Road Fund
Administration
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REVIEW OF THE ROAD USER CHARGING SYSTEM OF THE ROAD FUND ADMINISTRATION

PART C: REVIEW OF ROAD USER CHARGES

PHASE 4: CROSS BORDER CHARGES SYSTEM REVIEW

FINAL REPORT

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AFRICON

REPUBLIC OF NAMIBIA

ROAD FUND ADMINISTRATION

Review of Cross-Border Charges System

Final Report

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ACRONYMS AND ABBREVIATIONS

CBC	Cross-border Charge
CBCS	Cross-border Charges System
JV	Joint Venture
MDC	Mass Distance Charge
MDCS	Mass Distance Charging System
RUC	Road User Charge
SADC	Southern African Development Community
SACU	Southern African Customs Union
SATCC	Southern African Transport and Communications Commission

EXECUTIVE SUMMARY

Purpose

1. The main purpose of this report is to: (a) provide the outcome of a review and evaluation of various options for the future operation of the Cross-border Charging System (CBCS), including a recommendation for the preferred option, and (b) to propose revised cross-border charges broken down into their components.

2. The following options were analysed as part of the review of the cross-border charging system, regarding feasibility, advantages, disadvantages and costs:

   a) Continued operation based on a revised contract
   b) Tendering for a new contract
   c) Operation by staff of the RFA
   d) Operation by Customs officials

3. The revised cross-border charges were the subject of a companion report on the *Review of the Road user Charging System of the Road Fund Administration* and are not dealt with in detail in this report. However, for completeness, the revised cross-border charges broken down into their components are summarised in the report.

Background

Current cross-border charges

4. The current cross-border charge is a flat-based "entry fee" which includes a fixed component to over administrative costs as well as a 15% VAT component. The way in which the current charge is constituted results in a certain amount of cross-subsidisation between and within vehicle classes.

The Cross-Border Charging System

5. The CBCS was implemented in December 2000 by means of a build-operate-transfer type of contract with a Joint Venture (JV) arrangement comprising Africon (Namibia) and Arti-Tech. The system is not a fully-fledged cross-border charging system as it currently only imposes on foreign vehicles a charge which is comparable to the vehicle registration and licensing fees paid by locally registered vehicles.

Implementation of the CBCS

6. The CBCS was initially implemented at four of the largest border posts in the country and subsequently extended to an additional seven border posts. These border posts operations are serviced by nine payment offices that are operated by a total of six contractors employing a total of 38 persons.

Revenue generated by the CBCS

7. During the three year period of its operation to November 2003, approximately 470,000 permits had been issued with some 60% of them being cancelled. The gross revenue earned from the three year operation of the CBCS amounted to just under N$60 million of which approximately 64% represented net revenue to the RFA and the remaining 36% represented the JV operating revenue. This percentage includes for a variety of the JV's costs including management, profit, risk, further system development, computer replacement as well as cash transfer security and insurance.

Views of Stakeholders on Performance of CBCS

8. The consensus of stakeholder views on key aspects of performance of the CBCS are that:

- In general, the CBCS has performed satisfactorily with inevitable teething problems being sorted out.
- The cost of collection of the CBC charges is too high, with the ratio of administration costs to gross revenue being of the order of 36%.
- Alternative options for the future operation of the CBCS should be evaluated with a view to reducing administration costs.

Evaluation of Alternative Options for Future Operation of the CBCS

9. Based on consideration of a number of key factors pertaining to the future operation of the CBCS, including: (a) the feasibility of the option, (2) operation within an institutional environment conducive to efficiency, (c) cost of undertaking the operations and (d) compliance with general government policy for undertaking such operations, the following ratings emerge:

Option	Feasibility (A)	Environment (B)	Cost (C)	Compliance (D)	Score	Rating
1. Extend contract	H (3)	H (3)	H (1)	H (3)	10	2
2. Tender new contract	H (3)	H (3)	M (2)	H (3)	11	1
3. RFA operation	M (2)	M (2)	M (2)	M (2)	8	3
4. Customs operation	L (1)	L (1)	L (3)	L (1)	4	4

N.B: For Factors A, B and D:- Ratings: High (H), Medium (M) or Low (L) – scored 3, 2, 1 respectively.
For Factor C: Rating:- High (H), Medium (M) or Low (L) – scored 1, 2, 3 respectively

Preferred option

10. Based on consideration of all the factors that are likely to affect the future operation of the CBCS, the preferred option which is likely to provide the RFA with best value for money is to tender for a new contract.

Scope for Improvement of CBCS

11. A number of aspects of the current CBC operations offer scope for improvement. They include:

- improving collaboration and streamlining operations at border posts between Customs, Immigration and Cross-Border operations;
- installation of effective gate control procedures at border posts;
- introduction of a “ regular user permits”;
- reduction of number of border posts where traffic volumes are very low;
- Introduction of a MDC system to avoid cross-subsidisation within and between vehicle classes.
- Linking period of validity of CBC permit to period of validity of visa.

Review of Cross-Border Charging System

Current Namibian versus SADC/SACU approaches

12. The are a few differences between the current Namibian approach and SADC/SACU approaches to regional transit charging of road users. The major difference is that the Namibian approach intends that the costs to be recovered from transit traffic should be comprised of **fixed and variable costs related to the whole national public road** network while the SADC/SACU approach intends that such costs should be related **only to transit routes** as designated by the SADC Regional Trunk Road network (RTRN).

13. The differences in the current Namibian and SADC/SACU approaches to road user transit charging are probably due to differences in policy when viewed from a regional perspective rather than a national perspective. A policy decision is therefore required from the RFA as to whether the current approach should be extended in future, even though it is not in harmony with similar systems that may be implemented by neighbouring countries based on the SADC/SACU approach.

New cross-border charges

14. From the related companion report on the *Review of the Road User Charging System of the Road Fund Administration,* it was estimated that the current recovery from domestic road users based on current charge levels amounts to N$506.5 million compared to N$929.3 million which should be recovered from domestic road users. Thus, there is an under-recovery of N$422.8 million.

15. Four options have been considered for recovering road use costs from road users, three of which include a mass-distance charge; these are shown in Table E.1. The level of the portion of the CBC will depend on which option is implemented for domestic vehicles.

Table E.1 – Options for recovering road use costs from road users

CBC Vehicle Type	Fuel Type	Option 1: Basket of Instruments			Option 2: MDC and Fixed Fee Only		Option 3: MDC Only	Option 4: Fixed Fee Only
		Fuel Levy (c/l)	MDC - supplement to Fuel Levy (N$/100km)	Fixed Fee (N$/day)	MDC (N$/100km)	Fixed Fee (N$/day)	MDC (N$/100km)	Fixed Fee (N$/day)
1	P	81.87	3.27	3.21	7.36	3.21	13.05	7.36
2	P	81.87	0.00	2.84	7.60	2.84	13.80	6.33
3	D	49.48	0.00	3.38	12.35	3.38	22.21	7.61
4	D	49.48	5.50	6.54	25.29	6.54	35.45	22.83
5	D	49.48	6.06	6.93	25.85	6.93	36.01	24.56
6	D	49.48	5.30	8.07	21.14	8.07	38.92	17.65
7	D	49.48	9.83	6.21	30.12	6.21	47.90	16.74
8	D	49.48	0.00	6.13	20.52	6.13	35.86	14.33
9	D	49.48	0.00	9.56	26.66	9.56	42.01	26.18
10	D	49.48	1.01	5.54	30.20	5.54	45.54	16.46
11	N		25.74	6.07	25.74	6.07	36.00	21.30
12	N		32.50	6.63	32.50	6.63	42.76	27.61
13	N		35.59	6.19	35.59	6.19	45.86	27.67
14	N		39.96	4.40	39.96	4.40	50.22	21.52
15	N		43.20	9.93	43.20	9.93	53.46	51.74
16	D	49.48	0.00	3.07	8.56	3.07	16.28	6.48
17	D	49.48	0.00	3.34	8.56	3.34	16.28	7.05
Petrol Vehicles		81.87						
Diesel Vehicles		49.48						

Note: (1) Above charge levels exclude administrative fee (current level N$52.90 per vehicle (incl. 15% VAT).
(2) P = Petrol, D = Diesel, N = None.

