REPUBLIC OF NAMIBIA
MINISTRY OF WORKS, TRANSPORT AND COMMUNICATION

Participatory Review and Evaluation of Co-operation between Namibia and Sweden in the Transport and Communications Sectors

- Resource Paper 3 -

Co-operation between Namibia and Sweden in the Transport and Communications Sectors

- Reforming the Namibian Road Sector -

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Preface

This is the third of three resource papers prepared as part of the closing of the Swedish support to transport and communications in Namibia in 2006. The support was originally initiated in 1988.

The paper covers the reform of the road sector and presents a review of the performance, factors affecting performance, governance issues and other issues that were identified relating to the implementation of the three main semi-state institutions established as part of the reform, five years after their establishment.

The first two of the other papers provide a background to the support, an overview of its contents and identifies some issues. The emphasis is on support for policy, and institutional reform and restructuring in the two sectors.

The second paper covers the commercialisation of the operations in the transport and communications sectors.

The authors are alone responsible for the contents of the paper, including presentation, analysis and possible recommendations. They do not necessarily represent the views of the Ministry of Works, Transport and Communication (MWTC) or the Swedish International Development Cooperation Agency (Sida).

Glossary of Terms

ICTE	Interministerial Committee of Technical Experts (constituted to prepare recommendations to Government on a system of road user charges)
MDC	Mass-Distance Charge (on heavy vehicles)
MLTRMP	Medium- to Long-term Roads Master Plan (of the RA)
MME	Ministry of Mines and Energy
MOF	Ministry of Finance
MWTC	Ministry of Works, Transport and Communication
NaTIS	Namibian Traffic Information System
PPE	Petroleum Products and Energy (Act)
RA	Roads Authority
RCC	Roads Contractor Company
RFA	Road Fund Administration
RMS	Road Management System
Sida	Swedish International Development Cooperation Agency

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1 Introduction and Purpose

1.1 Scope of the Resource Paper

The road sector reform in Namibia brought about a new, increasingly efficiency-oriented dispensation for the funding and management of the Namibian national road network. It was manifested through the establishment of three new institutions, being the:

- Road Fund Administration (RFA);
- Roads Authority (RA); and
- Roads Contractor Company (RCC).

This Resource Paper presents a review of the performance, factors affecting performance, governance issues and other issues that were identified relating to the implementation of the three main entities, five years after their establishment.

The main thrust of the paper is to present observations to facilitate stakeholder consultation, and not to make recommendations. Where appropriate, the latter should be developed through stakeholder consultation.

The paper does not cover the details of the circumstances leading up to the establishment of these entities and how they were created, which have already been covered in several other reviews. The interested reader is referred for more detail to the reference literature listed at the end of this paper.

Of particular interest for further background on the pre-reform road sector is the report titled "The Namibian Road Sector Reform: Three and a Half Years After". The report provides a comprehensive summary of key characteristics of the road sector prior to the road sector reform, the developments leading up to and the implementation of the reform, and the developments after the implementation of the reform up to the end of September 2003.

1.2 Road Sector Reform Objectives relevant to the Review

The basic policy objective of the road sector reform was to promote a safe and efficient road sector in accordance with Government's basic development objectives (refer to the White Paper on Transport Policy). With a view to the achievement of the latter, specific objectives of the reform of most relevance to this paper were[1]:

- To implement cost-recovery policies and systems to recover funding requirements for the road sector from road users through equitable road user charges that would promote a safe and efficient road sector;
- To eliminate or constrain subsidies in the provision of services and promote transparency with regard to these;
- To separate the operational and regulatory functions pertaining to the road sector, which were mixed within the Ministry of Works, Transport and Communication (MWTC), and at the same time eliminate problems related to the size of the MWTC;

[1] These objectives were not limited to the road sector only, but were also relevant as appropriate to the transport and communication sector reform, of which the road sector reform was one component, in the wider context in which the MWTC is involved in the transport and communication sector. The reform of the latter involves, for example, also civil aviation, maritime affairs and ports, and post and telecommunications.

- To recruit and develop the required human resources in the transport sector, in which the MWTC found itself seriously constrained.

1.3 Review Framework

It is still too early at this stage to attempt assessing the overall achievements of the reform with respect to the basic policy objective of a safe and efficient road sector. The only possibly useful indicators currently amenable to measurement would be the level of recovery of costs of the national road network and the efficiency of execution of road maintenance works. However, these are not regarded as reliable indicators for assessing the achievement of the policy objective in a holistic manner. At the least, a holistic assessment could not be limited to a performance assessment of the new entities only, but would also require an assessment of Government's relevant performance.

A suitable framework for a review of the achievements of the road sector reform would be an assessment in terms of the achievement of external and internal efficiency gains. External efficiency relates to the right amount of the use of roads (marginal cost pricing), the right amount of overall resources (e.g. in terms of a cost-benefit analysis), and low cost inputs for road works by way of competition and the use of appropriate contracting formats (cost minimisation). Internal efficiency relates to the effective management of the organisations in the road sector both as concerns cost and quality of output. With some exceptions, neither outcomes nor outputs can be meaningfully measured at this stage.

Consequently, this paper aims at evaluating the performance of the road sector reform in terms of the extent to which envisaged inputs have been delivered and are operational and sustainable, with reference to the specific objectives listed under subsection 1.2.

1.4 Specific limitations of the Review

Two important aspects of the road sector reform, which could not be addressed in this review, are the safety dimension of the policy objective of a "safe and efficient road sector", and the safeguarding of the social dimension of national road network management, as the primary objective of the latter is the achievement of economic efficiency, as in "efficient road sector". An explanation is offered hereunder, which may, however, be more of interest to the informed reader than to the layperson. The latter may wish to skip the remainder of this section.

In documentation on the road sector reform, it has been variously held that the safety dimension should be interpreted in terms of the RA Act, which specifically vests powers in the Minister responsible for transport to prescribe minimum safety standards with respect to the national road infrastructure. Safety standards for road infrastructure have been developed and are in use, but these have not yet been formalised as provided for in the RA Act. The RFA Act places a responsibility for the achievement of a "safe and efficient road sector" also on the RFA, but this is strictly delimited to funding responsibilities for specific types of expenditure. One of these is the funding of costs related to road infrastructure safety standards prescribed in terms of the RA Act. The other is the co-funding of certain costs related to road traffic safety. However, road traffic safety remains under the dominion of the Minister responsible for transport, and the RFA Act does not confer any of this responsibility, nor the responsibility to fund the related costs in full, on the RFA. The latter has interpreted the provisions of its Act to mean that it should provide funding for specified road traffic safety related expenditure subject to the economic efficiency criteria generally applicable to its funding determinations. With due regard to the circumstances described above, it has not been possible to define measurable goalposts for the “safety” dimension of the overall policy objective of the reform.

The reform policies and implementation have been cognisant of the social dimension of providing and preserving the national road network. Broadly, the policy and approach adopted have been as follows: The Roads Authority would be responsible for the management of the whole national road network, the road user charging system would fund the maintenance thereof in full but would provide development funding only to the extent that this is economically justified, and Government would provide the balance of development funding required for projects costing in excess of the economically justified investment amount. Funding for the latter would thus be subject to the setting of national priorities in the same manner as any other of Government’s social responsibilities. To this end, the RA Act vests the Minister responsible for transport with powers to direct the undertaking of any road project or programme for the purpose of improving accessibility to or within any area in Namibia, subject to the availability of funds. Furthermore, the Minister responsible for transport may prescribe minimum standards for roads. Although minimum maintenance standards have not yet been formally prescribed, the RA is in practice applying, as appropriate, such minimum standards as it has defined. The overall allocation of road maintenance funds allocated by the RFA to the RA includes the funds spent on such “minimum maintenance”. As in the case of the “safety” dimension of the reform, no measurable goalposts have been defined with respect to the “social” dimension.

1.5 Overview of the Resource Paper

In section 2, a brief background to the Namibian road sector and the post-reform institutional and funding framework are provided to facilitate an understanding of the matters reviewed in this paper.

Section 3 presents conclusions from an earlier review held in 2001, which are relevant to the review reported in this paper.

In section 4, a review of performance of the road sector reform overall, as well as of the new entities, is presented.

