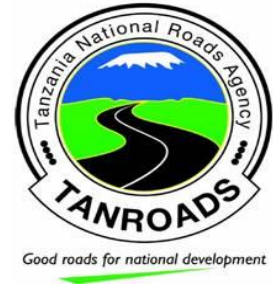


**THE UNITED REPUBLIC OF TANZANIA  
MINISTRY OF WORKS AND TRANSPORTS**



**TANZANIA NATIONAL ROADS AGENCY (TANROADS)**

**A CONCEPT NOTE FOR CONSTRUCTION OF MOROGORO – DODOMA  
EXPRESSWAY (258km) USING PUBLIC PRIVATE PARTNERSHIP (PPP)  
ARRANGEMENT**

***FEBRUARY, 2022***

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## LIST OF ABBREVIATIONS

AQRB	Architect Quantity Surveyors Registration Board
AG	Attorney General
BOQ	Bills of Quantities
CML <sup>5</sup>	Central Material Laboratory
CRB	Contractors Registration Board
CSIR <sup>3</sup>	Council for Scientific and Industrial Research
DBFOMT	Design, Build, Finance, Operate and Maintain and Transfer
eGA	e-Government Authority
ENPV	Economic Net Present Value
ENPV	Economic Net Present Value
ERB	Engineers Registration Board
ESMP	Environmental and Social Management Plan
PPRA	Public Procurement Regulatory Authority
FIRR	Financial Internal Rate of Return
FNPV	Financial Net Present Value
FYDP	Five Years Development Plan
GN	Government Notice
GPSA	Government Procurement Services Agency
MoE	Ministry of Energy
MoFP	Ministry of Finance and Planning
MoIA	Ministry of Internal Affairs
MoID <sup>6</sup>	Ministry of Infrastructure and Development
MoLHD	Ministry of Land and Housing Development
MoM	Ministry of Minerals
MoNRT	Ministry of Natural Resources and Tourism
MoW	Ministry of Water
MoWT(W)	Ministry of Works and Transport (Works)
NARCO	National Ranch Cooperation
NBS	National Bureau of Statistics
NCC	National Construction Council
NEMC	National Environmental Management Council
NPV	Net Present Value
OD	Origin Destination

OSHA	Occupational Safety and Health Authority
PO – RALG	President Office - Regional Administration and Local Government
PPAA	Public Procurement Appeal Authority
PPP	Public Private Partnership
PSC	Public Sector Comparator
ROE	Return on Equity
SATCC <sup>2</sup>	Southern Africa Transport and Communications Commission
SCBA	Social Cost Benefit Analysis
SP	Stated Preference
TANROADS	Tanzania National Roads Agency
TBS	Tanzania Bureau of Standard
TCAA	Tanzania Civil Aviation Authority
TRA	Tanzania Revenue Authority
TSIP 3	Transport Sector Investment Programme Phase 3
VFM	Value for Money
VOC	Vehicle Operating Costs
WTP	Willingness to Pay

# CONSTRUCTION OF MOROGORO – DODOMA EXPRESSWAY (258KM)

## PROJECT CONCEPT NOTE

### 1. Background

#### 1.1 Project Administration

The Project Management Team who will oversee the day to day processes of the project implementation are as follows; -

SN	NAME	PROFFESIONAL	DESCRIPTION
1	Eng. Harold M. Kitainda	Civil Engineer	Project Officer (PO)
2	TBN	PPP Center	Member - PMT
3	TBN	PPP Node	Member - PMT
4	TBN	MoFP	Member - PMT
5	TBN	AG Office	Member - PMT
6	TBN	MoWT (Works)	Member - PMT
7			Member - PMT
8			Member - PMT
9			Member - PMT
10			

*\*TBN – To be Nominated*

#### 1.2 Project Approval Status

The project concept note was approved by the Minister of Works and Transport on ..... The concept note was officially submitted to the Permanent Secretary of Ministry of Finance and Planning via letter with reference number .....