1. INTRODUCTION

1.1 Background

In June 2003, the Road Fund Administration (RFA) of Namibia appointed AFRICON Namibia to undertake two aspects of the overall Review of the Road User Charging System, namely:

- Part B: Study of the Macro-economic Impact of Economic efficiency in the Road Sector, and
- Part C: Review of Road User Charges.

The purpose of the project is to review the system as it currently operates as a basis for:

(1) identifying problem areas, and

(2) providing the RFA with ready-to-implement solutions for optimising and extending the road user charging system as it is currently implemented.

1.2 Scope of Work

The scope of work for Part C of the project is sub-divided into four phases as follows:

Phase 1: Road User Charges Policy and Strategy
Phase 2: Fuel Levy Refunding System Review
Phase 3: Mass-distance Charging System Review
Phase 4: Cross-Border Charging System Review

This report deals with Phase 4 only which is sub-divided into two sub-phases as follows:

Phase 4.1 Review and evaluation of options for future operation of the Cross Border Charging (CBC) System. This includes a review of the following options in terms of their feasibility, advantages, disadvantages and costs.

- Continued operation of current system: The current system to be continued but under a revised contract;
- Continued operation of the current system, but through tendering for a new contract;
- Internal operation by the staff of the RFA;
- Operation by Customs Officials.

As part of the analysis of the above options, a review is to be undertaken of various measures by which the RFA can exercise improved control over CBC operations with recommendations for improving the efficiency of such operations.

Phase 4.2: A review and revision of the cross-border charges, broken down into their components:

1) Administrative fee
2) Licence fee equivalent (or fixed cost component)
3) Mass-distance charge (MDC) equivalent (or variable cost component)

Currently, variable costs are recovered from foreign vehicles in the form of fuel levies (and not as part of the CBC tariff), as it is assumed that foreign vehicles fill up with fuel in Namibia.

As part of the above review, the relevant SADC and SACU protocols and related initiatives will be investigated to ensure compliance by the CBC system.

1.3 Purpose of Report

The main purpose of this report is two-fold, viz:

(1) to provide the outcome of the evaluation of various options for the future operation of the Cross Border Charging (CBC) system, including a recommendation of the preferred option, and

(2) to propose revised cross-border fees broken down into their components.

1.4 Layout of Report

The report contains five sections as follows:

Section 1 (this section) provides an introduction to the report that includes the background to the project and the purpose and contents of the report.

Section 2 outlines the role of the RFA in funding the road network and the operational environment of the CBCS as a basis for assessing its performance.

Section 3 reviews the performance of the system to date, including the problems encountered and lessons learned as a basis for assessing the merits and demerits of alternative options for future operation of the CBCS.

Section 4 reviews and evaluates various options for future operation of the CBCS and makes recommendations on the preferred option.

Section 5 reviews and proposes revised cross-border charge levels, broken down into their components.

2. REVIEW OF CROSS-BORDER CHARGING SYSTEM

2.1 Principle of Road User and Cross-Border Charges

The principle of road user charges is based on the concept that users of a facility should pay a fee in proportion to the extent of their use of that facility. In this regard, recovery of road infrastructure costs from road users through the levying of an appropriate road user charge (RUC) is provided for in the SADC Protocol on Transport, Communications and Meteorology, Proclamation No. 24 of 29 December 1997.

Cross-border charges are a component of RUC which, in terms of the Road Fund Administration Act, 1999 (Act 18 of 1999), the Road Fund Administration (RFA) is empowered to impose on foreign road users to ensure that they carry their fair share of road costs in Namibia.

The various RUC employed by the RFA are as follows:

- Fuel levies
- Annual vehicle license fees
- Weight-distance charges (or mass-distance charges (MDCs)
- Abnormal load fees
- Cross-border charges on foreign vehicles

The current cross-charge is essentially a flat "entry fee" payable each time a foreign registered vehicle enters Namibia and assuming that such vehicles will refuel in the country. The fee is made up of a CBC charge and an administration fee covering the Agent's costs and also includes VAT of 15%. This fee is the counterpart of the annual vehicle registration fee and licensing fee payable in respect of Namibian registered vehicles. It is so structured as to ensure that foreign registered vehicles visiting Namibia are contributing the <u>same</u> amount of funding as levied on Namibian registered vehicles. In order to collect cross-border charges in an efficient manner, the RFA decided in 1999 to implement an appropriately designed cross-border charging system as described below.

2.2 Cross-Border Charging System

2.2.1 Design and development

As part of the process of putting in place efficient and equitable charging instruments to secure and allocate sufficient funding to achieve a safe and economically efficient road sector, the RFA commissioned Africon (Namibia) under Tender Number 2000/01, to design, develop, implement, manage and undertake day-to-day operation of a Cross Border Charging system on an agency basis. The initial contract price made provision for the recovery of the consultant's cost of he capital investment made in developing the system, which will become the property of the RFA on contract expiry.

The CBCS was designed and developed by the consultant during the latter quarter of 2000 and implemented at four border posts (Ariamsvlei, Buitepos, Noordoewer and Oshikango) in December 2000. Since then an additional seven border posts have been added to the system. The current border posts, payment offices and contractors are shown in Table 2.1.

Table 2.1 – Border posts, payment offices and contractors

<table>
<tr><th>Border Posts
(11 No.)</th><th>Payment Offices
(9 No.)</th><th>Contractors
(6 No.)</th></tr>
<tr><td>Ariamsvlei</td><td>Ariamsvlei</td><td rowspan="2">FHD</td></tr>
<tr><td>Noordoewer</td><td>Noordoewer</td></tr>
<tr><td>Buitepos</td><td>Buitepos</td><td>Jan Pienaar</td></tr>
<tr><td>Holweg</td><td rowspan="2">Aroab</td><td rowspan="2">Bronco Sentra</td></tr>
<tr><td>Klein Menasse</td></tr>
<tr><td>Mohembo</td><td>Bagani</td><td>Divundu Stores</td></tr>
<tr><td>Wenela</td><td rowspan="2">Katima Mulilo</td><td rowspan="2">Maciej Engineering</td></tr>
<tr><td>Ngoma</td></tr>
<tr><td>Oshikango</td><td>Oshikango</td><td rowspan="3">Unic</td></tr>
<tr><td>Omahenene</td><td rowspan="2">Omahenene</td></tr>
<tr><td>Ruacana</td></tr>
<tr><td>-</td><td>Windhoek</td><td>Agent</td></tr>
</table>

2.2.2 Functionality and vehicle classes

The functionality of the CBCS entails the issue, cancellation and tracking of cross border permits and includes the calculation of the charge payable by a foreign or Namibian operator for the Namibian leg of a cross-border journey. Although the CBCS system has been designed to operate in tandem with the ASYCUDA system used by Customs and Excise to collect taxes and duties, currently it functions independently. The CBCS calculates the cross-border charges and records the journey, while all billing (including pre-payments) and financial record-keeping take place in ASYCUDA.