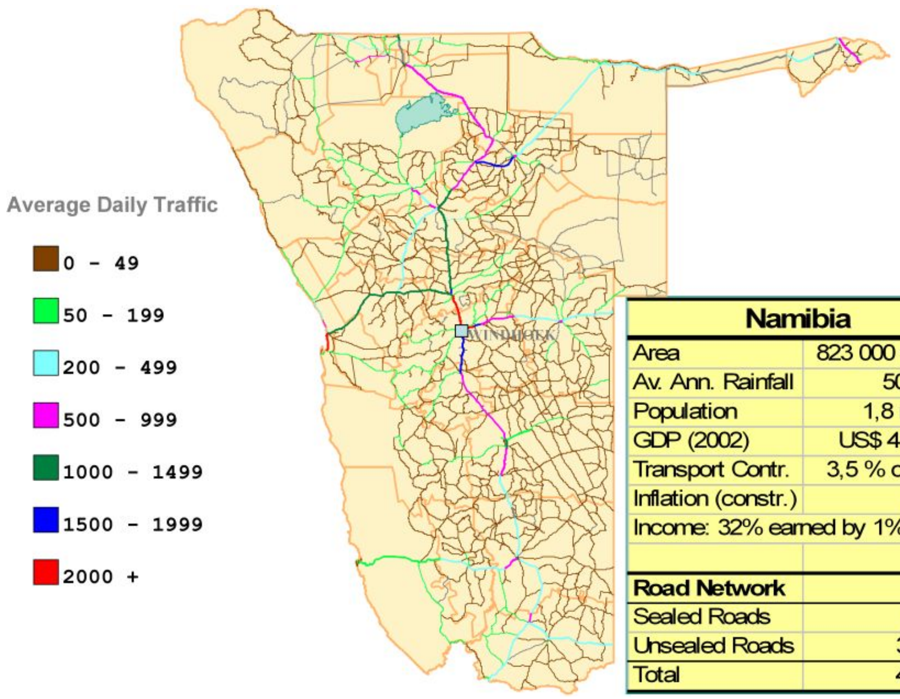
In section 5, the main conclusions from the review are presented, including a concise comparison with international experience in road funds.

2 A Brief Background

2.1 Namibian Road Sector

Notable characteristics of Namibia’s road network are its low traffic volumes (a population of only about 163 000 registered vehicles in December 2004) and its fairly good condition. However, the condition of the sealed road network, of which more than a third is far past its design life, has started deteriorating rapidly. This has created a need for extensive capital outlays for road rehabilitation. A strong need for the expansion and upgrading of the national road network still exists in the populous northern regions of Namibia, in which areas development had been relatively slow before Independence.

Until the new arrangements created through the road sector reform became effective in April 2000, the MWTC was responsible for the development, preservation and management of the national road network. Most road construction work was contracted out, but almost all road maintenance work was performed by the Ministry’s own workforce. All funding for the national road network was provided through Government budgetary allocations.



Namibia	
Area	823 000 sq.km
Av. Ann. Rainfall	500 mm
Population	1,8 million
GDP (2002)	US$ 4 billion
Transport Contr.	3,5 % of GDP
Inflation (constr.)	8% /a
Income: 32% earned by 1% pop.	
Road Network	**[km]**
Sealed Roads	5 500
Unsealed Roads	36 500
Total	42 000

Figure 1: Namibia and its road network

2.2 Post-Reform Institutional and Funding Framework

The expectations of the road sector reform with respect to improved efficiency were to be fulfilled to a large extent by the management and operational functions pertaining to the national road network being performed by professionally managed entities operating unfettered by bureaucracy and undue politics. These entities were the RA, RCC and RFA, which became fully operational on 1 April 2000.

Figure 2 shows the process through which the RFA, RA, RCC (and other private sector contractors) are funded through road user charges and interact towards the achievement of a safe and efficient road sector. With respect to this aim overall, it however represents only the part pertaining to the national road network. Also, while the RCC is shown in a prominent role as one of the three entities created as part of the road sector reform, this should not be construed in terms of predominance of the RCC over other private sector contractors.

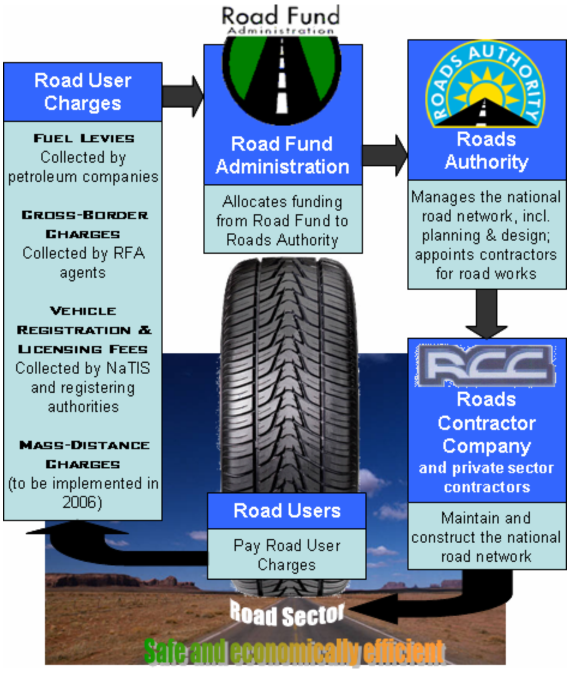


Figure 2: Rolling out the Namibian national road network

- The RA was established out of the former entities responsible for the management of the national road network within the Department of Transport. It was tasked to continue performing primarily this function, as a semi-autonomous Authority acting essentially as an agent of the Minister of Works, Transport and Communication. The latter is responsible for the governance of the RA and for the appointment of its board of directors. The main governance instruments are the performance statement of the RA to the Minister, an annual report in which the RA assesses its achievements in relation to the performance statements, and audited annual financial statements. The RA is governed by a board of five directors, and managed by a chief executive officer and a senior management team of eight. The total staffing of the RA comprises about 350 employees.

- The RCC was created out of former operational entities of the Department of Transport, which were responsible mainly for the maintenance of the Namibian national road network, and which included the earthmoving plant management and supply division of the Department. Its main function was to continue performing road maintenance, as a commercial roadworks contractor registered in terms of the Companies Act. The State is the sole company shareholder, represented through the Minister of Works, Transport and Communication, who is also responsible for the governance of the RCC and for the appointment of its board of directors. The main governance instruments are the performance agreement between the RCC and the Minister, an annual report in which the RCC assesses its achievements in relation to the performance agreement, and audited annual financial statements. The RCC is governed by a board of five directors and managed by a chief executive officer and a senior management team of seven. At its inception in 2000, it took over from the MWTC a staff of about 2 200 employees. This having been far in excess of its staffing requirements for performing its functions in a competitive manner, it has allowed a natural attrition of its staff level to about 1 200 employees in 2005.

- The RFA was the only entity to be completely newly established, as a semi-autonomous Administration under the auspices of the Minister of Finance, but independent from the national treasury. It was tasked to manage the road user charging system, which provides for the independent regulation of road funding in accordance with criteria of economic efficiency, equity and full cost recovery from road users. The road user charging system is the primary source for the funding of the national road network, but it also funds some other road sector related functions. The Minister of Finance is responsible for the governance of the RFA, and appoints its board of directors in consultation with the Minister of Works, Transport and Communication. The main governance instruments are the performance statement of the RFA to the Minister, the RFA's five-year business plan in which it sets out its funding allocations and road user charges determinations, an annual report in which the RFA assesses its achievements in relation to the performance statement, and audited annual financial statements. The RFA is governed by a board of five directors, and managed by a chief executive officer and a senior management team of four. Including the CEO and managers, the RFA operates with a minimal staff complement of 18 employees. Keeping the RFA's staffing small has been made possible by outsourcing most of the operational functions related to the management of the road user charging system.

The Ministry of Works, Transport and Communication has subsequent to the road sector reform retained only the core government functions of policy-making and regulation in the transport sector.

Figure 3 shows the interaction between the various institutions in the road user charging process. The RCC as a commercial company is not part of this process, although like other private sector contractors it benefits indirectly therefrom.

