Africa: Estimating Needs Using Average Unit Maintenance Costs

The following system, which is no longer used, was originally developed to ensure an equitable allocation of funds for rural roads. Maintenance was divided into: (i) routine maintenance (patching and sealing cracks, maintaining gravel shoulders, maintaining drainage, attending to the road reserve, and maintaining road signs and markings); and (ii) periodic maintenance (maintenance of bridges, resealing, and minor road safety improvements). A matrix of unit maintenance rates – for each type of road, traffic condition, and activity group – was then applied to all the roads under the jurisdiction of each road authority to arrive at the total "target" maintenance requirements. When no traffic figures were available and very low maintenance standards were applicable, a flat figure of $70 per km was used. The estimated figures were then adjusted to account for environmental conditions (e.g., heavy rainfall).

When the road agencies are technically strong, maintenance needs are normally based on the output of a standardized road management system (e.g., the HDM, or similar models). The road fund staff generally advise the road agencies on how to operate the systems and then carry out regular "procedural" audits on the road management system to ensure that each road agency is applying the procedures correctly. This system is used in New Zealand (see summary in box below).

New Zealand: Estimating Maintenance Needs Using a Road Maintenance Management System

New Zealand has one of the best needs based systems for dividing funds between the main road agency and the various regional transport authorities. All are required to prepare their road maintenance programs on the basis of a standardized road management system. Their investment programs use benefit-cost analysis using a cut-off benefit-cost ratio of 4. Staff from Transfund advise the transport authorities on how to operate the road management system and they carry out regular procedural audits to ensure that each authority is applying the procedures correctly and is also achieving minimum maintenance standards and service levels (i.e., the audit checks to ensure that the allocated funds are actually spent on maintenance and that the maintenance is carried out to agreed standards). The method used by Transfund is one of the best ways of dividing funds between different road authorities. It nevertheless requires a technically strong road agency and this is rarely the case in developing and transition countries, particularly at the local government level.

Measuring Maintenance Needs Indirectly

In many countries, road agencies (particularly those at the local government level) simply do not have the technical capacity to operate a standardized road management system. Furthermore, since most standardized road management systems were designed to serve the needs of national road agencies, they cannot always be applied at the local government level without serious modification. As a result, many countries have chosen to delegate much of the decision making process to the local government level. They first of all set “indicative” budgetary targets for the main, rural and urban road networks and then use an indirect measure of need to divide the sums associated with these indicative targets between the rural and urban road agencies within each group. The indicative targets are used for planning purposes and the final allocations may then be adjusted in the light of the actual programs submitted by each group of road agencies.

Setting Indicative Targets for National, Rural and Urban Roads

The road fund (nominally) allocates a certain percentage of its revenues to rural roads, a certain percentage to urban roads, and then allocates the balance to the national road network. For example:

- Latvia allocates 27 percent of the annual vehicle tax and 30 percent of the fuel levy to the local road network (both urban and rural);
- Mozambique allocates 20 percent to urban municipalities;
- Romania allocates 35 percent to county and communal (village) roads;
- Zambia allocates 40 percent to rural roads and 20 percent to urban roads;
- Ethiopia allocates 20 percent to rural roads and 10 percent to urban roads;
- Ghana allocates 20 percent to rural roads and 27 percent to urban roads;
- Laos allocates 10 percent to local roads and 5 percent to urban roads in Vientiane Municipality.

These nominal allocations do not mean that these sums of money are actually spent on rural and urban roads. All too often the targets are unrealistically high – particularly for the rural road agencies -- and they simply cannot absorb funds on this scale until they have built up their implementation capacity. The nominal allocation nevertheless provides a useful benchmark for planning purposes.

Initially dividing the funds between the different types of road agency ensures that each gets a fair share of the available revenues, provided the proportions are regularly amended in light of experience. This is an important consideration when strong urban councils bid against weak rural councils for the same share of the road fund. For example, in Tanzania during the early 1990s, 20 percent of the road fund was initially set aside to finance road works managed by 17 urban and 84 rural district councils. But the urban councils were generally able to prepare better road programs and had more political influence. Thus three-quarters of the funds went to the urban district councils, mainly to the capital city of Dar-es-Salaam.