The system contains a central database where the data collected at each border post is captured once a day. The database also generates financial and management reports for the use of the Agent and the RFA. Daily, weekly and monthly backups are also implemented and maintained by the JV while there is a back-up manual system for use in the case of emergencies such as system or power failures or where there is no electricity.

There are currently seventeen vehicle types ranging from motor cycles through buses to heavy vehicles, heavy trailers and construction vehicles (Ref. Annex A). These vehicle types are grouped in the following five categories:

- Petrol and diesel driven
- Heavy vehicles (single units)
- Heavy vehicles (Traction unit as part of a combination vehicle)
- Heavy trailers (as part of a combination vehicle)
- Construction vehicles

2.2.3 Management and operation

The management of the system is undertaken by a Joint Venture (JV) between the developers of the system, Africon (Namibia) and Arti-Tech who were appointed as Agent by the RFA for a 3 year period from 01 December 2000. Within the JV Africon is responsible for the financial and project management and Arti-Tech for the operational aspects. Arti-Tech currently employs six contractors who provide the staff for manning the border posts as shown in Table 1. The overall CBC operations are all managed from the JV office in Windhoek.

Under a *management contract* with the RFA, the Agent is responsible for the following:

- Provision of offices and office equipment at the border posts
- Provision of a computerised Cross-Border Charges system (hardware & software)
- Provision of staff
- Collection of fees
- Cash management and banking
- Issuing CBC certificates
- Handling all queries

Various performance indicators are included in the JV contract and are used for the determination of penalties and performance bonuses from the second year of operation. These include (a) On-site performance (the percentage of time that the computerised system is operational during border post opening hours), (b) Promptness of transfer of funds (the value of the total deposits for the week expressed as a percentage of the total transactions of the previous week), and (c) System effectiveness (no vehicles reported and fined without a valid CBC entry permit).

In keeping with its core functions, the RFA's involvement in the system is currently confined to the following:

- Policy matters
- Strategic planning
- Setting of tariffs
- Audits

2.2.4 Charging levels

Each vehicle type pays a different charge which is related primarily to its Gross Vehicle Mass (GVM). This charge includes administrative costs as well as 15% VAT. The charges are increased annually by the RFA under Section 18(1)(c) of the Road Fund Administration Act of 1999 which empowers the organisation to amend the charges as appropriate. It is noteworthy, however, that the RFA must have due regard to "*the avoidance of substantial increases in the rates of road user charges in any one year and, in the longer term, the maintenance of a reasonable stability, in real terms, in the rates of road user charges*" (Section 20(4)(b)(ii)).

As indicated in Table A.1 in Annex A, the charge levels have increased significantly during the first three years of operation of the CBCS. For example, the charges for small vehicles (Types 2 and 3), which constitute approximately 66% of all vehicle entering Namibia, increased on average by some 66% - an increase that is of significance with respect to Section 20(4)(b)(ii) of the RFA Act.

2.2.5 Permit volumes at border posts

Table 2.2 shows the permit volumes per border post for operations to June 2003 compared to the whole period of operation since December 2000.

Table 2.2 – CBC statistics up to end June 2003

Border Post	No. Permits Last 12 mts	% Total	No. Permits Total Period	% Total	% Difference
1. Ariamsvlei	51,650	32.4	119,509	32.7	-0.3
2. Noordoewer	46,700	29.3	111,488	30.5	-1.3
3. Buitepos	26,180	16.4	65,547	17.9	-1.5
4. Oshikango	21,650	13.6	46,317	12.7	0.9
5. Klein Menasse	8,980	5.6	14,696	4.0	1.6
6. Aroab	2,300	1.4	4,651	1.3	0.2
7. Mohembo	980	0.6	1,035	0.3	0.3
8. Omahenene	520	0.3	991	0.3	0.1
9. Windhoek	640	0.4	1,106	0.3	0.1
All border posts	159,600	100.0	365,340	100.0	0.0

Source: Report by Africon Namibia/Arti Tech JV report dated September 2003.

The interesting statistic from Table 2.2 is that the 4 largest border posts, which were the first ones to be established, contribute 91.6% of all permits issued. At the majority of the other border posts the volumes of permits issued per annum are relatively very small and not only highlights the adverse cost-benefit ratio of the CBC operations at these locations but also the efficacy of their continued operations. However, as a matter of policy, it may be necessary to continue with the operation of these relatively little used border posts, even if the operations are not cost effective.

2.2.6 Annual RFA and JV revenue

Table 2.2 shows the RFA and JV revenue for the years 2001 and 2002 with a projection for 2003 based on the current rates and escalations.

Table 2.3 – Annual RFA and JV operating revenue

Year	CBC Revenue		RFA Net Revenue		JV Revenue		JV Revenue as % Total Revenue
	Total	Increase	Total	Increase	Total	Increase	
2001	17,569,620	-	11,176,620	-	6,393,000	-	36.4
2002	20,183,000	14.8%	13,172,205	17.9%	7,010,795	9.7%	34.7
2003	22,201,300*	10.0%	14,489, 426*	10.0%	7,711,875*	10.0%	34.7

Source: Confidential report by Africon Namibia/Arti Tech JV report dated September 2003.
* estimate based on current rates and escalations

As indicated in Table 2.3, there has been an average annual increase in total CBC revenue of approximately 12.5% with corresponding average increases of approximately 14% for the RFA and just under 10% for the JV. However, the JV revenue as a proportion of total CBC revenue has remained almost constant at about 35%. This issue is discussed further in Section 3.1.2.

As illustrated in Figure 2.1, cross-border charges constitute a very small proportion of total RFA revenue, of the order of just one per cent.

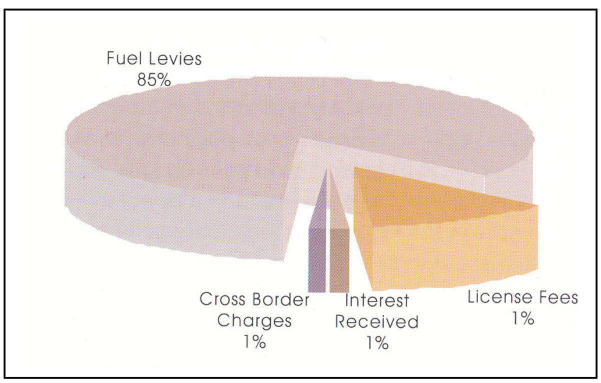

Figure 2.1 – Revenue collected by RFA
(Source: RFA Annual Report 2000/01)

3. COMPARISON OF CBC SYSTEM WITH SADC PROTOCOL

3.1 Review of SADC Protocol Requirements

In accordance with Article 4.5 of the SADC Protocol on Transport, Communications and Meteorology, Member States agree to develop and implement cohesive and definitive road funding policies with a view to ensuring that road users, including foreign road users, contribute to the full costs of maintaining roads and progressively to providing them. In this regard, the basic principles which serve to establish the ground rules for the development of the SATCC road user charging system may be summarised as follows:

I. **Non-discrimination:** i.e. transit vehicles with similar characteristics and loads undertaking trips between the same origins and destinations should be treated equally in respect of the payment of road transit charges, irrespective of the country in which such vehicles are registered.

II. **Equity:** i.e. in the context of the proposed charging system, the charges need to be fair. Fairness implies that charges should relate to the damage inflicted on roads by different classes of vehicles without cross-subsidisation, as far as is practically possible.

III. **Transparency:** i.e. the method of calculating the proposed charges for transit traffic, the elements thereof, and the practical levying thereof should be transparent and broadly acceptable to all participating countries.