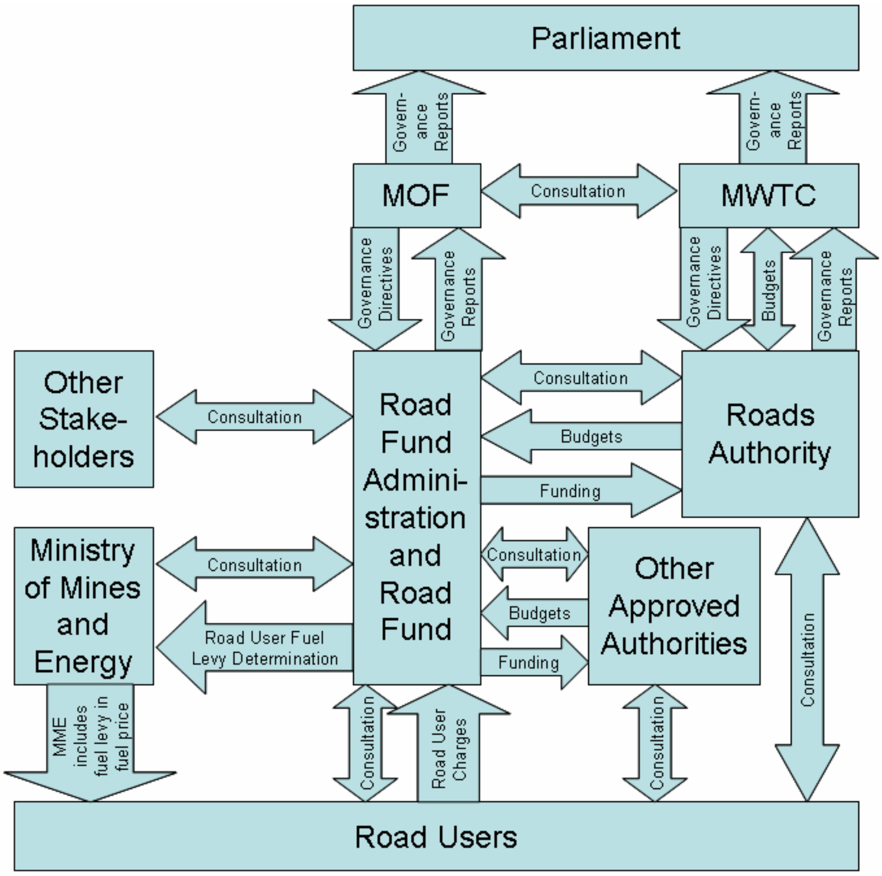


Figure 3: The road user charging process and its role players

3 Conclusions from Road Sector Reform Review Meeting in 2001

The success of the road sector reform first came under scrutiny when the Minister of Works, Transport and Communication convened a Road Sector Reform Review Meeting in November 2001, to which all major road sector stakeholders were invited. The objective was to review progress in implementing the reform and to identify problems and measures to deal with them.

The main finding of the Review Meeting was a general agreement on the road sector reform having been necessary and resulting in an improvement on the previously existing arrangements. An important conclusion was that the administrators within the new system had been given clearly defined obligations as well as an extensive policy and legal framework to assist them. The RA, in its role of manager of the national road network, was applying pressure for increased funding allocations from the Road Fund based on economic efficiency principles. However, due to concerns about fuel levy increases, the RFA was constrained in fulfilling its role of regulating road funding in accordance with such principles. Furthermore, it was hesitant to utilise available concessional loan facilities in foreign currency, due to the risks involved for the future solvency of the Road Fund.

The main issues identified were:

- Optimum levels of funding were not yet attainable, as the initial levels of road user charges that the RFA had inherited from the previous dispensation had been significantly below the levels required for the recovery of costs of the national road network; this resulted in an increasing backlog in road maintenance and rehabilitation.
- The RCC experienced problems in increasing its efficiency sufficiently to become competitive with private sector contractors and self-sustaining within the legislated three-year transition period; this meant that in addition to the problem of suboptimal levels of funding, road users continued funding inefficiencies (though to a lesser extent than under the previous dispensation).
- The need for improved stakeholder participation and understanding of the road user charging system.

Since the achievement of optimal budgets for road maintenance emerged as a key issue, and with that, their relationship to the underlying unit costs of maintenance works, it was regarded as essential for the RCC to emerge as a fully competitive contractor at the end of the 3-year transition period. It was agreed that unless this issue were to be resolved as a matter of urgency, it could threaten the success of the entire road sector reform process.

From the recommendations arising out of the Review Meeting, the following three themes could be identified:

1) <u>Funding</u>: Both the RFA and the RA need to re-visit the determination of optimal funding levels, including the size of the road network and associated service levels, and the cost effectiveness of road works execution.
2) <u>RCC commercialisation</u>: A strategy needs to be implemented for turning around the RCC into a commercially competitive company.
3) <u>Stakeholder participation</u>: Increased efforts should be made by the Road Fund Administration and the Roads Authority to promote the participation of stakeholders, such as road users, to obtain their understanding of the principles of road funding and their support for roads expenditure programmes and the related road user charges.

4 Review of Performance

4.1 Overall performance related to road sector reform objectives

An important measure of the overall achievement of the road sector reform would be an improvement in the national road network condition. Unfortunately, at this stage, it is still too early to be able to demonstrate how efficiency and funding improvements since the reform have ultimately affected the condition of the national road network. Due to various difficulties that the RA experienced with its road management system, it has not yet managed to complete a comprehensive road network survey since 2001. The existing survey data is mostly prior to the reform, and shows a clear trend of deterioration in the overall road network condition prior to the road sector reform and up to 2001. As shown in Figure 4, a pronounced decline in the structural condition of trunk roads and the overall condition of district roads is noticeable as from 1996. Extensive network condition surveys are planned for 2006, the results of which should be informative about the road sector reform's impacts on the road network condition. Evidence of some overall improvement in the condition of trunk roads may be expected, these having been the main beneficiaries of spending on road rehabilitation since 2000.

Figure 4: Road network condition development

Other indicators for overall performance with regard to road sector reform objectives are summarised below and are discussed in some more detail under the individual performance assessments of the relevant entities following in subsection 4.2.

Concerning the objective of **implementing cost recovery policies and systems and regulating road sector funding based on economic efficiency principles** (among others), the Medium- to Long-term Roads Master Plan (MLTRMP) prepared by the RA has laid the basis for **quantifying the long-term optimised development, preservation and funding needs for the national road network**. Based on this, the RFA has after consultation with the RA subsequently made a **funding determination in principle** regarding the level of road network funding that it would support.

The RFA has been successful in developing and partially implementing a long-term road user charging strategy according to which **the achievement of the funding levels as determined by the RFA would have been feasible by the financial year 2004/05**. This would have required continued moderate increases in road user charges, including fuel levies, as presented in the RFA's business plans, which had been supported by most stakeholders at the annual public business plan consultations.

During the initial years, considerable improvement in the funding of the national road network has been achieved, as shown by the reported expenditure of the RA (amounts shown in N$ millions).

2000/1[2]	2001/2[2]	2002/3[2]	2003/4[3]	2004/5[3]	2005/6[4]
384,6	425,5	596,5	658,0	777,0	568,7

By the financial year 2004/5, the expenditure on the national road network had come close to the funding as determined by the RFA on the basis of the MLTRMP. The achievement of this aim was facilitated by the RFA issuing loan stock for N$ 650 million to date, for the funding of mainly road rehabilitation projects. However, with the RFA being prevented by the Ministry of Mines and Energy (MME) from regulating road user fuel levies in terms of the RFA Act, as discussed under the performance review of the RFA hereafter, further borrowings and maintaining the achieved level of expenditure became unsustainable, resulting in the dramatic drop in the allocation of funds as from 2005/6.

As a result, **the current funding of the national road network is considerably below the determined funding requirements**. Similarly, concerns exist that funding from road user charges allocated to the maintenance of urban streets and traffic safety law enforcement, which the Road Fund is statutorily obliged to co-fund, is inadequate.

In consideration of the above, including the initial difficulties experienced, it may nevertheless be concluded that **a sound basis has been laid in legislation, and to some extent in practice, for the regulation of road sector funding and road user charges.** However, should the RFA remain unable to effectively regulate road user fuel levies due to the resistance of the Ministry of Mines and Energy against road user fuel levy increases, this would at least in the short- to medium-term have negative effects on the achievement of a safe and efficient road sector. Until such time that the RFA has implemented more sophisticated alternative road user charging instruments, which would also be less cost efficient and more resource intensive in administration and traffic law enforcement, it would be:

- **Impossible to secure sufficient funding for the achievement of a safe and efficient road sector**; if the increase in revenues from fuel levies does not keep pace with at least inflation, it would mean that about 75% of the Road Fund's revenues would keep lagging behind inflation, and this lag would be difficult to compensate for through any alternative road user charging instrument; and
- **Impossible to achieve marginal cost pricing** (see 4.2.1, page 14) **for the use of the road network to the extent envisaged in the underlying policy, and the concomitant aims of efficiency and equity** as written into the RFA Act; among the various road user charges, the fuel levy is the only available marginal cost pricing instrument for light and medium-heavy vehicles, and for mass-distance charges to become a truly marginal cost-pricing instrument for heavy vehicles, would require more sophisticated systems than can be implemented and adequately administered and enforced currently.

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[2] Annual Reports of the Roads Authority

[3] RFA Business Plans

[4] Latest available draft Business Plan of the RFA for 2005/06 – 2009/10, which at the time of writing this review report was still in progress depending on negotiations with the Ministry of Finance.

Regarding the objective of promoting transparency in funding, the following has been achieved:

- Road user charges being paid into and disbursed out of the Road Fund, thereby clearly separating these from general revenue taxes;
- Public consultations on and publication of the RFA's Business Plan; and
- Annual reporting by both the RFA and RA to their respective Ministers and ultimately the Parliament.