Dividing Maintenance Funds Between the Different Road Agencies

The next step is to divide the funds allocated to each group between the various (and usually numerous) road agencies making up each group. Since the road agencies do not have the capacity to measure needs directly using a standardized road management system, maintenance needs are measured indirectly. One of the easiest methods is to estimate maintenance needs on the basis of average maintenance costs per km for different types of road. This is the main method used in Latvia (see summary below).

Latvia: Estimating Maintenance Needs Indirectly

Funds allocated to municipalities from the national road fund are divided up between 7 city municipalities and 26 regional municipalities (27 percent of the vehicle tax and 30 percent of the fuel levy) on the following basis. Half of the vehicle tax is allocated to the city municipalities and is divided between them on the basis of vehicle registrations. The balance of the vehicle tax is divided between the regional municipalities on the basis of weighted (maintainable) road length. The weights crudely reflect maintenance costs in relation to traffic levels. The weights currently used are: urban roads of district cities and rural communes = 5; asphalt paved roads = 2; other roads = 1. The fuel levy is divided between all municipalities on the basis of weighted road length.

The United States, at the Federal level, has devised a more elaborate method. They carried out an elaborate correlation analysis between actual maintenance costs at the State level and various parameters describing the characteristics of the State road network, including weather conditions. The analysis showed that there were two dominant variables associated with the costs of maintenance:

- The length of the road network, measured in terms of lane-km (i.e., the size of the road asset); and
- volume of traffic, measured in terms of vehicle-km (i.e., traffic loading which affects pavement deterioration).

Following this study, maintenance funds from the US Federal Highway Trust Fund, were divided up between the various States on the basis of a simple formula consisting of x*(lane-km) + y*(vehicle-km) as summarized in the box below. Since this study was carried out, the US General Accounting Office has suggested modifications to the original formula which would have added a third variable, population, and also suggested that lane-km, vehicle-km and population should each be given equal weight. The actual method adopted by the US Congress is more complicated and seeks to ensure that the States paying most money into the Highway Trust Fund get more back out of it.

United States: Estimating Maintenance Needs Using a Formula

Maintenance funds from the Highway Trust Fund are divided between the various states according to the following formula: 0.55*(interstate lane miles/total interstate miles) + 0.45*(vehicle miles on interstate roads/total interstate vehicle miles). These weights were derived from a correlation analysis of actual maintenance spending versus lane miles, vehicle miles, population, weather, etc. Lane-km and vehicle-km were found to be the dominant variables. Each State receives a minimum allocation of 0.5 percent and the formula then tops this up on the basis of relative vehicle and lane km. The General Accounting Office has recently suggested two alternative allocation formulas: (i) distribution of funds to be based equally on total lane miles and total vehicle miles travelled; and (ii) distribution to be based equally on total lane miles, interstate vehicle miles travelled, and state population.

COST SHARING ARRANGEMENTS WITH LOCAL GOVERNMENT ROAD AGENCIES

Source: From the World Bank's Road Financing and Road Funds Knowledge Base at http://www.worldbank.org/transport. The procedures used by Transfund in New Zealand probably represent the best example of emerging "good" practice.

Introduction

The road fund normally finances 100 percent of the costs of maintaining and improving national roads and, although it tends initially to finance 100 percent of such costs at the local government level, most road funds attempt to move towards a cost-share arrangement for local government roads. The need for cost sharing is partly driven by the need to "stretch" the road fund's budget by encouraging local governments to mobilize additional revenues of their own at the local level. However, the main reason is affordability – how much can the local government afford to contribute to the necessary costs of road maintenance and improvement. One of the key tasks faced by most road funds is thus the need to devise and publish an acceptable basis for sharing the costs of road works with local governments.

Basic principles

There are two basic approaches to cost sharing:

(i) Central government, or the road fund, agrees to pay a fixed proportion of the "approved" expenditures. This is by far the most common procedure.