IV. **Foreign operators to pay in the host country:** i.e. foreign operators should pay for the use of road infrastructure in a host country.

V. **Foreign operators to pay for road use:** i.e. the charge to be paid by foreign vehicles in a host country should be broadly based on the cost which such vehicles impose on the road network in that country.

In addition to the above principles, the Protocol signed by SADC member states also stipulates the following additional guidelines for setting road user charges:

VI. The use of roads should be priced so as to improve transport economic efficiency.

VII. Road users, including foreign road users, should contribute to the full costs of maintaining roads and progressively contribute to the full costs of providing roads.

VIII. The charges should not unfairly impact on modal competition.

IX. The charging system should be flexible enough to ensure that transit vehicles do not pay twice, through domestic and transit charges for the same purpose.

X. The charges should fully recover from road users the costs associated with the economically justifiable road provision and maintenance programme.

Allocation of road costs to vehicle classes: The approach adopted by SATCC for allocation of road costs to the various vehicle classes was based on the following cost distinctions and principles:

a) ***Variable* costs:** (i.e. those costs associated directly with the usage of the road) to be allocated to road users in relation to the way in which those costs were occasioned, i.e. load –related (ESA-km) and vehicle-related (veh-km).

b) **Fixed costs** (i.e. those costs associated with the provision and maintenance of the road system relating to access, weathering and non-traffic related effects) to be allocated based on the principles of general taxation through Ramsey pricing, relating to demand elasticity or willingness-to-pay. Allocation on the basis of GVM can be used as a very practical proxy.

Based on the various principles agreed for road user charging in the SADC region, such a system will comprise the following:

a) The charge will be related to actual distance travelled.

b) The charge will be levied only for that proportion of a transit charge which takes place in the host country.

c) Five vehicle classes would be catered for.

d) Different rates will apply in different countries to allow for different road use costs.

3.2 Namibian Approach to Cost Recovery from Foreign Vehicles

The Namibian Road User Charges (NAMRUC) Model [3] was developed for the calculation of the level of RUCs in Namibia according to the principles of the RUC system which are based on RUC Policy as set out in the ICTE Report of August 1994 [4]. Extracts from the ICTE Report which are relevant to the current review of cross-border charges are summarised below:

3.2.1 RUC Policy Principles*: Charges for road use should be set so that they equal the marginal cost of road use, whereafter they should include additional charges as necessary, so that the revenue collected from all charges will equal the* ***full cost*** *of providing, maintaining and administering roads*.

3.2.2 Principles for Setting RUC*: The types of road user charging instruments utilised and the levels at which such instruments are set, should have as purpose to:*

- *Fully recover from road users the costs associated with the future economically justifiable road provision, maintenance and administration programme (principle of full cost recovery/user-pay principle);*
- *Ensure equity as far as possible between different categories of road users so that vehicle owners in one vehicle category do not subsidise, or are not subsidised by owners in another vehicle (principle of equity);*
- *Make provision for charging foreign based transit traffic for their use of the Namibian road network;*
- *Be in harmony with similar systems implemented by neighbouring countries.*

3.2.3 RUC Instruments: *The charging instruments should be:*

- *fuel levies on diesel and petrol, used on-road, for the recovery of marginal costs;*
- *annual vehicle licence fees, for the recovery of fixed costs;*
- *weight-distance charges on certain categories of heavy domestically registered vehicles to recover the marginal road damage costs of such vehicles which cannot be recovered with a fuel levy that fully recovers the road damage costs of light vehicles;*

- *abnormal vehicle charges, which should be regarded as part of the road user charging system and set in accordance with the principles applicable to the road user charging system;*
- *transit charges (of the weight-distance type) applicable to foreign registered vehicles and which should also be regarded as part of the RUC system; and*
- *"entry fees", applicable to foreign registered vehicles, to recover from such vehicles their pro-rata share of the* ***fixed*** *costs carried by domestically registered vehicles. (This charging instrument is optional and a pro-rata share of fixed costs may also be recovered through an additional weight-distance charge, based on pro-rata per journey distances, for a particular vehicle category.)*

3.2.4 Cost components

The total costs to be recovered from road users can be divided into fixed costs (those costs associated with the provision and maintenance of the road system relating to access, weathering and non-traffic effects and variable costs (those costs associated directly with the usage of the road).

Ideally, all fixed costs should be recovered in the form of license fees and all variable costs in the form of variable instruments (i.e. fuel levies and/or MDCs). However, the key issue to be considered with respect to the CBCS is *what proportion of fixed and/or variable costs are to be recovered from foreign vehicles relative to their domestic counterparts?* The issues surrounding the recovery of costs from foeign vehicles is discussed below:

(a) ***Efficacy of recovering fixed costs from foreign vehicles****:* On the one hand, it could be argued that on the principle of non-discrimination foreign vehicles should pay the same as local vehicles and, in this regard, they should also be subjected to a fixed charge in addition to a variable charge. On the other hand, it could also be argued that foreign vehicles should not be expected to fund through a transit charge road development in a host country that they will not use. Or, putting it another way, the RFA should not be recovering from foreign road users a road user charge that provides revenue that is subsequently used for capital development purposes other than on transit routes.

(b) ***Efficacy of recovering costs pertaining to all routes****:* Travel by foreign, particularly commercial, vehicles tends to be confined to specific (transit) routes rather than all routes in a host country. Thus, it could be argued that foreign vehicles should not be expected to fund through a transit charge load-related and vehicle-related costs on links that are not part of the transit route network in a host country.

In view of the above, it is noteworthy that the current Namibian approach, in contrast to the SADC/SACU approach, intends that *the costs to be recovered from transit traffic cannot be regarded as comprised only of variable costs and, moreover, of the variable costs on transit routes only.* The premise on which this fundamental principle is based is that *if such an approach were to be adopted, it would result in domestic operators paying more for the use of their own roads that foreign operators as a result of which they would be disadvantaged - this would be in conflict with the principle of non-discrimination*. Accordingly, the current approach is based on the principle that *the costs to be recovered from transit traffic should be comprised of* ***both*** ***<u>fixed</u>*** ***and*** ***<u>variable</u>*** ***costs related to the*** ***<u>whole</u>*** ***national public road network.***

3.3 Comparison of Namibian and SADC/SACU approaches to RUC

3.3.1 Commonalities

The commonalities between the Namibian and SADC/SACU approaches to regional transit charging systems may be summarised as follows:

Both approaches:

(i) attempt to promote the optimal use of resources and equitable inter-modal competition;

(ii) envisage that the charging systems should be simple and inexpensive to implement;

(iii) intend that revenue realised from road user charges should be “earmarked” for roads expenditure (although in the SADC/SACU approach, in the case of transit traffic only expenditure on the transit routes is intended).

(IV) intend that there should not be discrimination against transit vehicles

3.3.2 Differences

There are a number of apparent differences between the NAMRUC and SADC/SACU approaches to regional transit charging systems as regards the objectives intended to be achieved by the respective systems. These may be summarised as follows:

(I) NAMRUC is designed to recover from transit road users the **full** costs, i.e. both the variable and fixed costs, of providing, maintaining and operating the economically justified roads within the **whole** national road network (including part of the cost of maintaining public roads in urban areas) in the same way as domestic road users. This is in contrast to the SADC/SACU approach that recovers fixed and variable costs **pertaining only to transit routes**. *Thus, there seems to be conflict between the promotion of non-discrimination on the one hand and equity on the other in the context of foreign vehicles paying only for the cost that they impose on specific links of the national road network.*

(ii) NAMRUC adopts seventeen vehicle classes for cost allocation purposes compared with five vehicle classes in the SADC/SACU approach.