The review cannot express itself on the achievement of the **objective of separating the operational and regulatory functions of the former MWTC** without an assessment of the achievements of the MWTC in this regard, which is outside the scope of this review. The establishment of the RCC and RA, however, resulted in a **substantial decrease in the size of the MWTC**. Its former establishment of about 5 500 employees was reduced to about 3 100, with about 2 200 employees transferred to the RCC and about 200 to the RA. The crucial responsibility of transforming these staff transfers into actual efficiency gains was thus devolved onto the RCC and the RA, and to some extent also the RFA. The latter has a legislated responsibility to monitor the efficient utilisation of the funds it allocates from the road user charging system.

The observation made during the Road Sector Reform Review Meeting in 2001, namely that the reform had been necessary and had resulted in an improvement on the previously existing arrangements, has thus been substantiated in the subsequent years. Further **efficiency increases have since been achieved by the RCC** and considerable **efficiency benefits have been gained from the development of other small entrepreneurs in the road maintenance industry**. This is discussed further under the review of performance of the RCC and RA.

Although having been identified as a high priority area for attention during the Review Meeting in 2001, **public relations have since the review received little attention from both the RA and the RFA**. As a result, with the exception of the organised transport industry, the road using public and other stakeholders have remained largely uninformed about the reform. Fuel price increases published by the MME (and from which the RFA very seldom benefited in terms of a road user fuel levy increase) and licence fee increases published by the RFA regularly attract the attention of the press. On the one hand, few efforts have been made by the RFA to better inform road users about the increases; however, on the other hand, public reaction by road users to such increases (and to the press publicity given thereto) was also conspicuously absent.

4.2 The new entities' performance related road sector reform objectives

4.2.1 Road Fund Administration

The RFA's performance should be evaluated in terms of its main functions, namely:

- The regulation of road funding, chiefly through the funding determinations made by the RFA, in terms of economic efficiency, equity and cost recovery criteria;
- The raising of sufficient revenue by imposing equitable and stable road user charges; and
- The management of the Road Fund in accordance with principles of sound financial management.

Without delving too deeply into technicalities, it may assist an understanding of the RFA's road funding regulatory function to recognise that the marginal cost pricing of the use of roads is the main underlying philosophy of the Namibian road user charging system. Essentially, according to this philosophy, every additional vehicle travelling on a road imposes an additional ("marginal") cost through a marginal "consumption" of the road. Furthermore, it is accepted that every additional work effort expended on the road to compensate for the effects of such consumption, would cause an additional benefit to road users in the form of a marginal road user cost[5] saving due the resultant improved road condition. The level of work effort to compensate for "road consumption", at which the best economic efficiency is achieved, is the point where the price for every marginal additional work effort is balanced by the resultant additional amount saved on road user costs.

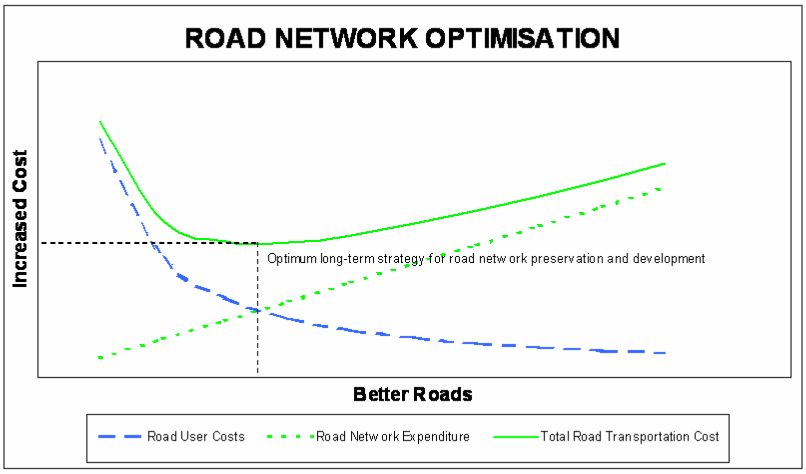

Figure 5: Road Network Optimisation

It is this economic philosophy, which found expression in the RFA Act through the latter's principles of efficiency, equity and cost recovery. The recommendation thereof was presented to Cabinet in the "Report of the Interministerial Committee of Technical Experts on the Proposed System of Road User Charges, 1994". The Committee (commonly referred to as the ICTE) comprised representatives of the major stakeholder Ministries, most notably: Finance; Works, Transport, and Communication; and Mines and Energy.

The **funding determinations**, which the RFA is required to make in terms of its Act for the purpose of regulating road funding, give partial effect to the marginal cost pricing philosophy, in that they **determine the cost of road use**. The determinations are based on five-year budgets submitted to the RFA by the RA and other authorities approved for funding from the Road Fund (referred to as "approved authorities"). Projects and programmes of the RA, pertaining to the management of the national road network, are to be submitted for any five-year period within a medium- to long-term development and preservation plan for the national road network, optimised in accordance with the principles of marginal cost pricing. The RFA assesses these budgets in accordance with the criteria prescribed in the RFA Act (mainly economic efficiency), including the rules and principles referred to in the next paragraph, and makes its funding determinations accordingly.

The RFA is legally required to **set rules and principles** for preparing and evaluating the budgets to be submitted by the RA and other approved authorities for funding from the Road Fund. **Most importantly, these rules and principles give practical expression to the RFA Act's economic efficiency criteria**. **Having been completed during 2005**, after extensive stakeholder consultations, the RA and other approved authorities are now required

[5] Road user costs are usually taken to comprise vehicle operating costs (excluding any road user charges), time and accident costs, which tend to increase as the condition of the road network deteriorates. Road user charges are used for paying for the road network expenditure, and therefore increase as more effort is expended on improving the condition of the road network.

to submit their budgets to the RFA in compliance with these rules and principles. However, it is still too early at this stage to assess how successfully these are being complied with in practice.

Subsequent to the determination of funding to be availed through the road user charging system, the RFA is required to **determine the rates of road user charges to be imposed,** thereby giving further effect to the marginal cost pricing philosophy. These determinations are intended to ensure that the price for the cost of road use is paid by road users equitably in relation to their use of and benefit from the road network. At the time of the review, road user charges mainly comprised **road user levies on diesel and gasoline** (being separate from the general revenue levies on fuel imposed by Government), **vehicle licence and registration fees**, and **cross-border transit charges** on foreign registered vehicles as an equitable equivalent of the licence fees paid by Namibian registered vehicles. The RFA Act also provides for the imposition of **mass-distance charges (MDC) on heavy vehicles,** but the implementation thereof had previously been delayed and is now scheduled to commence in 2006. The implementation of the MDC proved to be a contentious issue, strongly resisted by the organised trucking industry mainly on grounds of inefficiency and inequity. The latter was feared to arise due to technical weaknesses in the required travelling distance measurement systems, and consequent problems of adequately policing such a system to prevent illegal evasion of the charge. Instead, the industry strongly favoured the utilisation of fuel levies to recover the costs that were intended to have been recovered through the MDC. The RFA adopted a cautious approach and conducted various studies on the MDC. Given the known technical and traffic law enforcement weaknesses, the RFA was not convinced that the implementation of MDC under these constraints would indeed serve to improve the efficiency and equity of road user charges, a caution that the findings of the Road User Charging System Review (see page18) eventually confirmed as appropriate.

In accordance with the marginal cost pricing philosophy, the ICTE recommended that vehicle registration and licence fees should be set such as to recover the fixed (non-traffic related) cost of road use, and that road user fuel levies and the MDC should be set such as to recover the marginal (traffic-related) cost of road use. The MDC in particular was to be used to equitably impose on heavy vehicles such portion of the price of their road use as could not be recovered through fuel levies only, with the cost of road use of heavy vehicles increasing with the laden vehicle mass in a higher proportion than their increase in fuel consumption. Pricing by means of fuel levies only, would thus result in light trucks cross-subsidising heavy trucks. However, anticipating similar issues as were raised by the trucking industry, the ICTE recommended that as an alternative to the MDC, costs could in the interim be recovered through increased licence fees until a satisfactory solution for the implementation of MDC had been found. Since this would have resulted in roughly a trebling of then existing licence fees, this recommendation was not accepted. In fact, due to the low vehicle population in Namibia, it was found that licence fees would have to be substantially increased with a view to fully recovering fixed costs by means of the latter. The Cabinet at that stage did not accept this, with the result that a decision was eventually taken to attempt recovering only about 50% of the fixed costs by means of licence fees, with the remainder of fixed costs to be recovered by means of fuel levies.

