



**THE REPUBLIC OF UGANDA**

**MINISTRY OF WORKS AND TRANSPORT**

# **ROAD TOLLING POLICY**

**May 2017**

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## **LIST OF ACRONYMS AND ABBREVIATIONS**

ADT	Average Daily Traffic
AMS	Asset Management Systems
BCR	Benefit Cost Ratio
CPI	Consumer Price Index
EAC	East African Community
ESIA	Environmental and Social Impact Assessment
ETC	Electronic Toll Collections
GOU	Government of Uganda
IRR	Internal Rate of Return
ITS	Intelligent Transport Systems
KCCA	Kampala Capital City Authority
MOWT	Ministry of Works and Transport
NDP	National Development Plan
NPV	Net Present Value
NTMP	National Transport Master Plan
NTPS	National Transport Policy and Strategy
PPP	Public Private Partnership
SGR	Standard Gauge Railway
UNRA	Uganda National Roads Authority
URA	Uganda Revenue Authority
URF	Uganda Road Fund
WTP	Willingness to Pay

## FOREWORD

The rationale for the development of a tolling policy derives from the fact that road infrastructure is a public asset which requires massive investment. Henceforth, its maintenance is a shared responsibility ranging from road authorities to users.

This policy articulates Government's desire and commitment to additional funding for national road transport infrastructure investment through financing the construction, operation and maintenance of new roads, bridges or dedicated lanes.

Road tolling has become a globally accepted method of raising state funds. It has been tried and tested in many countries and found to provide substantial economic benefits if properly managed.

Over the years, Government has continued to prioritise investment in road infrastructure development by increasing the budget for the Works and Transport Sector from UGX 2.0 trillion in FY2007/08 to UGX 4.5 trillion in FY 2017/2018. However, there is a shortfall in funding for maintenance of the road network which is critical in the protection of the huge investment in road development. This policy is therefore timely to partially fill this funding gap.

I do assure all Ugandans that this policy will partly provide a solution to meet some of the critical deficit in road development, rehabilitation, operation and maintenance. In addition, Government will only permit tolling for specific roads where there is an alternative free route that offers an acceptable level of service.

Allow me to extend my sincere thanks to the Governments of Ethiopia and South Africa for sharing their experiences on tolling with the Ugandan technical team. Special thanks go to the staff and leadership of South Africa Roads Agency Ltd (SANRAL), BAKWENA toll operator (South Africa), Group Five Ltd (South Africa); the staff and leadership of Ethiopia Roads Authority (ERA), Ethiopia Toll Roads Enterprise (ETRE); and the Director, Saba Engineering (Ethiopia) for the valuable information that enabled our technical team to draft this tolling policy. In the same spirit, I thank and commend the Permanent Secretary, Engineer-in-Chief and the task team headed by the Assistant Commissioner, Policy Analysis for formulating this critical policy.

Lastly, I thank the Government of Uganda and the Development Partners for recognising the importance of transport infrastructure development by continuously increasing funding to the Sector.

I appeal to fellow Ugandans to accord this policy maximum support in its implementation.



Monica Azuba Ntege  
**MINISTER OF WORKS AND TRANSPORT**

## **EXECUTIVE SUMMARY**

The tolling policy provides a framework necessary for regulation, management and operation of toll roads in Uganda. It will address the growing demand for financing the development, operation and maintenance of road infrastructure by private investors, a basis for additional funding.

The policy objectives are to: provide guiding principles for planning, prioritizing and funding of toll road projects; provide for road tolling as an alternative source of funding for development, rehabilitation and maintenance of roads; guide and encourage private sector investment in road infrastructure development, operation and maintenance; ensure effective governance, transparency, fairness and sustainability in road toll collection; and to provide for an effective and efficient road tolling system as a way of decongesting urban centres. The policy legislation is guided by 11 principles.

The policy hinges on three options which include: tolling based on computation of cost recovery; tolling based on the proportion of the benefit accrued from the use of the road infrastructure; and tolling based on projects that are not self-funding.