3.3.3 Dealing with differences between the Namibian and SADC/SACU approaches

The differences between the Namibian and SADC/SACU approaches to road user transit charging are probably due, in part, to differences in policy when viewed from a regional perspective rather than a national perspective. In this regard, it is possible that insufficient consideration was given at the time of formulation of the SADC/SACU approach to the implications of transit road user charging systems for countries with domestic road user charging systems. In this regard, it is noteworthy that SADC/SACU approach that was first formulated in 1997 is to be reviewed in 2004. This will provide an excellent opportunity to revisit some of the basic principles adopted in the original approach, *moreso in the light of countries' experience of operating both domestic and transit charging systems during the intervening seven year period.*

Notwithstanding the above, the differences between the Namibian and SADC/SACU approaches can be dealt with by the RFA in one of the two following ways:

Option 1: Accept that there are differences between the two approaches with the over-riding view that individual countries should be permitted to implement their desired tax policies with regard to road users subject to the condition that such taxes are not discriminatory and thus apply equally to domestic and foreign vehicle operators. In so doing, the road user charging arrangements should not inhibit regional transport and trade.

Option 2. Amend the Namibian approach to accord with the SADC/SACU approach.

Adoption of either of the above options is a policy decision which should be considered by the RFA *bearing in mind the seemingly contradictory requirements embedded in the ICTE Report of non-discrimination between local and foreign vehicles and harmony with similar systems implemented by neighbouring countries.*

4. SHORT-COMINGS OF CROSS BORDER CHARGES SYSTEM

4.1 Management Aspects

4.1.1 Issuance and cancellation of permits

The number of permits issued and cancelled from the commencement of operations on 01 December 2000 through to 31 September 2003 is as follows:

No. of permits issued:	= 445,122
No. of permits cancelled:	= 291,353
Ratio of permits cancelled to permits issued	= 0.65

The percentage of cancelled permits is relatively low being of the order of about 65%. Whilst this figure may be partially explained by extended visitor stays in Namibia, it is also apparent that all out-going drivers do not hand in the permits for cancellation or hired vehicles enter Namibia and are not returned to the country of origin when the visitors leave the country. Nonetheless, cancellation of permits remains a valuable control mechanism and the introduction of more effective gate control should considerably improve the situation.

4.1.2 Agent's fee

Since the implementation of the CBCS in December 2000, the Agent's fee as a percentage of the gross revenue has been of the order of 36%. There is a concern by the RFA that this figure is excessive and should be reduced. This apparently high figure includes for the following:

- JV operational costs at border posts
- JV management costs, risk and profit
- Further development costs of the system since it was first commissioned
- Purchasing of additional computers and printers and replacement of old computers
- Bank charges
- Security and insurance costs for transfer of money to banks

In evaluating the reasonableness or otherwise of the Agent's fee, the following points should be borne in mind:

(1) The contract was competitively tendered and the resulting cost of designing, developing, managing and operating the system was *the best available to the client at the time of tender and under the prevailing market forces.* This, of course, does not imply that the Agent's fee may not excessive but, rather, that this fee was the best on offer by the market at the time of tender.

(2) The contract price for such project of the nature of the CBCS would include significant start-up costs pertaining to the design and development of the system, establishment and equipping of offices, staff training and operational risks which, together with a reasonable profit, the Agent would expect to recoup within the 3 year contract period.

(3) The volumes of cross-border traffic and the Agent's charge for permit issuance and cancellation at the time of tender, as compared to the actual figures after three years of operations, are as follows:

Table 3.1 – Estimated versus actual permit transactions

Cost description	**Estimated No. of Vehicle Entries/month**		**Tendered Charge Rate (N$)**	**Total Revenue or expenditure per month (N$)**	
	At Tender	**Actual**		**At Tender**	**Actual**
Operational Border Posts (BP)	4 No. BPs	9 No. BPs	5,998.09 per BP	23,992.36	53,982.81[1]
No. of Entry fee Transactions	7,500 per mth	13,028 per mth	21.73 per transaction	163,004.24	283,098.44
No. of Entry fee Cancellations	6,400 per mth	7,816 per mth	17.20 per cancellation	110,081.03	134,435.20

1 – Assumed to be same as at tender

As would be apparent from the above Table, the number of entry fee transactions and cancellations after three years of operations was significantly higher than that assumed at the time of tender (73,7% for entry fee transactions and 22.1% for entry fee cancellations respectively). This implies that the revenue available to the Agent from Entry Fee transactions and cancellations (N$ 417,533.64) was also higher than assumed at the time of tender (N$ 273,085.27). Also, the operational costs of the CBC offices in the second year of operations (when the new border posts CBC operations were established) would also have increased by a factor of probably over 100% which, in comparative terms, is relatively small.

The above information simply indicates that the total revenue available to the Agent after three years of operations was more than that assumed at the time of tender. This implies that if all the costs actually incurred by the Agent in designing and developing the system as well as establishing and equipping the CBC offices are reasonably close to that estimated at the time of tender, then his profit would be greater than that anticipated from implementing the CBCS. Conversely, if the costs were higher then his profit would have been less and, indeed, he might even have made a loss.

The scenarios outlined should be accepted as part and parcel of a competitive tendering process in which developmental costs of a new computerised management system are part of the intellectual property of the developer which, in normal circumstances, should be regarded as privileged information. Thus, in the absence of such information, it is not possible to determine whether or not the Agent's administration fee for the first three years of operation of the CBCS is excessive or not. What is apparent, however, is that as the CBCS procedures and operations become consolidated, cross-border traffic volumes are better known and developmental costs are recovered, there should be scope for reducing the Agent's fee as a percentage of the gross revenue.

4.1.3 "Leakage" in system

Reports on the outcome of law enforcement operations in the form of 24 hour traffic checks to ensure that foreign registered vehicles entering Namibia comply with the CBCS revealed some "leakage" in the process. One such operation carried out in November 2001 [2] indicated that 12% of foreign vehicles checked (62 out of 513 vehicles) were not in possession of a CBC permit. Such leakage represents a significant loss of revenue to the RFA and options for reducing and possibly eliminating such malpractice are discussed in Section 3.2 which deals with the operational aspects of the CBCS.

4.1.4 Weak management

There have been complaints from the general public that the management at some of the CBC offices is weak, that the attitude of some of the staff has been unhelpful and that there appearance/dress code leaves a lot to be desired.

Problems of the kind mentioned above, as well founded as they may be, should be able to be fairly easily resolved by management. The reason for such a situation may be attributed to either poor supervision of staff, poor supervisors or lack of training of supervisors and/or staff. Since the JV is responsible through their contract with the RFA for equipping the CBC offices with adequately, if not well trained staff, they should be required to make good these short-comings, including improving staff appearance through the issue of well designed and attractive uniforms. One option for doing so could be through the use of a CBC Performance Audit, including a category related to staff performance, that is linked to a system of contractual bonuses and penalties.

4.1.5 Remuneration differentials

There is concern that, for whatever reason, there is an undesirably large difference between the salaries paid to staff in the northern and southern regions of the country. Such salaries are a private arrangement between an employer and employee and are generally influenced by market forces which are related to a variety of factors, such as cost of living.

Should there be a specific wish to redress the difference in salaries paid to CBC staff in the northern and southern regions of the country, the contracts with the JV contractors could be reviewed with a view to specifying remuneration requirements that ensure a minimum degree of equity and fairness between the northern and southern regions of the country.