(ii) The proportion paid by central government or the road fund is determined by a formula that takes account of the local government's "ability" to finance the expenditures out of its own local tax revenues.

(iii) Clearly, the availability of local tax revenues is dependent on the degree of fiscal decentralization (i.e., which tax instruments have been delegated to local governments), but it is also significantly affected by how wealthy it is. Typically, the main source of local government tax revenues is the property tax and the formulas tend to measure affordability in terms of the size of the local property tax base, or a surrogate measure of that tax base (e.g., size of the population served by the road).

When the road fund is first set up it will often finance all road expenditures—or at least all maintenance expenditures—and will move toward an agreed cost share formula over a period of two to five years. The arrangements usually distinguish between maintenance and investment, and will usually finance a higher proportion of maintenance. These cost share formulas are usually reviewed and revised on an annual basis.

On average, most governments and mature road funds finance:

- 50 percent of the costs of maintaining urban roads;
- 60 percent of the costs of maintaining rural roads;
- 70 percent or more of the costs of investment (including rehabilitation);
- the cost-share percentage is usually lower for unclassified roads.

In the case of unclassified roads (village and community roads), the local communities often pay their share by providing volunteer labour, or other services in-kind (e.g., materials). The lower proportion financed by the road fund usually reflects the difference between the market wage and the opportunity cost of labour in the countryside.

Cost Sharing for Maintenance

Many countries simply finance a fixed proportion of the “approved” maintenance expenditures (e.g., Canada and Japan). The typical proportion financed by central government or the road fund is 50 percent. Some countries differentiate between urban and rural governments and finance a higher proportion of the costs in rural areas. This is done to recognize that rural governments generally have a weaker local tax base. Hence, urban governments may receive 50 percent of their approved costs, while rural governments may receive 60 percent.

Other countries vary the percentage financed by central government or the road fund to reflect each local authority’s ability to pay. New Zealand uses a system where they first specify the average amount to be financed for all local governments, they then set a minimum proportion (i.e., no matter how wealthy the local government, they can guarantee receiving this minimum amount) and then the allocations to all other local governments are based on ability to pay

New Zealand: Cost Shares Based on the Size of the Property Tax Base

In New Zealand, the road fund finances 50 percent of all qualifying maintenance costs, but varies this between local authorities depending on the size of their local tax base. The minimum allocation for the richest local authority has traditionally been set at 43 percent. To decide the proportions for the other local authorities, they draw a graph of the proportion financed by the road fund (y-axis) versus the program size (P in $’000) divided by the tax base (LV which is the three-year average net local property tax base in $ millions). The graph cuts the y-axis at 43 percent and the slope is then adjusted until the average for all local authorities comes to 50 percent. The actual formula for doing this is:

Proportion financed = $k_1 + k_2 \log (P/LV)$, where

P = the current year program allocation (thousands of dollars);
LV = is the three-year average net local property tax base in millions of dollars;
k_1 and k_2 are constants computed to ensure that the average national proportion is 50 percent.

If the calculation in any one year results in a proportion that differs by more than 2 percent from the previous year’s, the proportion is adjusted by half the difference to be within 2 percent of the indicator. If the calculation results in a difference of less than 2 percent, no change is made unless the trend continues for two consecutive years. The actual proportions in 1996–97 varied from 43 percent to 75 percent (an exceptional 83 percent was paid to an offshore island, which was an exception).

Finland has an interesting formula for deciding the cost share arrangements that apply to unclassified (private cooperative) roads. First, they estimate what the maintenance costs are likely to be, using the following formula: ($800**L)*C*, where $800 is the average maintenance costs, *L* is the length of the road and *C* is the maintenance class for the road -- 1.50 for class 1 roads, 1.25 for class 2 roads, 1.00 for class 3 roads, and 0.75 for class 4 roads. They then cap the maximum amount that central government will pay and reduce this on the basis of the number of people living alongside the road (i.e., in relation to the number of local residents who can be expected to contribute towards the costs of the road). The method used is summarised in the box below.