#### 1.3 Institution's Background

The Tanzania National Roads Agency (TANROADS) is a Roads Authority as stipulated in the Roads Act No. 13 of 2007. It operates as semi-autonomous entity implementing the day-to-day management of Trunk and Regional Roads Network of Tanzania Mainland. The overall National roads network administered by TANROADS is 36,361.95 km out of which 11,186.16km is paved.

The National roads network under TANROADS as of December 2021 comprised of the following:

- 12,215.58 km Trunk Roads network of which 9,058.22 km is paved and 3,157.36km is unpaved.
- 24,146.37 km Regional Roads network of which 2,127.94 km is paved, and 22,018.43 km is unpaved.

In addition, TANROADS is responsible for operation of weighbridge stations on the major Trunk Roads.

TANROADS executes its functions through an organisation structure, which comprises of five Directorates and Seven Units, both based at the Headquarters and 26 Regional Offices countrywide. As of December 2021, TANROADS staff complement was 733.

Therefore, TANROADS opts to develop and implements Morogoro – Dodoma Expressway (258km) under PPP arrangement which falls under its key roles. The proposed project is expected to achieve viability, fiscal affordability and explore value for money (as it is shown under Section 2 of this Concept Note)

### **1.3.1 Mandate**

TANROADS is mandated to plan, design, construct, maintain national roads and development of Airports under the Executive Agencies (The Tanzania National Roads Agency) (Establishment) Order GN. 293 of 2000 as amended by GN. 350 of 2009 and GN. 232 of 2020.

### **1.3.2 Roles and Functions**

The roles and functions of TANROADS as provided for under its Establishment Order, namely:

- a) Carryout all road planning, design and maintenance functions for the Agency;
- b) Undertake procurement and management of contracts for design, construction, rehabilitation maintenance and upgrading of roads under its control;

- c) Undertake procurement and management of contracts for design, construction and rehabilitation of airports under its control;
- d) Improve road safety and mitigate environmental impact from its operations on the road network under its control;
- e) Establish, improve and maintain an appropriate road data bank;
- f) Establish and operate weighbridges and enforce axle load control on the road network under its jurisdiction;
- g) Oversee the establishment and operation of toll roads;
- h) Carry out or commission studies/researches as necessary in support of its aims and functions;
- i) Advise the Ministry on regulations and standards for road works and airports construction; and
- j) Perform any work upon request by other road authorities with respect to long-term, medium, annual and operational plans for roads.

Pursuant to the Government directives made in August 2017, the roles of TANROADS have been extended to support 58 Government owned airports. In this regard, the functions and roles of TANROADS also include design and construction of airports.

### **1.3.3 Vision Statement**

*“A World Class Agency dedicated to providing a connected and sustainable all-weather national road network and airports.*”

### **1.3.4 Mission Statement**

*“To manage national roads network and airports development by planning, designing, construction and road maintenance for socio- economic development through a competent workforce.”*

### **1.3.5 Core Values**

In undertaking its roles and functions, TANROADS will uphold the following core values:

- i) **Customer focus:** We are responsive to our customers’ needs whilst observing laws of the land
- ii) **Innovation:** We are creative, examine options, challenge assumptions and ensure value for money



- iii) **Excellence:** We exercise competency through professionalism and ethical conduct
- iv) **Integrity:** We are honest and trustworthy
- v) **Transparency:** We fulfil roles and responsibilities in an open and accountable manner to the public
- vi) **Teamwork:** We work in collaborative and accountable manner with openness in a conducive and transparent environment realizing that output comes from contribution of many
- vii) **Non-discrimination:** We observe equal opportunity and treat our internal and external stakeholders without discrimination against gender, religion, race affiliation and ethnicity.

#### 1.4 Challenges and Need for the Project

Challenges facing the Morogoro – Dodoma road Project in particular involves the following: -

- i) Budgetary constraints for both development and maintenance of the road.
- ii) Inadequacy of innovations in road designing and supervision of Consultants,
- iii) Lack of new technologies in Construction Management Industry.
- iv) Insufficient staffing level and requisite skills.
- v) Inadequate control measures on Road Reserve trespassers.