4.1.6 *Insufficient CBC offices*

There is a concern that at some border posts there are no CBC offices which are located some distance away from the border, as a result of which some drivers are inconvenienced in terms of finding the CBC payment office or, worse, are able to evade payment of the CBC charge by by-passing the payment office.

Whilst lack of CBC payment offices at some borders is undesirable, the economies of scale in terms of traffic volumes would be an influential factor in terms of the viability of establishing such offices at all border posts. Thus, some of the border posts, for example Omahenene, experience very low traffic flows (approx. 520 per annum in the last 12 months to June 2003) and the establishment a payment office at a border post where daily CBC transactions are so low could hardly be justified. The same situation applies to other border posts such as Holweg, Klein Menasse, Wenela, Ngoma and Ruacana.

4.2 Operational Aspects

4.2.1 Lack of synergised operations

Immigration, customs, weighbridge and CBC officials all carry out separate, specific functions at border posts. This would typically entail a visitor having to go through four sets of activities, often not in a streamlined or collaborative manner manner. In the absence of a strong, overall policing authority, which is sometimes the case at some border posts, it is possible for drivers to evade the CBC or weighbridge procedures and enter the country without their vehicles being weighed or without payment of the CBC charge. This is particularly the case where gate control is lax or not operated at all.

In view of the above situation, there is certainly a need for a *Procedures Agreement* amongst the organisations operating at border posts in order to streamline the various operations in a sequential manner with, for example, weighbridge and CBC operations pre-ceding customs and immigration operations. Such a system would certainly reduce, if not eliminate, the “leakage” that currently takes place with regard to paying the CBC charge.

In addition to the above, there is also a need to fence all border posts for vehicle control purposes and to introduce more effective gate control at border posts, including the introduction of gate passes, to regulate all incoming and outgoing vehicles regarding permits. This will ensure that all incoming traffic is in possession of a CBC permit and that all out-going traffic hand in their permits for cancellation.

4.3 Charging Aspects

4.3.1 Frequent border crossers

There are a number of frequent border crossers, for example tourists, that enter and exit particular border posts frequently during a month, travelling relatively short distances in the process. For such visitors, the regular permit charges are disproportionately high and are adversely affecting the tourist industry. Consequently, a more appropriate charging system needs to be found.

Various options are available for overcoming the problems of frequent border crossers having to pay regular permit charges and include, for example, the use of a Type 17 permit as a regular user permit for Type 2 light vehicles, valid for one month.

4.3.2 Cross-subsidisation

As would be apparent from Table A.1 (Annex A), the current CBC fee structure as well as level of administration charge implies cross-subsidisation between vehicle classes. For example, the CBC fee structure that applied in April 2003 includes an administrative fee of N$48.98 per vehicle, including VAT. This fee results in cross-subsidisation between vehicle classes. For example, a Type 1 vehicle is subsidised by others as the Type 1 CBC level of N$60.00 results in a recovery of N$11.02 in contrast to a Type 10 CBC vehicle level of N$530 which results in a recovery of N$518.98. This problem is inevitable when the recovery instruments rely only on fuel levies and license fees and is the main motivation for the use of a MDC which will eventually consist of both an " entry fee" as well as a distance-based charge.

4.4 Scope for Improvements to CBCS

From the review of the CBCS as discussed above, coupled with the experience gained by the JV after, three years of operations, a number of aspects of the current operations could be improved upon. They include, in outline, the following:

- linking of decentralised systems at border posts with a central system in Windhoek;
- improving collaboration and streamlining operations at border posts between Customs, Immigration and Cross-Border operations through a Procedures Agreement that would minimise the scope for evasion of payment of cross-border charges;
- installation of effective gate control procedures at border posts;
- fine tuning of the "regular user permits" in terms of the penetration distance within Namibia allowed to frequent crossers;
- reduction of number of border posts where traffic volumes are very low (e.g. at Ruacana Border Post);
- Introduction of a MDC system to avoid cross-subsidisation within and between vehicle classes.

5. EVALUATION OF OPTIONS FOR FUTURE OPERATION OF CBCS

5.1 Option 1: Continued Operation Under a Revised Contract

5.1.1 Feasibility

It would certainly be feasible to continue the operation of the CBCS under a revised contract with the JV. In fact, the original contract allows for an appointment of initially three years with the option to renew the agreement for a further two years on a year-by-year basis and based on good performance.

From discussions with stakeholders, the unanimous view is that the performance of the JV in managing and operating the CBCS has generally been satisfactory. Most stakeholders are of the view that there have been inevitable teething problems in implementing the CBCS during its first three years of operation. However, the general view is that many of these problems have been attended to and sorted out in a satisfactory manner.

The major concern of some stakeholders is that the JV's fee as a proportion of total revenue is excessively high at about 36%.

5.1.2 Advantages

The advantages of continuing the operation of the CBC under a revised contract include:

- From a technical, managerial and operational perspective, the CBCS has been fulfilling its intended function in a satisfactory manner. Renewal of the agreement under a revised contract, as catered for in the original Terms of Reference, would minimise disruption to the operation of the system and would also allow the client to renegotiate aspects of the original contract by mutual agreement with the JV.

- The JV is very familiar with technical intricacies of the CBCS and in a good position to continue making enhancements to it in a relatively cost-effective and efficient manner.

- A revised contract allows the client the leeway to re-negotiate the JV rates for managing the CBCS at a time when the development component should be expected to have been recouped by the JV and, consequently, to provide scope for a commensurate reduction in rates.

5.1.3 Disadvantages

The disadvantages of continuing the operation of the CBC under a revised contract include:

- After three years of managing and operating the CBCS, a certain amount of complacency may set in with the JV which may reduce their incentive to effect efficiencies and further improvements to the system.

- There may be other competent service providers in the market place who are keen to compete for the future management and operation of the system and maintaining the current service provider would frustrate their aspirations.

- A perception might be created amongst some stakeholders of perpetuating a monopolistic situation without competition in an increasingly commercialised environment where competition is viewed as a necessary instrument of cost efficiency.

5.1.4 Costs

There should be cost advantages in continuing the operation of the CBC under a revised contract brought about by efficiency gains in operating the CBCS for a period of three years since its implementation. In addition, developmental costs, which should have been recovered by the JV after the first three years of the JV operation, should not feature from year four onwards. Thus, it is likely that the costs of managing and operating the system would fall and the ratio of the JV's administration fee to the gross revenue collected would also be reduced from the initial figure of about 36%.

5.2 Option 2: Continued Operation Through Tendering for a New Contract

5.2.1 Feasibility

The original contract provides for the option of renewing the agreement with the JV after its expiration at the end of November 2003 for a further two years on a year-by-year basis and based on good performance. Notwithstanding the acknowledged satisfactory performance of the JV to date, the client is not obliged to exercise the renewal option and can, instead, continue the operation of the CBCS through a new contract.

5.2.2 Advantages

The advantages of continuing the operation of the CBCS through tendering for a new contract include:

- Allows the market place to play its primary role of promoting competition amongst service providers and, in theory, allowing the client to obtain best value for money.
- Provides scope for the new entrant to provide fresh, more imaginative approaches to the continuing development of the system.
- Removes the perception of perpetuating a monopolistic situation without competition.

5.2.3 Disadvantages

The disadvantages of continuing the operation of the CBCS through tendering for a new contract include:

- The initial "learning curve" resulting lag in new developments or enhancements to the system can be expected in the first year or so of management and operation by a new service provider.

5.2.4 Costs

It is possible that competition in the market place could result in a tender in which costs could be reduced below that obtained from Option 1. This could arise either as a result of cost-effective innovations introduced by a new service provider or, alternatively, their under-estimation of actual costs through lack of familiarity of managing and operating a CBCS. A reduction in costs could also arise from the previous service provider (the JV) deciding to reduce his profit component under financial pressure from his competitors. On balance, therefore, there is a probability that costs under a re-tendered contract could be less than for an extended contract.