The funding and road user charges determinations of the RFA, made in accordance with the aforementioned principles, are presented in a five-year rolling-forward "**business plan**" (as referred to in the RFA Act) of the RFA, listing all projects[6] and programmes[7] to which funding would be allocated from the Road Fund, and the amounts and timing of such funding. The **RFA's business plan could thus be seen as a "moving window" onto the longer term**

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[6] A project is defined by an output achieved after a given activity period.

[7] A programme is defined by annually recurrent outputs.

plans for the management of the national road network. The rates of road user charges as determined by the RFA are likewise published in the business plan.

The RFA Act prescribes the **business plan to be prepared after consultation with stakeholders**, and the final business plan to be adopted by the RFA's board at least two months before the beginning of the ensuing financial year.

The RFA has succeeded in implementing a framework and processes for the regulation of road funding as envisaged in the RFA Act and as briefly outlined above, albeit after some initial challenges.

Based on the MLTRMP, the RFA has made a **funding determination in principle**[8] that it would support the full level of funding indicated in the plan with respect to the unpaved road network, but with respect to the bitumen road network it would support only 60% of the level of funding indicated in the plan. The latter determination was based mainly on indications that, within the accuracy constraints of the data used in the analysis, the reduced funding level would still result in close to optimal results; therefore, it would apply until such time that the MLTRMP has been revised on the basis of further road network data to be collected.

In order to bridge the gap between the low revenue from road user charges available in the first few years and the short-term funding requirements, the RFA has been obliged to consider the financing of roads projects by means of loans. Initially, a conservative loan strategy was adopted, but in 2002, the RFA decided to **borrow money mainly for dealing with road rehabilitation backlogs**. This was executed, in local currency in order to eliminate currency risks, in the form of an issue of RFA 10 loan stock for up to N$ 750 million, with a ten-year maturity period. The amount of loan funding was negotiated with and guaranteed by the Government based on a road user charging strategy presented in the RFA's business plan for 2002/03 – 2006/07, which would have kept future loan repayments within manageable limits.

The RFA has further succeeded in **developing and partially implementing a road user charging strategy that would have made the achievement of the funding levels as determined by the RFA feasible, and would have led to long-term sustainable and stable rates of road user charges**. The total road network funding from road user charges, from the loan stock issues discussed further below, and from loans to Government by its development co-operation partners, rapidly increased in the financial years since 2002/03. In 2004/05, funding would have reached the level in accordance with the RFA's determination. This would have required continued moderate increases in road user charges as presented in the RFA's business plans, which had been supported by most stakeholders at the annual public business plan consultations.

However, **subsequent actions by the MME that prevented the RFA from regulating road user fuel levies as provided for in the RFA's business plans have since negated the road user charging strategy as presented**. As a result, the RFA found it unsustainable to issue further loan stock beyond the nominal value of N$ 650 million for which stock had been issued between 2002 and 2004. Consequently, the RFA also found itself unable to continue with the funding of the Namibian contribution towards donor loans, which would adversely affect a number of ongoing projects managed by the RA. Consultations between the RFA and the MOF in November 2004 to apprise the latter of the problems that were arising and canvass its support for an increase in the road user levies on fuel were unsuccessful.

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[8] The said funding determination was made in principle, because in accordance with the RFA Act, funding determinations have to made for specific projects and programmes in the business plan. However, with the RFA being prevented from regulating road user fuel levies, which yield about 75% of its revenue, it had become meaningless to make funding determinations for projects and programmes without any prospect of these being funded within the five-year period of the business plan.

The resistance of the MME against increases in the road user charge on fuel had already manifested itself as from the year 2000, when the MME declined to include the fuel levy determination made by the RFA in terms of its Act in the price of fuel (refer to Figure 3 for the process involved). It claimed the determination of fuel levies to be the autonomous privilege of the MME in terms of the Petroleum Products and Energy Act (PPE Act)[9]. Despite the provisions of the RFA Act giving the mandate for the regulation of road user fuel levies to the RFA, the RFA has thus been effectively prevented from exercising this regulatory mandate right from the first year of its existence.

Although the basic policy objectives of the road user charging system had not yet been formally challenged, due to the aforementioned resistance to increases in the road user fuel levy and questions of legal interpretation, **the RFA performed a Road User Charging System Review with the purpose of reviewing the strengths and weaknesses of the legislation and the practical aspects of implementing road user charges**. This project was launched in mid 2003 and was essentially completed by the end of 2004. The Review:

- **Essentially confirmed the soundness of the road user charging system** as had been implemented, also confirming this to provide the best balance of efficiency and equity, as well as the strategies that the RFA had attempted to pursue with regard to road user charging;
- **Identified a number of weaknesses in the legislation**, and made proposals on how to overcome these; and
- **Provided the RFA with a strategy for implementing a mass-distance charging system** according to a phased approach, beginning with a simple system and progressing to a more technically advanced system as international experience with such systems progressed, thereby reducing Namibia's risks in the implementation of such a system. At the time of writing, Cabinet announced its approval for the RFA to commence with the implementation of a mass-distance charging system, likely to be rolled out in the course of 2006.

Realising that **the apparent conflict between the RFA and PPE Acts should most appropriately be resolved at a Government policy level**, the RFA has attempted, but thus far not succeeded, to engage political office bearers in a high-level debate about a review and reconfirmation of the road user charging policy. While the RFA has to date been unable to resolve the dilemma of not being able to give effect to the object and core provisions of the RFA Act, joint efforts by the RFA and RA to resolve the dilemma at Government policy level are continuing with the involvement of the Minister of Works, Transport and Communication.

With respect to the management of the Road Fund, the RFA has to date succeeded in managing revenue and expenditure in such manner that the Road Fund has always had adequate liquidity in the short term. A notably successful system implemented by the RFA is the refunding of the road user fuel levy, which is included in the price of diesel used off-road by various identified industries. The potential impact that a road user fuel levy has on the economy in general is one of the vexing problems that road user charging systems suffer world-wide. **With the implementation of an effective and cost-efficient off-road fuel levy refunding system, the RFA has managed to limit the negative effects that road user fuel levies might have had on economic activities dependent on the off-road use of fuel.**

The RFA, in compliance with the requirements of its Act, maintains separate financial records and statements for its own administrative finances and for the Road Fund. The statements of

[9] Legal opinions obtained by the RFA confirmed that the MME's claim to the right of refusing to include the road user fuel levy in the price of fuel cannot be substantiated legally.

the Road Fund can briefly be summarised as follows, for the years since its establishment. The figures for 2004/05 are a business plan projection.

Road Fund Account [N$ millions]	**2000/01**	**2001/02**	**2002/03**	**2003/04**	**2004/05**
Non-current Assets	0.0	0.0	0.0	0.0	41.3
Current Assets	88.5	123.6	284.4	305.4	193.1
Accumulated Funds / (Deficit)	**16.9**	**(13.5)**	**(151.1)**	**(308.9)**	**(615.6)**
Non-current Liabilities[10]	0.0	0.0	200.0	400.0	650.0
Current Liabilities	71.6	137.1	235.5	214.3	200.0
Revenue	405.9	413.2	486.5	511.6	645.9
Transfers[11]	389.0	443.6	624.1	669.4	952.6
Net surplus/ (shortfall) for the year	**16.9**	**(30.4)**	**(137.6)**	**(157.8)**	**(306.7)**

From the above it is evident that the Fund, due to the loan stock issue, appears to be in a serious deficit – technically, it could be regarded as being insolvent. The problem arises due to the fact that the road network remains the property of the State, and any investments in this asset are therefore not reflected in the Fund's financial statements, leaving the amount borrowed (and reflected in the Fund's statements) for the purposes of such investments without a balancing counter-entry. As a result, while the financial statements of the Road Fund raise questions about the Fund's solvency they also raise questions about whether the financial statements in their current format "present a true reflection of the state of the Fund's business", as required in terms of Generally Accepted Accounting Practice. In particular, the question of how the Fund's future revenues would be utilised towards servicing the Fund's liabilities to protect the Fund's solvency remains unanswered by the financial statements. However, the answer thereto would be found in the long-term financial plan of the RFA. The latter presents a strategy for covering the initial peak demand for funds through the loan stock issued, gradually increasing the rates of road user charges to long-term stable rates, and utilising the forecast excess of revenue over funding demands, following the initial peak funding period, to redeem the loan stock liability. The need for representing the Fund's financial situation in a more appropriate manner, to specifically address the solvency issue, is evident.

4.2.2 Roads Authority

4.2.2.1 Management of the national road network

The RA's performance should be evaluated in terms of its main function, which is to efficiently manage the national road network subject to the funds at its disposal. It has a responsibility though to quantify and motivate to the RFA the funds it requires for the performance of its functions towards the achievement of its object of a safe and efficient road sector.