The prescribed criteria to determine whether a road infrastructure project can be earmarked for tolling are: economic viability- consideration of costs and benefits as economically justifiable; public acceptance and willingness to pay (WTP); and consistency and in conformity with the priorities as set out in the Government's development plans.

The policy further provides the methods for tolling; tariff pricing for a specific class of vehicle based on the classification system for motorcycles, light vehicles, medium goods vehicles, medium buses, large goods vehicles and large buses; currency for toll tariff payment and payment methods; and the policy outlines the different PPP modes of engage under concessional terms.

The accrued benefits of the policy, include: a new source of financing road development and maintenance; stable source not tied to the annual Government budgetary process; dedicated source to fund development and maintenance of particular roads; support to the development of road infrastructure in less developed regions; contributes to social aspects as employment and urban sprawl; increased private sector participation and investment in road; and reduced travel time and costs.

In conclusion, the tolling policy provides a clear framework necessary for regulation, management and operation of toll roads in Uganda. It enables raising additional funds from road users.

## **1.0 BACKGROUND**

### **1.1 Overview of the Transport Sector**

The transport sector in Uganda comprises road, railway, air and water transport modes. Road transport is the most dominant mode carrying over 95% of passenger and freight traffic. However, it is anticipated that the development of the Standard Gauge Railway (SGR) will reduce over reliance on road transport most especially for transportation of imports and exports.

The Country has a total road network of 144,785km which comprise of 20,544km of National Roads; 35,566km of District Roads; 10,108km of Urban Roads and 78,567km of Community Access Roads. The Uganda National Roads Authority (UNRA) is responsible for the development and maintenance of the national road network. The District and Community Access Roads are managed by District Local Governments, while Urban Roads are the responsibility of Kampala Capital City Authority, Municipalities and Town Councils.

## **2.0 STATEMENT OF THE PROBLEM**

### **2.1 Development of the National Road Tolling Policy**

The Government of Uganda (GOU) has in the recent past committed a sizeable amount of the national budget towards funding road infrastructure works. However, the available funding has not been able to meet the road infrastructure development and maintenance needs.

The current established road network estimated at 144,785km (National Roads 20,544 km; District Roads 35,566km, Urban Roads 10,108km and Community Access Roads 78,567km, has only about 5,300km (4%) of paved road network with the largest network of 96% gravel or earth surface.

Despite deliberate efforts by Government to road infrastructure development as observed from the increased funding to the sector in the last 8 years ; FY 2008/09 (UGX 1.368trillion); FY 2009/2010 (UGX 1.448trillion); FY 2012/13 (UGX 1.650 trillion); FY 2013/14 (UGX 2.510 trillion); FY 2014/15 (UGX 2.575trillion); FY 2015/16 (UGX 3.329 trillion); FY 2016/17 (UGX 3.847trillion) and FY 2017/2018 (UGX 4.534 trillion) funding has not met the road infrastructure development and maintenance needs.

In FY 2015/16 under GOU financing there was a total deficit of UGX 1.67 trillion for road development and land acquisition for externally financed projects which resulted into non-inclusion of new projects in the FY 2016/2017.

To bridge the funding gap, GOU intends to attract private sector capital to be recouped through tolling. Road tolling is a method of raising revenue from transport infrastructure through imposing a charge or fee on the vehicle.

A toll road shall be defined as the whole length or portion of a national, urban and community access road infrastructure where tolls are levied and collected from vehicles.

In Uganda, tolls were operated on roads such as Kampala-Masaka and Kampala-Jinja in the late 1980s and early 1990s but were later abolished due to lack of a policy and clear legal framework.

The proposed policy will therefore provide the road tolling framework necessary for regulation, management and operation of toll roads in Uganda. With its operationalization, the policy will enable the collection of revenues from tolling and contribute significantly to the progress made towards improving the stock and quality of our road infrastructure and services.

### **3.0 SITUATIONAL ANALYSIS**

#### **3.1 Cost of Freight**

Uganda plays an important role as a transit hub in East Africa, connecting landlocked countries such as Burundi, Rwanda, and South Sudan with coastal gateways in Kenya and Tanzania. Traffic volumes are substantial along all of these transit routes, particularly on the Northern Corridor into Kenya. But the condition of road infrastructure varies significantly across corridors. The cost of moving freight in Uganda varies between typical East African rates of \$0.09 on the routes to the coast, and much higher rates of \$0.20 on inland routes toward South Sudan. The reason underlying the expensive freight tariffs for northbound traffic is that the road quality is not good, which escalates the costs of moving freight.