5.3 Option 3: Internal operation by staff of RFA

5.3.1 Feasibility

The RFA's mandate and mission are embedded in the RFA Act which stipulates the objective of the Administration as essentially being to *manage* the road user charging system. In fulfilling this mandate, the RFA's core business might well be expected to focus on strategic planning, regulatory, monitoring and promotional functions with lesser, if any, involvement in the actual collection of road user charges. Thus, although it would be feasible for the RFA to undertake the operation of the CBCS, this would not be in keeping with the general trend observed by other similar organisations in Namibia.

5.3.2 Advantages

The advantages of internal operation of the CBCS by staff of the RFA include:

- Extending the RFA's capacity through a partnership with the private sector to ensure broad-based stakeholder participation in some aspects of transport sector operations.

- Potential for reducing the overall management and operational costs by excluding the profit component from the cost-benefit equation, thereby providing the potential for reducing the ratio of collection costs to gross revenue.

- Closer control of, and involvement with, the CBCS and the ability to more directly influence its development to suit requirements.

5.3.3 Disadvantages

The disadvantages of internal operation of the CBCS by staff of the RFA include:

- The operation of the CBCS is arguably not part of the core business of the RFA and is not in keeping with the general government policy of outsourcing such operations to the private sector (e.g. vehicle testing which was previously undertaken by the police is currently undertaken by NATIS.)

- Diverts the RFA's focus from its core business of strategic planning, regulatory, monitoring and promotional functions.

- The RFA's ability to attract and retain systems management specialists or take over existing JV staff within their remuneration structure may be problematic, if not infeasible, with resulting losses in the operational efficiency of the CBCS.

5.3.4 Costs

There is likely to be a cost reduction in the operation and management of the CBCS brought about by removal of the profit component of internal operation by staff of the RFA rather than by reductions in other cost components such as staff remuneration.

5.4 Option 4: Operation by Customs officials

5.4.1 Feasibility

The expansion of Customs officials duties to include CBCS operations would require an official amendment of the establishment, functions, responsibilities and staff duties of the Customs Department. Such amendments are certainly possible although they would need to be considered at the highest levels of government and, moreover, there would need to be very good reasons for obtaining approval of such a proposal. If such approval were to be granted, it would probably take quite some time, of the order of one year, before it could be effected.

5.4.2 Advantages

The advantages of operating of the CBCS by Customs officials include:

- Provides potential synergy by combining the operations fo two government departments.

- As with the case of operations by the RFA, there is potential for reducing the overall management and operational costs by excluding the profit component from the cost-benefit equation, thereby providing the potential for reducing the ratio of CBC collection costs to gross revenue.

5.4.3 Disadvantages

The disadvantages of operating the CBCS by Customs officials include:

- The Customs Department is currently pre-occupied with the implementation of the SADC Protocol on Trade and, more specifically, with preparations for establishing a Free Trade Area in the region. This involves significant re-organisation of customs procedures to ensure that the provisions of the Protocol are effectively applied. As a result, the department is not enamoured with the prospect of getting involved in managing and operating a CBCS.

- The CBCS is not part of the normal core business of Customs and its introduction within a government environment would require the undertaking of a lengthy re-structuring process and, relative to the private sector, the operation of relatively bureaucratic and cumbersome rules and regulations.

- The scope for managing the CBCS in a commercialised manner within a public sector environment is very limited and is likely to result in operational inefficiencies typically associated with such arrangements.

5.4.4 Costs

As is the case with the operation of the CBCS by the RFA, there is likely to be an initial reduction in the cost of managing and operating the CBCS brought about by removal of the profit component that is part and parcel of private sector operations. However, such cost reductions are likely to be gradually lost as a result of reduced efficiency in managing and operating the CBCS.

5.5 Summary

Based on consideration of the pros and cons of the alternative options for the future operation of the CBCS, a recommendation on the preferred option is presented in Section 6.

6. RECOMMENDATIONS FOR FUTURE OPERATION

6.1 Preferred Option for future operation of the CBCS

6.1.1 General

In principle, the preferred option for the future operation of the CBCS would be one that allows the RFA to obtain maximum revenue at minimum cost over an extended period of time. The bulk of the future costs will be related to management, maintenance and operation of the system rather than to its further development which has now been largely accomplished.

6.1.2 Contractual developments since implementation of system

Since the CBCS was first implemented in December 2000, the RFA has re-negotiated an extension of the original contract with the JV. As a result, both the new and cancellation permit fees have been reduced by approximately 23% while the fixed border post charge (currently N$6,879.97) no longer applies. This has resulted in the Agent's fee as a proportion of the total revenue being been reduced from 36% to 22.3%. Thus, although the option of extending the existing JV contract is now a *fait accomplit*, for completeness the efficacy of this option is considered below together with the other feasible options described above.

6.1.3 Evaluation of options

The following factors serve as a broad basis for attempting to evaluate the four options available for the future operation of the CBCS:

A. Feasibility of option – in terms of the ease of implementation.
Rating: High (H), Medium (M) or Low (L) – scored 3, 2, 1 respectively.

B. Environment conducive to efficiency of operations – in terms of the suitability/appropriateness of the institutional framework/arrangements.
Rating: High (H), Medium (M) or Low (L) – scored 3, 2, 1 respectively.

C. Cost of undertaking operations – in terms of the profit element which is assumed not to apply in the cases of the operations for Options 3 and 4.
Rating: High (H), Medium (M) or Low (L) – scored 1, 2, 3 respectively.

D. Compliance with general government policy–in terms of general government policy for outsourcing/commercialising/ privatising such operations.
Rating: High (H), Medium (M) or Low (L) – scored 3, 2, 1 respectively.

Based on consideration of the above factors, the various options for undertaking the future operation of the CBCS would be rated as follows:

Table 4.1 – Evaluation of options for future operation of CBCS

Option	Feasibility (A)	Environment (B)	Cost (C)	Compliance (D)	Score	Rating
1. Extend contract	H (3)	H (3)	H (1)	H (3)	10	2
2. Tender new contract	H (3)	H (3)	M (2)	H (3)	11	1
3. RFA operation	M (2)	M (2)	M (2)	M (2)	8	3
4. Customs operation	L (1)	L (1)	L (3)	L (1)	4	4

6.1.4 Preferred option

On balance, and based on consideration of all the factors that are likely to affect the future operation of the CBCS, the preferred option which is likely to provide the RFA with best value for money is ***to continue operation of the CBCS through tendering for a new contract.***

6.2 Revised Levels of Cross-border Charges

6.2.1 Current versus required levels of road user charges

From the related companion report on the *Review of the Road User Charging System of the Road Fund Administration,* it was estimated that the current recovery from domestic road users based on current charge levels amounts to N$506.5 million compared to N$929.3 million which should be recovered from domestic road users. Thus, there is an under-recovery of N$422.8 million which is proposed to be recovered through a mass-distance charge which is aimed at recovering the excess cost responsibility for heavy vehicles that cannot be recovered using the current flat-based "entry fee".

6.2.2 Options for new levels of road user charges

The following options are available for recovering road use costs from road users:

1. Basket of instruments (Fuel levy + MDC supplement + Fixed fee)
2. MDC and Fixed Fee Only
3. MDC only
4. Fixed Fee only.