#### **Need for the Project**

The main purpose for the proposed Morogoro – Dodoma Expressway is to enhance fast movement of traffic between Morogoro and Dodoma and address emerging traffic congestion causing increase in travel time and vehicle operating costs (VOC).

#### 1.5 Problem Statement

The existing Morogoro - Dodoma road was constructed in mid-1980s with design life of 20 years that has elapsed and the needs for rehabilitation emerged. Backlog rehabilitation was carried out 15 years ago under European Union (EU)

financing support and it could not cover the entire roads length due to budget constraint. Either, the road condition is characterized by occurrence of pavement distresses such as pot holes, cracks, deformation ruts and drainage structures failure.

Apart from the Port Traffic to Central and Western parts of Tanzania and to land linked countries, following shifting of Government functions from Dar es Salaam to Dodoma Capital City economic activities and political affairs have increased in Dodoma, which has consequently generated high traffic plying between Morogoro & Dodoma. Currently the Average Daily Traffic on this road is ranging between 5,000 to 25,000 vehicles.

Considering massive and sustainable investment required for this project and based on budgetary constraint, the Ministry of Works and Transport (Works) through TANROADS wishes to carry out a pre-feasibility study of implementing this project as a toll road under Public Private Partnership (PPP).

In macro-economic aspect of balanced development of the country the public investments for transport sector have ripple effects on not on reductions of transport cost and time but regional economic activation, increase of the income and employment according to change in transport system.

The importance of the transport sector in Tanzania is not limited to its direct contribution to the GDP but it also allows other sectors (agriculture, mining and tourism) to generate value added. Tanzania also serves as a transit corridor to the land-linked countries of Rwanda, Burundi, Uganda and Democratic Republic of Congo (DRC).

## **2. PROJECT OVERVIEW**

### **2.1 Geographical Description**

The Morogoro - Dodoma road section is part of the Central Corridor T- 3 route with a total length of 258 km connecting Dar es Salaam port with national capital of Dodoma and serves the neighbouring land linked countries of Rwanda, Burundi, Uganda and Democratic Republic of Congo.

The traffic along the road is comprised of an International traffic to and from the neighbouring countries of Rwanda, Burundi, DR - Congo and Uganda originating from or going to the port of Dar es Salam. It passes through, Morogoro, Dodoma, Singida, Shinyanga, Geita, Mwanza and Kagera Regions. A national and local traffic originating from other regions including Morogoro, Singida and Western regions.

## **2.2 Objectives**

The main objective of the proposed project is to construct a new Morogoro – Dodoma Expressway (258 km) toll road under the PPP arrangement as an alternative of the existing road in order to achieve social - economic benefits including:

- To enhance efficiency in the provision of Infrastructure services and hence reduce the infrastructure financing gap.
- To increase the scope of development budget resources for financing infrastructure projects to accelerate socio – economic goals.
- To transfer and share risks with the private sector.
- To reduce the Government expenditure on development projects.
- To reduce the congestion within the fastened traffic movement between Morogoro and Dodoma.
- Stimulate international trade between Tanzania and the land linked countries and foster economic integration.

## **2.3 Services Delivered**

The private party is expected to finance project design, construction, operation and maintenance during the concession period. The public sector will monitor and evaluate the provided services and revenue collection based on user fees as agreed by the parties, which will be feasible to both parties.

Services expected to be provided are; -

- Provision of full access controlled dual carriage expressway
- Provision of recreation areas along the road
- Provision of a toll plaza

## **2.4 Option Analysis and Justification for Preferred Option**

The project has been developed by TANROADS under guidance of the Ministry of Works and Transport (Works) and Ministry of Finance and Planning and is proposed to be implemented through Public –Private Partnership. The arrangement of implementation is through Public – Private Partnership (PPP) and mechanism of operation is Design, Build, Finance, Operate, Maintain and Transfer (DBFOMT).