Finland: Cost Sharing on Local Cooperative Roads

The maximum amount they finance is 75 percent and they then reduce this by 0.1**R* per km, where *R* is the number of permanent residents living along the road. *R* is typically greater than 3 and less than 8 people per km. Hence, with 3 people per km living along the road, the proportion financed is (0.75 – 0.3) = 45 percent. With 8 people, the amount is zero. In 1990, the Finnish Road Administration on average financed 25 percent of the maintenance costs of these roads using the above formula.

Cost Sharing for Investment

Most countries finance a fixed proportion of the costs of investment, although they do it in slightly different ways. The amount financed is usually higher than for maintenance (5 to 10 percent higher, as in New Zealand where it is 5 percent higher) and may even be as high as 100 percent for special programs. In Japan the road fund finances 70 percent of works on the national expressway network and 50 percent of the costs on other roads, while in the USA the Highway Trust Fund generally finances 80 percent of costs, but goes as high as 90 percent for inter-state construction and maintenance. The danger with such high cost share proportions, is that they may encourage local governments to implement schemes that they would not finance out of their own resources (i.e., it biases the setting of priorities).

An alternative approach – usually only applied in urban areas – is where central government or the road fund finances a fixed proportion of the investment and requires the adjoining landowners to finance the balance. For example, some municipalities finance 90 percent of the costs of upgrading and widening roads and charge the balance to the landowners living on either side of the road. They may also restrict their proportion to, say, 75 percent of the costs of land acquisition and require the landowner to "donate" the remaining 25 percent.

Another option is where municipalities require anyone developing property to provide all the basic infrastructure services to specifications laid down by the municipality (including roads). After completion, staff from the municipality inspect the completed works to ensure they have been constructed according to specification and the municipality then "adopts" the facilities and takes over responsibility for their maintenance, together with the costs of any future upgrading. The municipality therefore charges 100 percent of the costs of new road scheme to the developer.

WAYS OF DISBURSING FUNDS TO ROAD AGENCIES

Source: From the World Bank's Road Financing and Road Funds Knowledge Base at http://www.worldbank.org/transport

Introduction

This document summarizes three ways of disbursing funds to the road agencies entitled to receive money from the road fund. It includes: (i) disbursing funds directly to each road agency on a regular basis and then auditing the use of funds *ex post*, (ii) issuing approval for the work to be done and then reimbursing the road agency after the work has been completed; and (iii) paying the contractors directly, but only after certification that the work has been done and carried out according to specification.

Disbursing Funds Directly to Road Agencies

This method operates like a revolving fund and works best when there is good governance, competent road agencies, and a decentralized system of road administration. The basic principle is that the road fund provides funds to road agencies, if they agree to provide all the information and cooperation necessary to enable the road fund to review and audit the correct application of these funds, usually against an approved annual expenditure program. Staff from the road fund visit each road agency on a regular basis to review their internal financial systems (including accounting and related financial systems), and to confirm that they are being operated correctly and in conformity with the various policies published by the road fund administration. Technical and financial audits are carried out on a regular basis, and procedural audits are carried out every few years to ensure that the road agency is complying with the road fund's policies with regard to the custody, recording and utilization of road fund resources. New Zealand operates such a system and so does Ghana.

In New Zealand, Transfund channels funds to Transit New Zealand on a back-to-back basis (i.e., as Transit pays for work, Transfund reimburses them), while local authorities are reimbursed on the basis of monthly claims. If a local authority does not comply with the procedures laid down by Transfund, it has to repay the funding received.

In Ghana, the system operates as follows:

Routine Maintenance

(i) Road agencies submit details of their annual programs to the Secretariat at the beginning of the year. The programs provide separate lists for force account work and work done under contract.

(ii) The Secretariat releases funds monthly **in advance** to the road agency's head office. The releases are based strictly on the approved annual program.

(iii) Road agencies submit to the Secretariat a statement of payments (**Payment Report**) giving details of distribution of previous cash release. Subsequent releases are conditional on submission of these reports.