#### **3.2 Unpaved Road Network**

The road network is largely unpaved with only 4,157km of 20,544km of the National Roads and 1,148km of 10,108km of Urban Roads bitumen surfaced. According to Vision 2040, it is envisaged that 80% of the total road network will be paved by 2040. Therefore, additional sources of funding are needed to meet this vision with road tolling as a viable option.

#### **3.3 Inadequate Funding**

There is inadequate funding from both Government and Development Partners for all the needed construction, rehabilitation and maintenance works on the road network.

Government has continued to prioritise the Works and Transport sector by giving it the biggest share of the national budget. The move is intended to close infrastructure gaps as well as improving trade in Uganda. Despite the increased funding to the sector, there is still a remarkable gap in the funding of road infrastructure construction and maintenance.

In 2017, Government pronounced itself on the use of Public Private Partnerships (PPPs) as an important option for delivering public infrastructure projects and services. The PPP Act of 2015 provides the Legal Framework for implementation of PPP projects. However there is a need for a well-developed policy to enable the Private Sector recoup their investment through tolling.

The good news is that government of Uganda through the Road Tolling Policy is exploring opportunities for tapping into private sector financing. This strategic shift has come about on the realization that scaling up financing from traditional sources alone would not be adequate to close the road infrastructure gap. Some roads within the national road network have relatively high potential for success as Design, Build, Finance and Operate (DBFO) projects.

### **3.4 Inadequate Policy and Legal Framework**

The PPP Act, 2015 encourages private sector participation in road infrastructure development and maintenance. The URF Act (2008) on the other hand encourages tolling to raise finance for road maintenance needs. The laws are however silent on the mechanisms for the implementation and operation of road tolls. Therefore, there is need for adequate policy and legal framework to support road tolling.

## **4.0 THE OVERALL DEVELOPMENT CONTEXT**

### **4.1 Uganda Vision 2040**

The long term development vision for Uganda is to transform Uganda from a peasant to a modern and prosperous country within 30 years. Vision 2040 pays particular attention to the need to develop a critical mass of transport infrastructure to lower the costs of doing business and to spur economic growth. In the roads sub-sector, the focus of the Vision is on improved connectivity, effectiveness and efficiency. The rail network will be extended mainly for long distance and inter-urban transport.

Similarly, marine transport will be expanded by improving connectivity between other transport modes, particularly for long distance and international goods traffic. For air transport, it is envisaged four more international airports will be constructed in Soroti, Nakasongola, Arua and Kasese in addition to expansion of Entebbe International Airport.

### **4.2 Second National Development Plan (NDPII) 2015/16 – 2019/20**

Towards the realization of Vision 2040, NDP II set out development objectives under the overall theme of “Strengthening Uganda’s Competitiveness for Sustainable Wealth Creation, Employment and Inclusive Growth”. NDP II positions the private sector as the engine of growth, employment and prosperity with Government actively promoting and encouraging public-private partnerships.

### **4.3 The National Transport Master Plan (NTMP)**

The NTMP sets out a framework for development of the transport sector over a period of 15 years from 2008 to 2023. Since transport is the “lifeblood” of any economy, this Plan

constitutes an essential element for overall planning of the medium-term economic and social development of Uganda. The NTMP recognizes that road will remain the dominant transport mode up to 2023 due its flexibility but all modes have their role in the future transport system.

#### **4.4 East African Community (EAC Development Strategy, Policies and Legislation**

The EAC Development Strategy prioritizes the promotion of social and economic infrastructure that would support and spur economic growth in the Partner States. Specific policies on transport are detailed in the East African Transport Strategy and Regional Road Sector Development Program, Final Report, September 2011.

#### **4.5 National Transport Policy and Strategy (NTPS), 2014**

The draft policy objective is to provide cost-effective, affordable, efficient, safe and environmentally sensitive transport services.