The model of PPP is seen as the best feasible option to be used due to the fact that there is limitation of funds from the Government sources. Also, depending of finance from the Government may take long time for the project to be implemented and thus PPP model of funding the project is a best option. Also, DBFOMT is preferred option as it will maximize innovation in the sector.

## **2.5 Relevance to Development Priorities**

The Second FYDP emphasizes industrialization and openness to regional and global trade by articulating efforts to build and reorganize domestic productive capacities while also ensuring sustainability of a conducive environment for doing business and investment.

It further recognises that infrastructure gaps still exist mainly in power and transport sectors. Given the importance of adequate infrastructure to support industrialization and to foster the desired economic transformation, these gaps need to be closed in order to satisfy growing infrastructural demands for FYDP II implementation.

The Transport Sector Investment Programme Phase 3 (TSIP 3), intends to implement a number of transport development and maintenance projects and reforms aimed at enhancing the provision of an efficient, cost-effective and safe transport system in the country. The current Government agenda on the Transport Sector therefore goes a long way toward enhancing the country's industrial economic growth.

## **2.6 Sector Policies and Strategies**

The National Transport Policy 2003 and Transport Sector Investment Program Phase 3 (TSIP 3), among other things aim at:

- (i) Development of effective and efficient seamless transport infrastructure;
- (ii) Mobilization of local and international resources to speed up integrated transport infrastructure development;

- (iii) Fostering involvement of public-private sector partnerships in the transport sector investment and management;
- (iv) Putting emphasis on rural access;
- (v) Enabling the transport sector to tick and facilitate the growth of key economic sectors including agriculture, manufacturing, mining, tourism and trade and,
- (vi) Taking cognizance of existing problems and taking measures for improving urban mobility.

In response to the Government's initiative to embark on PPP, TANROADS in its 5th Strategic Plan plans to develop some sections of the national roads network under PPP arrangements.

## **2.7 National Policies and Strategies**

Government launched the Tanzania Development Vision 2025 in 1999. The goal of Vision 2025 is that by 2025 Tanzania should have gone through an unprecedented economic transformation and development to achieve middle income status; characterized by high levels of industrialization, competitiveness, quality livelihood, rule of law; and having in place an educated and pro-learning society.

In order to attain the long-term aspirations of the Vision 2025, Government found it necessary to prioritize a few key interventions in an orderly sequence so that they complement each other to enable effective and optimal resource utilization. In this respect a medium-term planning tool to operationalize the long-term perspective plan was adopted. Each of these medium-term plans (5-year plans) has a theme to underpin the thrust, and priority interventions. Thus, the thrust of the first Five Year Development Plan (2011/12 - 2015/16) was to unleash Tanzania's growth potentials.

The main objectives of FYDP was to improve the physical infrastructural networks and human capital in order to hasten investment for the transformation of the country's production and trade supply structures (agriculture, manufacturing and services), and thus foster Tanzania's competitiveness. The first FYDP (2011/12-2015/16) addressed the implementation bottlenecks revealed by the review of the Vision 2025. Two more medium term plans were envisaged: The Second (2016/17-2020/21), and the Third (2020/21-2025/26). The theme of the second 5-year plan is

to be named “nurturing industrialization for economic transformation and human development”.

### 3 TECHNICAL OVERVIEW

The design basis should establish guidelines for the implementation of the detailed engineering design, and must at least include the selection of design speed, final alignment alternative, typical cross section standards, final pavement construction option and drainage rehabilitation principles.

As a basis for the preliminary design, appropriate design standards will be agreed with the Client. This will among others entail a discussion of the following issues:

- (i) Geometric standards
- (ii) Drainage standards
- (iii) Traffic forecast
- (iv) Pavement type/design load (for 20-year design life excluding period of construction)
- (v) Value for money to ensure an appropriate balance between capital expenditure and cyclical maintenance costs.