With respect to the **quantification and motivation of the funding requirements with a view to achieving a safe and efficient road sector**, the RA appointed a consulting firm for preparing its MLTRMP. This was finalised at the end of November 2003, and has laid the basis for **quantifying the long-term optimised development, preservation and funding needs for the national road network**, in keeping with the philosophy of marginal cost pricing of the use of roads. While some concerns remain about the accuracy of the plan's funding estimate due to data limitations, the RFA had ordered an independent expert audit of the MLTRMP, which confirmed the technical soundness of the plan.

[10] Non-current liabilities arising out of the issuing of RFA 10 loan stock.

[11] Transfers constitute the allocation of funds to Approved Authorities in accordance with funding determinations made by the RFA, for approved expenditure funded from the road user charging system.

To facilitate the efficient management of the national road network, the RA has established a road management system (RMS), capable of providing the extensive information required. Initially, an extensive road network survey was carried out in 2001, supporting the further development of the RMS. Further extensive surveys are planned for 2006, and it is anticipated that the RA will then be in a position to competently utilise the RMS in updating the MLTRMP based on more accurate and comprehensive data than was available for the initial preparation thereof. It is anticipated that the RMS would play an important role in allowing the RA to correctly price the use of roads in accordance with the marginal cost pricing philosophy underlying the road user charging system.

The RA's main challenge with regard to the management of the national road network lay in the limited available funding from the Road Fund, which has resulted in an increasing backlog in the rehabilitation of the older parts of the paved road network. For this purpose, a level of funding considerably higher than normal would have been required in the short- to medium-term. At least, the **RA managed in completing the rehabilitation and improvement of several of the highest priority roads**. In addition, the **upgrading of remaining gravel road links to neighbouring countries to bitumen roads has been completed**.

Visitors to Namibia have in general been favourably impressed with the standard of Namibia's roads, an impression that the RA has been able to maintain despite the overall shortage of funds. Not least, this can be attributed to the RA's well-managed use of the available funds for road maintenance, with expenditure having been consistently within no more than 5% of the target. The RA has to date still **managed to routinely maintain the paved road network adequately to arrest any arising defects from aggravating**, except in the case of some road sections that have already far exceeded their design lives. Unfortunately, this applies to more than a third of the Namibian paved road network, and due to the aforementioned constraints on the funding of road rehabilitation works, the situation is bound to worsen rapidly. The RA also **managed to keep up the routine road maintenance of the unpaved parts of the national road network adequately** to ensure that the service levels continued to be acceptable to road users in Namibia. However, with a longer term view, it has become evident that the condition of the Namibian unpaved road network is declining overall. In particular, the current rate of replacement of gravel surfaces is below the loss rate.

The success that has been achieved in **the improvement of the RCC's efficiency since its establishment is largely due to the efforts of the RA**. These comprised close and expert scrutiny of the RCC's tendered rates, and exerting focussed pressure on the RCC in the negotiation of contract rates, as well as attention by the RA's engineers to the RCC's adherence to the negotiated parameters in its contract performance. In addition thereto, **the RA has pursued a strategy of developing new small entrepreneurs in road maintenance and increasingly outsourcing work to these**, with the RCC being allowed to competitively tender for a portion of this work. **Notable efficiency improvements have thus been achieved with respect to road maintenance**. This will be further discussed under the performance review of the RCC.

It can thus be concluded that **the Roads Authority has developed into an effectively functioning organisation** capable of performing its main function, as well as performing the additional duties which have either been assigned to it or for which it has been contracted by the Minister responsible for transport. While it has from its inception been somewhat hampered by a shortage of personnel in its technical establishment, the RA has implemented measures to redress the situation, most notably a bursary scheme for the training of engineers and technicians. The RA was also a major beneficiary with respect to the recruitment of engineers who were trained during the years of the road sector reform under **a bursary scheme of the MWTC funded by the Swedish International Development Co-operation Agency**, Sida, from 1997 to 2003. The scheme had been established in anticipation of the shortage of engineering skills to meet the requirements of the three new entities, and was managed by the Engineering Professions Association of Namibia, a non-profit voluntary association of engineering professionals. **By the end of its operations, 23 engineers and 1 transport economist had been trained with financial assistance by the scheme**.

On a somewhat different note, but related to the matter of efficient utilisation of funds, it may be mentioned that the RA in particular, but also the RFA, have been subject to scrutiny by a Presidential Commission of Inquiry, following charges of a misappropriation of funds. Both entities were essentially exonerated from these charges. In a society that has been rocked by several reports of public funds being misappropriated by semi-state institutions, it serves to the credit of the RA and RFA to have successfully withstood public scrutiny. This brings to the fore the achievement of one of the aims of the road sector reform, namely the improvement of transparency in the utilisation of funds in the road sector. Whereas similar public scrutiny has been focused on several semi-state institutions, this has not been applied to the same extent to Government Ministries.

One of the main problems that the RA has experienced is that **it has to date not yet been able to launch an effective public relations campaign** to motivate to road users the merits of its road network management plans with a view to achieving its object of a safe and efficient road sector. This would have been all the more important to counter the negative perceptions created by the Presidential Commission of Inquiry. Since the RFA likewise carries a responsibility for the achievement of the said object, albeit primarily as an independent funding regulator required to objectively make funding decisions independent of the RA's motivations to road users, **an appropriately co-ordinated public relations campaign of the RA and RFA might be the most effective**.

4.2.2.2 Management of the Namibian Traffic Information System

The Roads Authority currently operates the Namibian Traffic Information System (NaTIS), and also performs a number of related functions such as the issuing of road transport permits, the operation of the Cross Border Road Transportation System, the operation of vehicle-testing stations and driving testing centres, and the issuing of various licenses (e.g. driving licences).

Since these functions are not part of the RA's main function of the management of the national road network, but are performed on behalf of the Minister for Works, Transport and Communication in terms of the Road Traffic and Transport Act, it was considered appropriate to deal with these under a separate heading.

The Roads Authority has implemented a number of the modules forming part of NaTIS to support the performance of it various functions, based on the NATIS system developed and operated in South Africa, but customised for Namibia. In addition to such other functions, **the RA uses NaTIS to collect vehicle registration and licensing fees on behalf of the Road Fund Administration**, in which it has been remarkably successful, particularly with regard to the minimisation of fraud and evasion losses. By all accounts, NaTIS performs its various other functions equally well.

In general, **the Division of the RA tasked with the management of NaTIS has built itself a solid reputation for good customer relations and the competent handling of its business**. It is regarded as a good candidate for conversion into a stand-alone, commercially operating enterprise. Some discussions with a view to this have already been held between the RA and RFA.

4.2.3 Roads Contractor Company

At the time of the Road Sector Reform Review Meeting in 2001, it had already become apparent that **the RCC would be unable to become fully commercially competitive during the first three years of its operation, as had been originally envisaged. To**

redress this situation, a turn-around strategy was implemented as from 2003, and the RA has continued providing the RCC with a minimum guaranteed road maintenance work load to facilitate the latter's progress towards full competitiveness[12]. The RCC has since then indeed shown remarkable progress, which will be briefly discussed below.

The need for a turn-around strategy, as identified during the in 2001, led the Minister of Works, Transport and Communication to initiate an independent review of the performance of the RCC at the end of 2002. The review report submitted during February 2003 ascribed the RCC's problems to mainly the following factors:

- Serious deviations from key principles of the reform, which were: right-sizing, Treasury funding for social obligations to surplus staff, organisational decentralisation, and joint-venturing with private companies;
- Lack of focus on its core competency in maintenance and premature diversification into construction, without joint-venturing to build the RCC's capacity in this field;
- An underestimation of the scope and complexity of the transformational task, including an inadequate emphasis on changing to a competitive organisational culture; and
- Corporate governance failures.

The RCC, however, saw its problems from a somewhat different perspective and emphasised its core problems as:

- Inadequate financial resources and appropriately skilled human resources;
- Commencement of operations with aged plant and equipment; and
- Overstaffing, due to the numbers of staff that the RCC had to take over from the MWTC, for the purposes of what should have been its core business, namely road maintenance. In particular the latter had forced it to diversify into construction, although it acknowledged its weakness in this area and admitted to having suffered heavy losses as a consequence.

According to the RCC management, the difficulties being experienced by the RCC as a result of the public service obligations transferred to it at the time of its inception (i.e., the transfer of about 700 staff in excess of its needs), had become a major drain on performance. This has not only affected its capacity to become fully competitive to date, but was also hampering attempts to develop the company's commercial orientation.