Periodic Maintenance

(i) A maintenance certificate is sent to the road agency's head office for approval.

(ii) Once approved, the certificates are sent to the Secretariat before the end of each month. The schedule of requested payments has to be in a form specified by the Secretariat on a **Payment Request** form.

(iii) Requests for force account units are based on Operational Costs only. These are submitted together with the above Payment Request forms.

(iv) Secretariat releases total amount requested in approved certificates and road agencies must then submit corresponding **Payment Reports** (as per routine maintenance). Payment to force account units are also shown on the **Payment Reports**.

The **Payment Request Form**, includes Item, Contract No., Project, Name of Contractor (where applicable), Region, Contract Amount, Certificate (number and date), Date Received (by the Secretariat), Certificate Amount, Amount Paid, and Outstanding Amount.

The **Payment Report Form**, includes Item, Payment Certificate No., Contractor (where applicable), Gross Value, Tax, Retention, Net payment, Payments to date, and Outstanding Amount.

Reimbursing Road Agencies After Work Has Been Completed

This system operates like a line of credit and only works when the road agencies have access to adequate working capital. The starting point is similar to option one. The road fund first of all defines the systems and procedures to be followed by each road agency as a condition of being able to receive money from the road fund. This may involve having an annual audit carried out by independent auditors, covering both financial compliance and internal control procedures. The audit is thus more comprehensive than the usual financial audit, in that it also covers the internal control procedures used by the road agency. Staff from the road fund may check these procedures on an ad hoc basis, and may also carry out field inspections of work financed through the road fund. Each year there is an approved expenditure plan and the road agency goes ahead with implementation. Once an item of work has been completed, the road agency pays the contractor (this is where the working capital is needed) and submits a voucher for reimbursement to the road fund. In the case of force account work, it submits a claim for bought-out plant and materials, together with in-house staff costs. The road fund certifies the payment and then transfers the necessary funds to the road agency. The need for certification prior to payment gives the road fund additional control over the payment process. This system is used by the US Federal Highway Trust Fund.

Paying Contractors Directly

The third method involves more oversight by the road fund and is more staff intensive. The method starts with the same approved expenditure program but, instead of transferring funds to the road agencies (as per both other previous options), the road fund pays contractors directly. Payment is furthermore only made after certification that the work has been carried out and has been completed according to specification. The procedure works best when the work is done under contract, but can also be applied to force account work. The work is usually certified by local consultants. In practice, the contractor usually submits monthly statements of work completed (except for very small contracts) and, within a fixed period of time, the consultant certifies the work for payment. These procedures are widely used in Africa for both force account work (Benin), work undertaken by state contractors (Mozambique) and private sector contractors (Zambia). Attachment 1 provides an example of the forms used to certify work for payment in Mozambique.

Final Inspection Prior to Handing Over Maintenance Responsibilities to DNEP/DEPs

Date of Inspection

Contractors Name

Date of Handover

Contract reference	
Datum Reference Point	

Kilometre		**Carriageway**							**Shoulders**			**Drainage**						**Road Space**		**Transfer of maintenance acceptable?**	**Remarks**
From	**To**	Ravelling	Potholding	Cracking	Rutting	Undulations	Bleeding	Edge loss	Profile	Vegetation	Erosion	Culverts	Mitre drains	Siltation	Erosion	Vegetation	Debris	Debris	Obstacles/ Obstructions		

Prepared by		
	Name:	
	Organization:	
	Position:	

X to be placed in the boxes where defects are,
and within the scope of the Contract Works undertaken.

CONTRACTING OUT DAY-TO-DAY MANAGEMENT OF THE ROAD FUND ADMINISTRATION

Source: Draft originally prepared for Ministry of Finance, Lesotho.