### **5.0 INSTITUTIONAL FRAMEWORK**

#### **5.1 Ministry of Works and Transport (MoWT)**

MoWT is the lead agency in the Transport Sector. The Ministry is responsible for policy formulation, setting standards, guiding and monitoring performance of all transport related authorities, agencies, boards and councils.

#### **5.2 Uganda National Roads Authority (UNRA)**

UNRA was established by an Act of Parliament in 2006 with the mandate of planning, developing and maintaining the National Roads.

#### **5.3 Uganda Road Fund (URF)**

URF was established under the URF Act, 2008. It is mandated to finance routine and periodic maintenance of public roads. The finances of the Fund consist of road user charges such fuel levies and tolls among others.

#### **5.4 Kampala Capital City Authority (KCCA)**

KCCA was established under the KCCA Act, 2010 and one of its mandates is to plan, construct and maintain roads within its jurisdiction.

#### **5.5 The Local Government, Urban, Municipal Authorities**

One of the functions of Local Governments, Urban and Municipal Authorities is the construction, rehabilitation and maintenance of roads within their jurisdiction.

### **6.0 LEGAL FRAMEWORK**

The existing laws are not sufficient for the operation and management of road tolls. The Policy will enable further legislation on tolling with the relevant provisions to be included in the Draft Roads Bill and any other relevant law.

#### **6.1 The Constitution of Republic of Uganda, 1995**

The Constitution under article 153 establishes a Consolidated Fund into which all revenues or other monies raised or received for the purpose of, or on behalf of, or in

trust for the Government shall be paid. The Constitution also provides for establishment of other coffers where such revenues can be kept.

This provision therefore allows for the establishment of other accounts for specific purposes such as road tolls.

### **6.2 Uganda Revenue Authority (URA) Act Cap 196**

The primary function of URA is to assess, collect and account for all revenue in Uganda. Under Section 14, all revenue collected by, or due and payable to the authority shall be credited or be due and payable to the Consolidated Fund.

### **6.3 Uganda Road Fund Act, 2008**

The Act establishes the Uganda Road Fund for purposes of financing routine and periodic maintenance of public roads.

According to Section 21, the finances of the Fund consist of road user charges as the Minister may, by Statutory Order and on the recommendation of the Board determine. The finances include among others bridge and road tolls.

The Act gives the Fund power to open and maintain bank accounts necessary for the performance of the functions of the Board.

### **6.4 Public Finance Management Act, 2015**

Section 30 of the Act requires all revenues or other money raised or received for the purpose of Government to be paid into and form part of the Consolidated Fund.

However, Section 29 provides that a vote, state enterprise or public corporation may collect or receive revenue as authorized by an Act of Parliament. Subsection 2 (b) therefore establishes a public fund for an authorized specific purpose.

### **6.5 Public Private Partnership (PPP) Act, 2015**

The Act provides for different types of PPP agreements such as Concessions; Operation and Maintain; Build, Own, Operate and Transfer, Design, Build; Finance and Operate among others. It also provides for their management.

### **6.6 Kampala Capital City Authority Act, 2010**

The Act establishes KCCA whose functions under Section 7 (1) (g) include among others to construct and maintain roads within its jurisdiction. The Authority has power to levy, charge, collect appropriate fees and taxes.

### **6.7 Uganda National Roads Authority Act, 2006**

The Act establishes the Uganda National Roads Authority which is responsible for, among others the management of the national roads network. The national roads network is interpreted to mean 'the system of all roads maintained by the Government. The funds for the Authority according to Section 24 consist of money appropriated by Parliament for purposes of the Authority and revenue earned from activities of the Authority among others.

## **6.8 Local Government Act, Cap 243**

One of the functions of Local Government under the Act is the construction, rehabilitation and maintenance of roads within their jurisdiction.

## **6.9 Draft Roads Bill**

The Government has drafted the Roads Bill which will enable levying, enforcement, collection and operation of tolls on roads. The road authority will utilize the toll to meet construction, operation and maintenance costs and any other obligations associated with road infrastructure.

The Bill will provide for the collection, management and utilization of funds accruing from tolls.