The review report of February 2003 concluded that road users were still burdened with a 20% - 30% inefficiency cost premium on road maintenance works performed by the RCC. The main components of the recommended turn-around strategy were:

- Commercialisation of the RCC should be confirmed as a means to the end of achieving efficiency, rather than as an end in itself.
- Therefore, the reform of the RCC should be brought back on track in accordance with the principles of the reform, instead of remaining merely cosmetic, which had been the factual, even if not intended, result. To this end, it would be necessary to:

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[12] The RA Act made it compulsory to allocate to the RCC certain specified work for the first three years after implementation, but it does not inhibit the RA from continuing with such work allocation thereafter. The RA is accountable to the Minister responsible for transport, in terms of its Performance Statement to the Minister, for the efficient utilisation of the funds allocated to it, including funds from the RFA. The Road User Charging System Review undertaken by the RFA has confirmed that the Minister responsible for transport, and not the RFA, carries the ultimate responsibility for the efficient utilisation of funds by the RA. The RA is thus empowered, albeit after consultation with the RFA and with the permission of the Minister responsible for transport, to continue with the preferential allocation of work to the RCC. This has, though, remained a contentious issue with the RFA. The latter has shown understanding for the broader context within which the RA has decided on the approach taken, such as the need for empowering small private sector contractors to deliver better work quality and reliability, which currently makes for a poor comparison of prices between the RCC and the private sector. Nevertheless, the RFA would prefer a stronger commercial imperative being imposed on the RCC to become commercially competitive.

- Refocus the RCC on its core business of road maintenance;
- Right-size, restructure and decentralise the RCC organisation;
- Improve operational efficiency, management and corporate governance, including the provision of transitional management support to build lacking core competencies; and
- Restructure the finances of the RCC.

In implementing elements of the turn-around strategy recommended in the review report, the **RCC has to some extent restructured and decentralised**, and refocused on road maintenance. The RCC is now also **venturing into road construction more cautiously, through joint ventures** with established private construction companies. The **problems experienced with respect to aged and redundant plant are being pro-actively addressed**, with the agreements between the RA and RCC containing an incentive element to this effect. The RCC continues to diversify in an effort to productively employ personnel who are still in excess of its road maintenance business requirements, and to reduce its dependence on the RA as its main client. From an early beginning in railway line construction, it has recently ventured into property development and the acquisition of a brick and concrete factory.

When the RCC's transitional period expired on 31 March 2003, it became necessary to put in place further formal arrangements between the RCC and the RA to extend the transitional period. Subsequent **Executive Agreements have been signed between the RA and RCC, which have extended the transitional arrangements up to March 2009**. In terms of the agreements the RCC would receive road maintenance contracts from the RA for each year following the 2002/03 financial year for an amount that represents a "base workload", granting the RCC a realistic opportunity of breaking even on its road maintenance work. For the period from 2003 to 2006 this was set at N$237 million annually, and for the period from 2006 to 2009 at N$210 million annually, excluding VAT. **During this period the RCC is required to annually show efficiency improvements** and, based thereon, additional work may be allocated as an incentive. As a condition of the arrangement, the RCC shall subcontract at least 15% of the annual contract value to emerging contractors.

A report prepared for the RA on contract rates negotiated with the RCC in accordance with the aforementioned agreements shows **substantial improvements in the performance related figures for the period from 2000 to 2005** (projected for the last year):

- Plant, personnel and material input costs increased by 7% - 8%, and fuel costs by 3%, annually;
- However, over the 5-year period of analysis, production targets increased by between 14% and 140%;
- As a result, negotiated rates over the period have decreased by 7,5% annually, compensated for the general national inflation rate.

The RCC cannot yet compete with the private sector in the routine blading maintenance of roads, where private contractors' rates are typically up to half of the rates of the RCC. However, caution is advised in this case, since the RA has found that private sector services are often rendered below sustainable cost levels, which in turn affects the quality and reliability of these services. The need for improving the quality and reliability of work of private sector entrepreneurs in road-building has emerged as a clear necessity, before a fair comparison can be made between the RCC and private contractors.

The RCC's **financial performance** can be summarised in terms of net profits and losses before tax as shown in the table below (amounts in N$ million). The RCC's performance, however, cannot be evaluated solely on the basis of its income statement figures, because it did not compete for work with other similar companies, and its unit work rates were therefore not subjected to testing in a market environment.

Roads Contractor Company: Net Profits and Losses before tax				
2000/01	**2001/02**	**2002/03**	**2003/04**	**2004/05**
24,9	(19,2)	0,5	(1,9)	8,3

In the financial year 2004/5, the RCC has for the first time managed to exceed its budgeted revenue, surpassing the N$400 million mark and realising a net revenue growth of 18,4%. In the current financial year (2005/6), it is aiming for a net profit before tax of N$18 million.

Despite common consensus that the RCC is to date still not yet fully competitive in a commercial environment, **cautious confidence exists that the road maintenance component of the RCC would become fully competitive by the end of the current Executive Agreement in March 2009**.

4.3 Corporate governance of the new entities

The road sector reform legislation has placed potentially strong corporate governance instruments at the disposal of the Minister of Finance, with respect to the RFA, and the Minister of Works, Transport and Communications, with respect to the RA and RCC. The processes involving these have been depicted in Figure 3. Some observations regarding the utilisation of these instruments are reported below.

- **Boards of Directors**: Perhaps the most important governance instrument comprises the boards of directors of the three entities. The Acts of the respective entities require that board members should possess expertise relevant to the functions of the respective entities. In this regard, it is of concern to note the relatively high turnover of board members, and also chief executive officers and senior managers, over the first five years of the entities' existence. While little transparency has been maintained about the underlying reasons, indications exist that these were not merely performance related. This turnover has undoubtedly harmed governance and management continuity, which would have been particularly important to maintain during the initial period of the entities' existence.
- **Performance Statements and Annual Reports**: The RFA, RA and RCC must submit performance statements (in the case of the RCC: performance agreements), which must be renewed at least every three years, and annual reports to their respective Ministers. The latter are required to submit copies of all of these governance instruments to Parliament. All three the aforementioned entities are obliged to analyse in their respective annual reports their progress or compliance with respect to matters contained in the performance statements or agreements. The RFA must in its performance statement provide particulars about the strategies it intends to employ to achieve the objects of its Act and such particulars as are required to allow an assessment of the RFA's performance with regard to financial and staff matters. Although the RFA has submitted a draft performance statement to the Minister of Finance, the latter has not yet approved this. Therefore, as at the time of the review, no formal instrument exists by which the Minister of Finance (and Parliament) could assess the performance of the RFA with respect to the achievement of the objects of its Act. The RA must in its performance statement provide particulars about the strategy it intends to employ to meet its operational objectives, as well as such particulars as are required to allow an assessment of the RFA's performance with regard to staff matters and matters related to the exercise of the Minister's powers in terms of the RA Act. The performance statement of the RA has been approved by the Minister and is being utilised by its board. The RCC must

in its performance statement provide particulars about the expectations of Government pertaining to the business of the RCC, and such particulars as are required to allow an assessment of the RCC's performance with regard to financial and operational performance, as well as staff matters. The RCC's Performance Agreement has not yet been finalised, which impedes on the Minister's and Parliament's ability to assess the RCC's performance with respect to its object and Government's expectations regarding the performance of the RCC.

- **Audited financial statements**: All three entities have thus far complied with the legislated requirements for the submission of annual audited financial statements, together with their annual reports, although, due to various constraints, these were not always submitted within the prescribed time frame.
- **RFA Business Plans**: Except for the financial years 2000/01, in which the RFA's business plan was to have been prepared by the Ministry of Finance, and 2001/02, in which the RFA's Board adopted only a budget for that year, the RFA has complied with the requirement of preparing and adopting rolling-forward five-year business plans; however, these were also always completed late due to the need for ongoing consultations to deal with problems arising from resistance against road user fuel levy increases and the issuing of RFA loan stock.
- **Procedures Agreement between the RA and RFA**: Although the procedures agreement, as prescribed by the RA Act, is not a governance instrument in the usual sense, it fulfils a related purpose. The agreement provides particulars such as required to allow the RFA to assess whether the funds allocated from the Road Fund to the RA will be efficiently utilised by the latter for the performance of its functions. Among others, this includes particulars about the RA's management and financial systems, contracting, budgeting and compliance with the RFA's rules and principles pertaining to the preparation of budgets. The RA is required to draft the procedures agreement and submit this to the RFA for approval. The RA and RFA have thus far not been able to reach consensus on some contentious matters covered in the agreement. At the time of the review, a draft agreement existed that had been used for a number of years as a working document to the extent that a mutual understanding existed between the parties, who were still engaged in consultations on finalising the agreement.