The road user charge levels related to the above options are shown in Table 6.1

Table 6.1 – Options for recovering road use costs from road users

CBC Vehicle Type	Fuel Type	Option 1: Basket of Instruments			Option 2: MDC and Fixed Fee Only		Option 3: MDC Only	Option 4: Fixed Fee Only
		Fuel Levy (c/l)	MDC - supplement to Fuel Levy (N$/100km)	Fixed Fee (N$/day)	MDC (N$/100km)	Fixed Fee (N$/day)	MDC (N$/100km)	Fixed Fee (N$/day)
1	P	81.87	3.27	3.21	7.36	3.21	13.05	7.36
2	P	81.87	0.00	2.84	7.60	2.84	13.80	6.33
3	D	49.48	0.00	3.38	12.35	3.38	22.21	7.61
4	D	49.48	5.50	6.54	25.29	6.54	35.45	22.83
5	D	49.48	6.06	6.93	25.85	6.93	36.01	24.56
6	D	49.48	5.30	8.07	21.14	8.07	38.92	17.65
7	D	49.48	9.83	6.21	30.12	6.21	47.90	16.74
8	D	49.48	0.00	6.13	20.52	6.13	35.86	14.33
9	D	49.48	0.00	9.56	26.66	9.56	42.01	26.18
10	D	49.48	1.01	5.54	30.20	5.54	45.54	16.46
11	N		25.74	6.07	25.74	6.07	36.00	21.30
12	N		32.50	6.63	32.50	6.63	42.76	27.61
13	N		35.59	6.19	35.59	6.19	45.86	27.67
14	N		39.96	4.40	39.96	4.40	50.22	21.52
15	N		43.20	9.93	43.20	9.93	53.46	51.74
16	D	49.48	0.00	3.07	8.56	3.07	16.28	6.48
17	D	49.48	0.00	3.34	8.56	3.34	16.28	7.05
Petrol Vehicles		81.87						
Diesel Vehicles		49.48						

Note: (1) Above charge levels exclude administrative fee (current level N$52.90 per vehicle (incl. 15% VAT).
(2) P = Petrol, D = Diesel, N = None.

6.2.3 Options for new levels of cross-border charges

Based on the cost responsibilities of the various vehicle types, the required levels of the CBC charge would depend on the following factors:

(1) Whether or not foreign vehicles would use Namibian fuel: If is assumed that foreign vehicles use Namibian Fuel, then Charge level Option 1 (last column MDC N$/100km) would be appropriate.

(2) If the fuel price differential between Namibia and neighbouring countries is too high: Two options are available to cater for this situation:

(a) The future CBC system could make provision for the fact that foreign vehicles travelling in Namibia will try to avoid purchasing fuel in Namibia by incorporating a fixed and a variable cost component into the future CBC tariffs. In this scenario, Charge level Option 2 would be appropriate.

(b) Should the variable cost component not to be incorporated into the CBC tariff, provision could be made for an “on-board fuel levy” whereby the volume of fuel brought in by foreign vehicles would be measured at the border (possibly under the current CBC system). Based on the volume of fuel foreign vehicle operators “import” into Namibia, an amount equal to the revenue that could have been generated from the fuel levy of the foreign vehicle would then have to be paid up-front at the border post. Refunds would be paid to foreign vehicle operators for any fuel that was not used in Namibia when leaving Namibia again.

In the final analysis, the charge levels of the CBC components would be dependent on which of the four options are implemented for domestic vehicles.

7. SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

(1) The CBC system has now been in operation for over three years. During the period of its three year operation to end November 2003, the system had issued approximately 170,000 permits and raised total revenue of about N$60 million. Approximately 36% of this total revenue has been paid as the Agent's fee which is considered to be too high by some stakeholders.

(2) The apparently relatively high Agent's fee was the best available to the client at the time of competitive tender and included for recovery of the initial development costs, profit and risk as well as on-going operational costs, including further development costs, purchasing and replacement of computers and bank, security and insurance costs. This fee should be expected to decrease significantly from year 4 onwards when the initial start-up costs have been recovered and the risk element considerably reduced.

(3) The operation of the CBC system has been generally satisfactory although it has experienced a number of inevitable teething problems which are gradually being addressed. There is also scope for effecting various management and operational improvements to the system.

(4) There are a few differences between the current Namibian and SADC/SACU approaches to regional transit charging of road users. The major difference is that Namibian approach intends that the costs to be recovered from transit traffic should be comprised of **fixed and variable costs related to the whole national public road** network while the SADC/SACU approach intends that such costs should be related **only to transit routes** as designated by the SADC Regional Trunk Road network (RTRN).

(5) Of the various options available for the future operation of the CBC system, the preferred alternative is to continue operation of the system through tendering for a new contract.

(6) There is currently under-recovery of N$422.8 million from road users for which various options are available including (a) a basket of instruments (fuel levy + MDC supplement + fixed fee), (b) MDC and Fixed fee only, (c) MDC only or (d) fixed fee only. In the final analysis, the charge levels of the CBC components of the RUC would be dependent on which of the four options are implemented for domestic purposes.

8. REFERENCES

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Annex 1

Table A.1 – Cross-border charges by vehicle type

Vehicle Type	Description Petrol and Diesel driven)	CBC Tariff Nov 2000	CBC Tariff Nov 2002	CBC Tariff April 2003
1	Motor cycles, motor tricycle and motor quadrucycle. Caravans and light trailers by Type 2 vehicles	N$ nil	N$ 58.00	N$ 60.00
2	All passenger cars, station wagons, S/C and D/C bakkies, 2x4 and 4x4 bakkies, kombis, microbus and minibus (up to 16 seaters)	N$70.00	N$ 90.00	N$ 100.00
3	Light vehicles/delivery vehicles (tare < 3 500 kg)	N$ 130.00	N$ 160.00	N$ 230.00
Heavy Vehicles (Single Units)				
4	Bus with 2 axles (carrying capacity of 25 or more passengers.	N$ 150.00	N$ 200.00	N$ 230.00
5	Bus with 3 axles (carrying capacity of 25 or more passengers.	N$ 200.00	N$ 255.00	N$ 290.00
6	Single unit truck with 2 axles (Tare > 3 500 kg)	N$ 150.00	N$ 200.00	N$ 230.00
7	Single unit truck with 3 axles (Tare > 3 500 kg)	N$ 200.00	N$ 250.00	N$ 290.00
Heavy Vehicles (Traction unit as part of a combination vehicle)				
8	Truck with 2 axles	N$ 150.00	N$ 200.00	N$ 230.00
9	Truck with 3 axles	N$ 200.00	N$ 250.00	N$ 290.00
10	Truck tractor with 4 or more axles	N$ 350.00	N$ 460.00	N$ 530.00
Heavy Trailers (as part of a combination vehicle)				
11	Trailer with 1 axle	N$ 100.00	N$ 130.00	N$ 150.00
12	Trailer with 2 axle	N$ 150.00	N$ 200.00	N$ 230.00
13	Trailer with 3 axle	N$ 200.00	N$ 250.00	N$ 290.00
14	Trailer with 4 axle	N$ 250.00	N$ 320.00	N$ 370.00
15	Trailer with 5 axle	N$ 300.00	N$ 390.00	N$ 450.00
Construction Vehicles				
16	Tyre dozer, grader motor, front-end loaders, excavators, self-propelled vibratory rollers.	N$ 500.00	N$ 650.00	N$ 760.00
17	Any other vehicle not listed	N$ 100.00	N$ 130.00	N$ 150.00
Regular User Permit		-	N$ 490.00	N$ 520.00
Administrative costs per transaction			N$ 45.07	N$ 48.98

Annex 2

SADC Regional Trunk Road network (RTRN)