Whereas the general principle is that all revenue collected for Government purposes is paid in the Consolidated Fund, the Constitution and the Public Finance Management Act allow for the establishment of other public funds for specific purposes on approval by Parliament. Therefore, the operation of road tolls shall be managed as a public fund under the proposed Roads Bill.

## **7.0 THE TOLLING POLICY**

The prevailing problem/situation justifies the need for a policy and legal framework for road tolling.

### **7.1 Vision, Goal and Objectives**

#### **7.1.1 Vision**

Well-built, operated, maintained, safe and reliable toll roads.

#### **7.1.2 The Goal**

To raise adequate funding from toll road users to develop, rehabilitate, operate and maintain reliable, efficient and sustainable road infrastructure.

#### **7.1.3 Objectives**

The policy objectives include:

- 1) To provide guiding principles for planning, prioritizing and funding of toll road projects;
- 2) To provide for road tolling as an alternative source of funding for development, rehabilitation and maintenance of roads;
- 3) To guide and encourage private sector investment in road infrastructure development, operation and maintenance;
- 4) To ensure effective governance, transparency, fairness and sustainability in road toll collection;
- 5) To provide for an effective and efficient road tolling system as a way of decongesting urban centres.

## 8.0 POLICY PRINCIPLES

The Policy is guided by the following principles:

### 1 National Development Framework

Government recognizes that the development of the road transport network shall be part of the National Development Framework and is an integral part of the National Transport Policy.

**Principle: Road tolling shall be responsive to the national prioritized economic and social transportation needs.**

### 2. Gender equality, public consultations, environmental and social management.

The Policy is based on the principles of gender equality and social inclusion for equitable accessibility and mobility as well as environmental preservation. It aims to foster community participation and sustainability in the development, operation and maintenance of toll roads.

**Principle: Environmental and Social management practices shall be enforced on every toll road.**

**The concessionaire/toll operator shall participate in social economic development of the project area of influence.**

### 3. Transparency and cost effectiveness

**Principle: The operation and management of toll roads shall be conducted with fairness, cost-effectiveness, transparency and accountability to all stakeholders.**

### 4. Legislation for toll roads

Government recognizes that there is need for legislation for the operation, management and maintenance of toll roads.

**Principle: Legislation shall be enacted to enable the operation, management and maintenance of toll roads.**

### 5. Road infrastructure financing

Government recognizes that available funding is not sufficient to meet the road infrastructure development and maintenance needs of the Country.

**Principle: Toll revenues shall provide additional funding for development, rehabilitation, and maintenance of roads.**

### 6. Public Private Partnerships (PPPs)

Government recognizes that the private sector can invest in road infrastructure and recoup their capital investment through levying and collection of tolls under well-structured PPP agreements. Unsolicited offers shall not be accepted.

**Principle: Partnerships and strategic alliances with private sector through PPP agreements shall be emphasized to ensure recoupment of their investment over a**

**specified period. Thereafter, the investor shall return the asset to Government in a specified condition.**

#### 7. Alternative free route

Government recognizes that not every road user will be willing and able to pay the toll tariff. Therefore, for equity and social justice, an alternative route of acceptable standard shall be provided.

**Principle: There shall be accessibility and movability through an alternative free route that offers an acceptable level of service**

#### 8. Use of appropriate technology

Government recognizes the need for use of appropriate technology in management of toll roads.

**Principle: The management, operation and maintenance of toll roads shall be supported by use of technologies including but not limited to Intelligent Transport Systems (ITS), Electronic Toll Collections (ETC) and Asset Management Systems (AMS) and promotion of interoperability of toll systems.**

#### 9. Declaration of toll roads

Government recognizes the need for a systematic process in the identification and declaration of toll roads.

**Principle: A systematic process involving among others public consultations, conduction of feasibility studies, Environmental and Social Impact Assessment, gazetting of toll tariffs shall be conducted prior to commencement of road toll operations.**

#### 10. Road Safety Management

Government recognizes that road accidents are still high despite road safety interventions.