5 Conclusion

5.1 Comparisons between the Namibian and international experiences in Road User Charging

Some comparisons were made between Namibia's experiences with regard to its road sector reform and the experience of other countries involved in similar reforms to detect whether common features would become evident among these collective experiences. However, a comparison with the Namibian experience must be viewed with the caveat that the Namibian system differs from the systems reviewed in a number of material aspects, which make a direct comparison difficult. Although these have been discussed before in this paper, it serves to briefly recapture the main, unique features of the Namibian system here:

- The system aims at full cost recovery for the preservation as well as the development of the national road network;
- Total road funding (in terms of all the individual projects and programmes) is to be regulated in terms of economic efficiency warrants;

- Nevertheless, provision has been made for the separate funding of “non-economic” or “social” roads;
- Strong emphasis is placed on equity in road user charges, which should be set to reflect marginal costs to promote efficiency in the use of roads; and
- Principles with respect to transparency, accountability and control that allocated funds are effectively used are part of the road user charging policy.

In a review carried out for the World Bank as part of its Road Maintenance Initiative programme, Gwilliam and Kumar investigated the situation of eight road maintenance administrations in Africa, which were established between 1994 and 2000. Seven of these had resulted in the establishment of road maintenance funds, namely in Benin, Ethiopia, Ghana, Kenya, Malawi, Tanzania and Zambia. The eighth, Uganda, chose not to set up a road fund, but instead committed to meet road maintenance requirements through the normal budgetary process. All the funds are governed by boards of directors, with a tendency towards a majority of directors being recruited from the private sector, with the chairmanship being allocated to a Minister or senior public sector official. Most of the road funds were to fund road maintenance only, but two were also to fund road rehabilitation. Except in one case, the revenue of the funds is derived predominantly from fuel levies.

Considering the aforementioned features of the Namibian system, it is evident that Namibia has taken a much more comprehensive and ambitious approach to road funding. Namibia is in a similar situation, however, in that its revenue is predominantly derived from a road user levy on fuel. The study of Gwilliam and Kumar found such a dependence on fuel levies as problematic, as it has also proven to be in Namibia’s case, in that Governments showed a general reluctance to relinquish control over fuel levies, these being regarded as national resources. A study performed by Zietlow in Latin America (see reference below), identified similar problems with regard to the use of fuel levies as a road user charge. Governments have thus been willing to recognize the advantages of the second generation road fund argument, but without yielding the principle of their ultimate control over either taxation or expenditure responsibilities for an important public good. As a result thereof, the road funds studied are still not able to fully fund their desired levels of road maintenance.

It is of interest to note in the study of Gwilliam and Kumar that, despite limitations on overall funding, evidence existed of increased efficiency in implementation associated with greater security of funding and extended private sector contracting. It was further concluded that the outcome has often been surprisingly favourable in terms of the efficiency of maintenance expenditures, irrespective of whether those expenditures met the needs as assessed by the sector. The study of Zietlow in Latin America made similar findings. Whereas these experiences might have been fortuitous in the cases of the countries studied, the road sector reform in Namibia had actively sought to bring about such efficiency benefits.

The Namibian experience, and even the aforementioned experiences in other countries, must be regarded as relative successes compared to the dismal experiences with many other road funds around the world.

In a paper presented in 2004, Zietlow reviewed the experiences of several road funds in Latin America, which had been established with assistance from the Technical Assistance Programme of the Federal Republic of Germany, between 1994 and 2003. Eleven Latin American countries benefited from the programme. The generally adopted scheme was the establishment of a Roads Board, mostly filled by public servants, which would manage the road fund and contract out the works execution to road management companies. The fund was to be funded by a portion of the fuel tax being ceded to the fund, for the funding of road maintenance only. Of the eleven beneficiary countries, only one had at the time of the review established a functional road fund, and an additional three had made some progress towards passing the necessary legislation. It was found that in some countries, initial progress towards fund establishment was reversed after changes of government. The overall success of the Latin American road funds initiative was regarded as still uncertain. Some major lessons were concluded to be: the need for achieving consensus among all stakeholders, the establishment of stakeholder forums, and the need for keeping the public informed.

In a study from 2001, the Asian Development Bank reviewed experiences with the establishment of road funds in 12 countries around the world. Of these, only three had established a road fund by the time of the review, with one of the funds in effect regulated by the Ministry of Finance. One of these three countries had re-established a previously existing road fund, but was already considering abolishing it again, as it perceived greater fiscal benefits in funding roads through budgetary allocations. The remaining nine countries had not yet significantly progressed beyond draft legislation, except that one of these countries had established an “interim fund”.

Significantly, the report of the Asian Development Bank proposed the establishment of road maintenance funds in accordance with principles and using road user charges very similar to those that had been adopted by Namibia. The report’s warnings about the “weak corporate memories” of governments, and an inclination of new incumbents to deliberately contradict the decisions of their predecessors as a means of stamping their authority on an administration, also have a “ring of truth” with regard to the Namibian experience.

Among the cases of other road funds studied, examples were also found that might be regarded as cases of road funds having served a useful initial purpose towards achieving a return to good governance within the public sector. Cases in point appear to be Australia and New Zealand, which have been among the earliest leaders in road user charging. In Australia, road funding is shared between central government, the States and local governments, with the States paying a road funding contribution to local governments. The central government raises fuel levies paid into the Consolidated Revenue Fund. States raise vehicle registration and licence fees, and stamp duties on registrations, insurance and other administrative transactions, as well as a general sales tax of 10% on car sales, spare parts and services. Generally, it appears that road user related taxes are indeed mostly returned to the road sector; however, there is no linkage between road funding needs and revenues raised. In New Zealand, the previous road fund, Transfund New Zealand, has been combined with the Land Transport Safety Authority into a Crown entity, Land Transport New Zealand. The latter only manages, but otherwise has little say in, the National Land Transport Account, which is funded by a mix of road user charges on diesel, excise duties on petrol, motor vehicle registration fees, and some minor other fees. Funds are allocated through the government’s National Land Transport Program to a wide variety of land transport needs, with allocations being decided in accordance with a structured multiple criteria method. As in the case of Australia, road transport related charges in general appear to be mostly returned to the road transport sector, but without any link between funding needs and the revenue collected.

5.2 Conclusions drawn from the Review

With regard to road user charging, Namibia has achieved much in comparison to other countries around the world. Its road user charging policy and principles are among the most advanced, incorporating most if not all of what has been found, or perceived, as good practice internationally.

Namibia’s road user charging system typically exemplifies, and in some aspects even exceeds, what the Asian Development Bank’s report is presenting as a recommendation to Asian countries in terms of road funds.

Commensurate with the findings of the World Bank review prepared by Gwilliam and Kumar, Namibia has at least initially experienced an improved funding situation, and has benefited from institutional performance improvements arising out of the road sector reform.

On the other hand, Namibia has also experienced similar pitfalls as those experienced by road funds in other countries, although to date to a lesser extent than most other countries, as well as experiencing some of the problems against which the report of the Asian Development Bank has cautioned.

The new arrangement with regard to road funding and road user charging has at least been a partial success. The underlying policy and its implementation have proven to be workable, and in fact potentially effective in not only quantifying but also achieving the object of a safe and efficient road sector. The adverse economic effects feared by some have proven unsubstantiated; but the RFA and RA are yet to bring this message across to their stakeholders. Indeed, the oil price crisis at the time of writing has, as predicted by the Road User Charging System Review, shown the economy to be quite resilient in the face of even drastically increased fuel prices.

The Namibian traffic information system and the vehicle licensing system had been a Cinderella of the pre-reform dispensation. As part of the reform, they were latched onto the RA despite not being part of the core business of the latter, out of a concern that these important systems might fail if they had been retained within the Ministry of Works, Transport and Communication. However, under the management of the RA, these systems have since emerged as strong candidates for full commercialisation in their own right. Considerations in this regard have already been exchanged between the RA and RFA.

Possibly one of the most encouraging successes of the reform could yet prove to be the turn-around of the RCC. The proof of sustained improvements over the years provides a measure of confidence that the goal of turning the RCC into a competitive roads contractor would be achieved, albeit with a far greater delay than had been expected initially. Evidently, the Road Sector Reform Review in 2001 had provided a timely impetus to arresting the developing problems and initiating a timely turn-around strategy in 2003.

One aspect of the reform, which requires concerted further efforts to ensure its success, is the road user charging system. This would be an imperative for, among others, assuring the road sector's crucial contribution towards achieving Namibia's Vision 2030, as well as Namibia's adherence to its obligations under the SADC Protocol on Transport, Communications and Meteorology. The need has become evident for a review and reconfirmation of the road user charging policy, and a reconfirmation of Government's commitment thereto.

Implementing effective public relations to assure stakeholders' commitment to the road user charging system has proven to be a major stumbling block. The need for an effective co-ordinated public relations campaign by the RA and RFA is clearly evident.

An important contributing factor to ensuring sustained benefits from the road sector reform is for the Government to strengthen its governance capacity. With the pending constitution of a State-Owned Enterprises Governance Council the Government has shown its realisation of the existing weaknesses and its commitment to overcome these.

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