Some countries have decided that they could not recruit the right kind of staff into their Road Fund Administration, usually because it remains subject to civil service trams and conditions of service. They have therefore either recruited the staff as consultants (on regular long term consultant salaries), or they have out-sourced the day-to-day functions of the Secretariat to a firm of accountants, or to a bank. The following documents provide examples of: (i) the kind of letter that might be used to invite such bids; and (ii) the sort of tasks that the contractor might be invited to provide.

Letter of Invitation

Ministry of ....
etc.
Date

Address
(local accounting firms/banks)
Dear Sir/Madam:

Invitation to Submit Proposal to Act as Secretariat for National Road Fund

The Ministry of .... has decided to invite proposals from local accounting firms (and/or banks) to help manage the Road Fund Administration. The Road Fund Administration was established to finances routine and periodic maintenance of roads, road safety programs, and some rehabilitation and minor improvements *[adjust as necessary]*. The revenues of the road fund administration consist of a surcharge added to the price of gasoline and diesel, vehicle license fees and fines for overloading. The total annual revenues of the road fund administration are expected to be in the region of $?? million. The Road Fund Administration is under the overall jurisdiction of the National Roads Board who are accountable, through this Ministry, for the proper management of the Road Fund Administration. The National Roads Board consists of a Chairman and eleven other members representing various government ministries, road users, and local government agencies *[adapt as needed].*

The Road Fund Administration will be managed by a Secretariat which will be responsible for day-to-day management of the Fund and for of the decisions of the Board. To ensure the Fund is well managed, the Ministry intends to appoint a firm of chartered accountants (or a bank) to help the Executive Secretary to manage the financial affairs of the Fund. The selected firm will be expected to develop all the financial systems needed to manage the Fund.

The firm will be expected to provide the following support to the Executive Secretary:

(a) Keep proper accounts and records in respect of the Fund;

(b) Maintain a ledger for the Fund bank account in which shall be recorded all receipts into the fund and all disbursements from the Fund;

(c) Prepare monthly statements of revenues collected, amounts deposited into the Fund bank accounts, commitments entered into by the Board, authorized withdrawals, and actual withdrawals;

(d) Ensure that all monies due to the Fund have been collected and deposited into the relevant bank accounts;

(e) Design and implement collection and deposit procedures that minimize delays and reduce avoidance and evasion;

(f) Prepare and submit for audit in respect of each financial year a statement of income and expenditure, a statement of cash flow, and any other financial statements that may be requested by the Accountant-General **[or equivalent];**

(g) Prepare an Annual Report in such form and with such content as prescribed by the Board;

(h) Provide such other support to the Executive Secretary as he may prescribe.

I am now writing to you to invite you to put forward a proposal to help the Executive Secretary to manage the Road Fund Administration, in line with the attached Terms of Reference (see Annex 1). The same invitation is being sent to two other firms with registered offices in .... The initial contract for this work will last for two years and the contract may then be renewed on an annual basis thereafter subject to satisfactory performance. Your proposal should include a statement setting down: (i) the type of financial systems and procedures you would recommend using for the Fund; (ii) the type of staffing arrangements you would propose to employ; and (iii) how you would charge for your services; and (iv) an estimate of your total fee costs for the first 12 months.

I would appreciate it if you could let me have your proposal within four weeks of the date of this letter.

Yours faithfully

Minister of ....

Annex 1

TERMS OF REFERENCE FOR FIRMS SUBMITTING BIDS TO ACT AS SECRETARIAT TO THE ROAD FUND ADMINISTRATION

STATEMENT OF INDICATIVE REQUIREMENTS TO BE PROVIDED BY THE SECRETARIAT TO THE ??? NATIONAL ROADS BOARD

MINISTRY OF FINANCE

1. Rationale for this Statement

This statement has been produced to assist prospective firms to put together their proposal to act as a secretariat to the National Roads Board who have been empowered to oversee management of the Road Fund Administration (the Fund). The need for such a statement has been identified due to the unusual scope of services and because those services are as yet not comprehensively defined. A further terms of reference will be produced later, based largely on this statement, in response to which the chosen firm will be required to produce a more detailed tender document.