**Principle: The development, operation and management of toll roads shall among others promote road safety management through major road safety activities including accident prevention, incident management and post-crash management.**

#### 11. Toll Exemption

Government recognizes the need for exemption of paying road tolls under special circumstances.

**Principle: All road users shall pay toll except where they are exempted from toll payment. Exempt vehicles may include; police vehicles on duty, military vehicles on duty and emergency service vehicles.**

**Principle: Road users living and working along the toll road shall be exempted from toll payment.**

## **9.0 TOLL REVENUE OPTIONS**

The Policy gives direction to three options:

### **9.1 Option One: Tolling based on computation of cost recovery**

This option is derived from the concept of cost recovery. The Concessionaire shall manage the road infrastructure for a period stated in the PPP agreement to recoup the construction, maintenance and operation costs. Thereafter, the concessionaire shall return the infrastructure to the responsible road authority in the condition specified in the agreement.

### **9.2 Option Two: Tolling based on the proportion of the benefit accrued from the use of the road infrastructure**

The basis for this option is that users of the road are expected to pay a proportion of the benefit they get from the road infrastructure.

The Concessionaire shall manage the road infrastructure for a period stated in the PPP agreement to recoup the construction, operation and maintenance costs. In case these costs cannot be recouped, Government shall cover the balance costs to the concessionaire through agreed means.

### **9.3 Option Three: Tolling based on projects that are not self-funding**

This option considers projects that after a cash flow forecast, toll revenues will not be sufficient to cover costs of construction, operation and maintenance yet they are strategic. In this respect, Government will support such projects through direct revenue support, loan guarantee, equity guarantees, subsidies, grants, preferential loans, shadow tolls, tax relief, foreign exchange guarantees, availability fees etc.

**10.0 POLICY STRATEGIES**

**10.1 Limiting Tolling to Certain Limited Access Road Facilities**

The policy strategy provides that only "greenfields" road projects that are freeway or motorway type facilities with grade-separated limited access, i.e. with access at interchanges, will be considered as toll projects.

Deviations from this strategy will be allowed in respect of upgraded, rehabilitated or reconstructed national, urban, district and community access roads where the construction of interchanges is not economically justifiable.

**10.2 Establishment of Alternative Routes to Toll Roads**

All toll roads shall have a well maintained all weather alternative route. In the case of a "greenfield" road section being tolled, the roads that existed prior to a toll road being constructed will be regarded as the alternative routes and shall be well maintained.

In case of "brownfield" road projects, alternative routes shall be provided in good motorable condition.

**10.3 Implementation framework/ Selection Criteria**

The following criteria shall be used to determine whether a road infrastructure project can be earmarked for tolling:

**10.3.1 Economic Viability**

A road project to be implemented through toll financing should, after consideration of costs and benefits be economically justifiable. Parameters to be evaluated include: Net Present Value (NPV), Internal Rate of Return (IRR), Benefit Cost Ratio (BCR), Average Daily Traffic (ADT) and others.

It should, after consideration of the impact of higher costs and lower road user benefits associated with tolling, still be economically justifiable. After taking into account the reduction of the project indices of economic worth (Benefit-Cost Ratio, Net Present Value (NPV) of benefits minus costs and the Economic Internal Rate of Return) as a result of toll-related costs and lower economic benefits due to toll-induced traffic diversion, the threshold values of these indices indicating economic viability, should still be exceeded. This means that:

1. The NPV should be more than 0 at the appropriate social time preference discount rate\* (predetermined p.a.), and/or
2. The Benefit-Cost Ratio should be more than 1,0 at the appropriate social time preference discount rate\* (predetermined p.a), and/or
3. The Economic Internal Rate of Return (EIRR) should be equal to or more than the appropriate social time preference discount rate\* (predetermined p.a).

**\* Social Time Preference is the value society attaches to present rather than future consumption of goods and services.** The Social Time Preference Rate is, therefore, the rate used for discounting future benefits and costs to their present values and is based upon comparisons of utility across different points in time or even different generations.

### **10.3.2 Willingness to Pay (WTP)**

Public acceptance and willingness to pay is critical for financial viability. This will largely depend on whether a proposed road offers clear and verifiable net benefits to road users. Studies shall be carried out to establish the willingness to pay.

### **10.3.3 Consistency with Government Policies**

The road infrastructure project under consideration shall be in conformity with the priorities as set out in the Government's development plans.

### **10.4 Tolling Methods**

The following methods shall be used for tolling: manual, electronic and mixed. The appropriateness of the tolling method will be determined by the technical analysis carried out on the various options.

### **10.5 Tolling Systems**

Government shall use three (3) modes of tolling systems, namely: open systems, closed systems and shadow tolling. Appropriateness of the system to be used shall depend on an analysis performed on its suitability.

In an **open system**, there are no toll plazas on the entry and exit ramps to the toll road. Tolls are collected at toll plazas established along the road and the tolls paid are not related to the distance travelled.

In a **closed system**, toll plazas will be constructed at the entry and exit points to the toll roads. Motorists are allowed into the toll road at the entry points and make payments at the exit points that are directly proportional to the distance travelled along the toll road.

In **shadow tolling**, no tolls are paid directly by the road users but instead by Government to the toll operator. The payment is based on two scenarios:

- i) Traffic counts and agreed rates for vehicle type and vehicle class. The toll operator does the traffic counts based on which the Government pays the tolls.
- ii) Availability of the road infrastructure to carry traffic at an agreed level of service. Government shall periodically pay availability fees to the operator computed based on investment and operation costs.

### **10.6 Tariff Pricing**

Toll revenues shall not only come from toll receipts of motorists but also from other sources such as advertising and service areas established within the toll road corridor.

The toll tariff for a specific class of vehicle shall be determined based on analysis of the perceived benefits offered to that class of vehicle by a toll road relative to an alternative route.

The toll tariff for a specific class of vehicle shall be based on the classification system shown in table I.

**Table I: Classification of vehicles**

<b>Class</b>	<b>Type of vehicle</b>	<b>Description</b>
1	Motorcycles	Vehicle with two wheels, excluding tricycles. (Commercial motor cycles should not be allowed on toll roads).
2	Light vehicles	Light vehicles with 3 or more wheels with or without trailers and with no heavy axle* on the vehicle or trailer.
3	Medium goods vehicles and medium buses	Goods vehicles and buses with three or fewer than three axles of which one or more is a heavy axle*.
4	Large goods vehicles and large buses	Goods vehicles or buses with four or more axles of which one or more is a heavy axle*.

**\* A heavy axle is defined as an axle with more than 2 wheels**

The tariff shall be comparable with existing regional and international rates in developing countries.

The toll tariff shall be adjusted to cater for inflation in accordance with the Consumer Price Index (CPI) as provided by the responsible agency.

### **10.7 Methods of Payment**

Toll tariffs shall be paid in local currency using the following payment methods; Cash and credit cards; Operator cards, Mobile money and others. The payment method adopted shall be customer friendly.

### **10.8 Toll Operations**

Toll operations shall take on two dimensions:

1. Private sector concessions: if the private sector is involved in toll roads, a designated road agency will be the authority to issue Requests for Proposals, leading to the negotiation of the concession. Seven different alternatives identified below, will guide Private sector involvement in toll roads.
  - a) Build, (Finance), Operate and Transfer;
  - b) Build, Own, Operate and Transfer;
  - c) Formation of a private trust to finance toll concession;
  - d) Finance, Operate and Transfer;
  - e) Design, Build, Operate and Transfer;
  - f) Design, Build, Finance and Operate;
  - g) Design, Build, Finance and Transfer.

The Concessionaire shall manage the road infrastructure for a period stated in the **PPP agreement** to recoup the construction, operation and maintenance costs. Upon recovery the concessionaire shall return the infrastructure to government as stipulated in the agreement.

2. Government may opt to:
  - a) Designate an existing public sector authority, operating on commercial principles(using the private sector as much as possible to operate tolls);
  - b) Contracting out selected individual toll road projects to the private sector on a concession basis through competitive tendering without any financial guarantees.

### **10.9 Axle Load Control**

Axle load control shall strictly be enforced on toll roads by the toll operators.