2. Background

Low maintenance expenditures have seriously impaired the capacity of the various road authorities in ??? to undertake adequate road maintenance. The system has not provided sufficient funding, which has resulted over the years in a backlog of deferred maintenance and ever increasing rehabilitation costs. At the same time, road users have not been paying the full cost of the investments made for their use nor of the damage they cause on road assets. Roads are not commercial goods as access cannot be denied other than by restricting vehicle and driver licensing. Hence, it is difficult to recover fully the costs involved from road users.

Allocations for road maintenance currently come from the government's consolidated budget. However, given the growing size of the road program and the other urgent demands on the government's budget, it is simply not possible to allocate sufficient funds for road maintenance from the consolidated budget. It is therefore proposed to shift gradually the road sector onto a fee-for-service basis under which road users will pay directly for road maintenance. The aim is to ensure that: (i) sufficient funds are allocated for maintenance; (ii) maintenance allocations cover all roads; (iii) financial discipline is strengthened to ensure that the public gets value-for-money; and (iv) the fiscal burden on government is reduced to manageable proportions.

In order to ensure the necessary regular and adequate flow of funds and to ensure users pay at least for regular maintenance required to compensate for the damage they inflict on roads, the Government has created a Road Fund Administration. This is sustained by an access fee to the network (vehicle licensing fees and fees raised at the border from vehicles entering or leaving Lesotho), and a usage fee with a levy on fuel employed as the best proxy for road usage. The latter has a direct, although imperfect, relation to distance and therefore to damage.

The Road Fund Administration, hereafter the Fund, has been established by Legal Notice published in the Government Gazette. This specifies its purpose, sources of revenues, and its management by a representative board. The first charge of the fund is to finance routine and periodic maintenance of the network under the jurisdiction of the Ministries of Works and Local Government. The second charge is to assist in the maintenance of selected local rural and urban roads on a cost sharing basis. Village and Municipal Councils will be required to contribute significantly towards the cost of maintaining local roads, and may choose to do so by contributing direct labor. It is anticipated that the cost of maintaining urban roads will largely be financed using revenues from rates and other local taxes. Fund revenues may also be used to finance rehabilitation and selected road safety projects. However, it will only be used to finance road upgrading and new works once all road maintenance requirements have been met.

Revenues will come initially 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 the country; (iii) license fee collected from vehicles, especially from heavy vehicles to ensure they pay more adequately for the damage they do to the road pavement; (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 expected to be in the region of US$11 million.

It has been found in countries having adopted road funds that major policy reforms within the road sector are unlikely to succeed without active support from the road users. Road users' support is essential as it is they who will be paying for the roads. To gain their support requires the direct involvement by them in the decision-making and management process, and in the technical and financial control/audit of road activities. It has further been found that when such policy reforms have been implemented, then the road users are not only willing to pay extra road user charges, but also to take a very active part in the road management business. This is because they have been given an opportunity to have a say in the setting of policies including how the funds allocated for roads are spent, and to ensure that they obtain value for money from their road user charges. 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 consists of a chairman and eleven members, six members representing concerned government departments and five representing non-governmental organizations. The government members have been nominated by their respective Ministers, while the non-governmental members have been nominated by the organizations they represent. Additional non-voting members may be co-opted to the Board when required. Members of the Board are appointed for a period of two years and compensated for the time spent attending board meetings. Board meetings will be held at least once a month and subcommittees can be established as the Board sees fit.

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 will then recommend to MOF the required levels of road user charges. The Board will also recommend how the revenues from the road fund should be divided between the various road agencies entitled to draw from the Fund, including those dealing with road safety.

The accounts and other financial statements of the Fund will be audited annually by a firm of auditors selected by the Auditor General. The audit includes a full financial audit and a selective technical audit. 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.

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. The legal regulations of the Fund makes provision for a secretariat to assist the Executive Secretary of the Board and it is to fulfill this service that proposals are now being sought. The Fund itself will cover all its own administrative costs including the cost of the secretariat.

3. Secretariat Role

The role of the Secretariat is to manage the financial affairs of the Road Fund in accordance with the decisions of the Road Board as laid down in Legal Notice No.???.