## **11.0 POLICY OUTCOMES**

The policy shall contribute to the following outcomes:

### **i) New Source of Financing**

The toll revenue will be a new source of financing road development and maintenance.

### **ii) Stable Source of Finance**

Tolls will provide an additional source of revenue, which is not tied to the annual Government budgetary process. This can be particularly important for raising debt finance outside the national accounts.

### **iii) Dedicated Source of Finance**

Funds from toll revenues will be dedicated to support the development and maintenance of a particular road.

### **iv) Regional Harmonisation**

Tolls will support the development of road infrastructure in less developed regions in Uganda.

### **v) Social and Economic Impacts**

Toll roads will have significant social impacts such as employment and urban sprawl.

### **vi) Private Sector Investment in the Road Infrastructure Development**

Tolls will lead to increased private sector participation and investment in road infrastructure development and maintenance.

### **vii) Reduction of Travel Times and Costs**

Toll road infrastructure will reduce journey times and travel costs.

### **viii) Road Safety**

There will be increased road safety for motorist due to limited access.

### **ix) Equitability**

Tolls will lead to equitability because they are paid by those who use the road infrastructure.

## **12.0 IMPLEMENTATION FRAMEWORK**

Operationalization of a toll road shall be declared in the Government Gazette and also published in print media of wide circulation.

Every vehicle shall be mandated by law to pay a fee for using a toll road.

### **12.1 Declaration of the Toll Road**

The process leading to the declaration of the toll road shall be as follows:

- iii) Conduct of conceptual design and toll feasibility studies by the road authority;  
Where applicable appoint a specialist advisor;
- iv) Preliminary designs and detail traffic and toll studies and modelling by the road authority;
- v) Financial and economic viability studies to be done by the road authority;
- vi) Environmental and social impact assessment and public consultations to be done by the road authority;
- vii) Land compensation for acquisition of right of way by the road authority;
- viii) Detailed designs for road and toll facilities to be done by the road authority;
- ix) Procurement of road contract, toll facilities and toll operations;
- x) The intent to toll shall be published by the Minister responsible for roads, in the Government Gazette, and print media of wide circulation.
- xi) Public consultations shall be held with stakeholders by the authority.
- xii) Preparation and submission of the report with recommendations to the minister responsible for roads for consideration and presentation to Cabinet for approval.
- xiii) Gazetting of toll road and tariffs by the Minister responsible for roads.
- xiv) Commencement of tolling operations

### **12.2 Toll Exemption Regimes**

All vehicles shall pay tolls unless they are exempted from toll payment. Exempt vehicles may include; police vehicles on duty, military vehicles on duty and emergency service vehicles.

Road users living and working along the toll road and have no access to alternative routes shall be exempted from toll payment.

## 13.0 MONITORING AND EVALUATION

The following indicators shall be used to monitor the physical aspects of the toll road from pavement and equipment conditions to performance in terms of facility availability, safety and technical efficiency. Toll revenue and cost indicators shall also be used to monitor and evaluate financial performance of the toll road.

<b>1. Operational performance</b>
a) Lane availability b) Average speed c) Toll plaza availability d) Toll plaza queuing time e) Accident and safety indicators f) Engineering quality parameters (roughness, rut depth, signage, lighting) g) Traffic management (accident management, incident management and post-crash management)
<b>2. Toll revenue</b>
a) Traffic volume by class b) Traffic volume by time of day(peak/off peak) c) Revenue collected by vehicle class d) Revenue collected by time of day(peak/off-peak) e) Revenue generated from ancillary services e.g service centres f) Revenue from enforcement levies e.g axle load fines
<b>3. Operating expenses</b>
a) Toll collection b) Road maintenance c) Road operations d) Emergency services
<b>4. Investment Indicators</b>
a) Profit as percentage of revenues b) Working capital c) Debt service coverage and projections d) Debt: equity ratio e) Debt: asset ratio f) Return on assets and equity
<b>5. Asset by class</b>
a) Road infrastructure b) Equipment c) Ancillary services d) Maintenance program
<b>6. Financial Information</b>
a) Income statements, balance sheets and cash flow statements (audited) b) Working capital c) Debt service schedule and currency standings