4. Objectives

The role of the secretariat can be further broken down into three main objectives as follows:

- i.) Ensure all user charges due to the Fund have been collected and deposited into the designated bank account.
- ii.) Maintain proper accounts and records of all transactions through the Fund and provide reports as required by law and as otherwise requested by the Board.
- iii.) Ensure that all disbursements made by the Fund are to finance those civil works and administrative costs which form part of the approved program and that work is done to an acceptable standard

5. Indicative Scope of Services

As section ?? of Legal Notice ?? states, the scope of services is general in that the secretariat shall be responsible for the management of the Fund in accordance with the decisions of the Board. More specifically and as guidance only, the chosen accounting firm will be expected to develop and put in place all financial systems needed to manage the Fund according to sound commercial principles, including as a minimum:

i) Collecting Due Revenues

The firm is to develop and establish a system to collect, deposit and monitor road fund revenues, including streamlining current procedures to reduce any delays and taking steps to minimize evasion. In particular to ensure that,

- the road maintenance levy on all eligible fuel is collected by the oil companies and paid directly into the designated account in collaboration with the Department of Energy and relevant oil companies;
- all road toll gate and border fees are collected and deposited directly into the designated account in collaboration with the Customs and Excise Department;
- all eligible license fees are collected and deposited directly into the designated account in collaboration with the Ministry of Transport and Communications; and
- any contract into which the Board may subsequently enter with a private company contracted to collect user charges on behalf of the Board is adequately monitored.

ii) Maintaining the Fund

The firm will be expected to develop and employ computer-based financial systems in order to:

- keep proper accounts and records in respect of the Fund;

- keep a ledger for the Fund bank account in which shall be recorded all receipts and disbursements;

- prepare monthly statements of revenues collected, amounts deposited into the account, commitments entered into by the Board, authorized withdrawals and actual withdrawals for subsequent presentation at Board meetings;

- prepare quarterly and annual projections of revenues and planned expenditures;

- prepare and submit for audit annual accounts, which will include a Statement of Income, a Balance Sheet, and a Statement of Cash Flow, to those appointed to the task by the Auditor General;
- prepare on behalf of the Board and in such form and with such content as prescribed by the Board, a published annual report within six months of the end of each financial year (this will deal generally with the policies and activities of the Board during the year, and include a copy of the audited accounts and the auditors report on the accounts); and
- provide any such other support to the Executive Secretary as from time to time the Board might require.

iii) Disbursement of Funds

The firm will be expected to control all expenditure in accordance with the decisions of the Board. In general, funds from the Road Fund will only be disbursed for goods and services forming part of an approved maintenance program. Tasks will include to:

- receive requests for payment (a copy will go to MOF) from contractors, force account units, and firms providing consulting or administrative services;
- arrange to pay road agencies, contractors, administrative or consulting firms directly out of the road fund account within an acceptable timeframe in advance or in arrears to be decided by the Board (contracted work is more likely to be paid in arrears); and
- establish and employ procedures for ensuring that work paid for is of an acceptable quality, including making a selective technical audit of 20% of finished civil works by value and at least 5% of all requests for payment.

6. Personnel Requirements

The Regulations governing the Fund make allowance for the secretariat to consist of up to four qualified officers. Proposals are to include detailed CVs of proposed staff. The team is expected to include at least one chartered accountant and a professionally qualified engineer, with at least ten years experience in their respective professions. Previous experience working in or with public sector institutions would be an advantage. Proposals are required to make it clear which posts, if any, would be full time.

7. Initial Assistance to be Provided Through the Roads Board

Due to the unusual nature of the task, such technical assistance as deemed necessary by the Board will be provided to the firm upon request. It is anticipated that this would require no more than two person weeks. If the Board consider it necessary for a particular and unanticipated problem, a separate short-term consultancy may be employed under a separate terms of reference. This consultancy would work with the secretariat to resolve the issue. No logistical support is to be provided to the firm by any government ministry.