The criteria to be applied in the project are as follows:

Description	Design Criteria	Nationality	Remarks
Geometric	Road Geometry Design Manual (Mow1), 2011)	Tanzania	Apply
	Code of Practice for Geometric Design of Trunk Roads (Draft) (SATCC <sup>2</sup> , 1998)	CSIR <sup>3</sup> (South Africa)	Reference
Pavement	Pavement and Materials Design Manual (Mow, 1999)	Tanzania	Apply
	Field Testing Manual (TANROADS <sup>4</sup> , 2003)	Tanzania	Apply

	Laboratory Testing Manual (CML <sup>5</sup> , 2000)	Tanzania	Apply
Structure	British Standards BS 5400	Tanzania	Apply
Hydrology /Hydraulics	TRRL East African Flood Model and any other recognized manual	Tanzania	Apply
Ancillary	The Guide to Traffic Signing (MOID <sup>6</sup> , 2009)	Tanzania	Apply
Surveying and Specification	Land Survey and Mapping Standards of Tanzania (Land Surveying Regulations CAP 390)	Tanzania	Apply
	Standard Specifications for Road Works (Mow, 2000)	Tanzania	Apply
Asphalt Hot- MIX Design	TANROADS Interim Guideline for the Design of Hot-MIX Asphalt: - MOWTC 2018	Tanzania	Reference
Safety Auditing	Safety Auditing Manual: A Guide to Road Safety Audit (MoID, 2009)	Tanzania	Apply

#### 4 ECONOMIC OVERVIEW

This project is expected to demonstrate positive Economic Net Present Value (ENPV) and generate economic incentives to users. However, Cost-Benefit analysis of the project road and sensitivity analysis assuming variation of construction cost and traffic volume will be carried out at pre-feasibility and Feasibility stage.

##### 4.1 Sensitivity Analysis – Varying Key Parameters

The economic internal rate of return (EIRR) of a project is calculated using the most likely forecast values of economic benefits and costs. However, the stream of benefits and costs is influenced by a wide variety of factors that may vary from the 'base case'. sensitivity analysis shows the extent to which the project EIRR or NPV changes for different values of the main variables.

Sensitivity analysis is carried out by varying the magnitude of the appraisal's more important variables, normally one at a time, whilst keeping all other variables fixed ('ceteris Paribus' or 'all others being equal'). By looking at higher and lower figures than those expected, it is possible to determine how sensitive the NPV or EIRR or BCR is to any changes. The variables that are selected for sensitivity testing are a matter for the analyst or agency but for most road projects include the following:

- Traffic: low and High growth rates should be examined around the central or medium or most likely growth scenario.
- Project costs: project costs should be increased and decreased by +-10%, +-20% and +-20%. if additional percentage change tests are warranted this can be done but the minimum should be the eight specified (increase – four, decrease- four).
- Benefits: Benefits are composed of a number of items. The total benefit column can be varied again by the same percentages as the construction costs above. if necessary a particular component of total benefits can be sensitivity tested. The principal categories are VOC benefits, passenger working and non-working travel times, diverted traffic benefits, generated traffic benefits and accident cost reduction benefits.
- Combined sensitivity Tests: in addition to individually varying costs and then benefits these two can be varied simultaneously. such an instance can be labeled a 'Worst case' scenario. All appraisal sensitivity tests should have at least two worst-case scenarios: "costs +10% and Benefits -10%" and "costs +20% and Benefits -20%". other suitable worst-case scenarios can be devised if any particular circumstance in the project's area of influence warrants such additional tests.

These can be varied by certain percentage points or can be 'With/Without' entirely to test the sensitivity of the project's performance to those benefits. Thus, if the estimation of travel time savings is questionable then they can be excluded from the cash flow and the NPV, EIRR, BCR, etc calculated without that particular benefit class. The same is often true of accident cost reductions. Accident data is quite unreliable so any benefits, although they rest on firm theoretical foundations, may be based on unreliable data.



The table below shows a typical layout for a sensitivity testing procedure on construction costs and total benefits. In addition, there are two 'worst case' scenarios and two 'switching' tests (see below).

The tests were conducted for IRR, NPV, FYRR and BCR decision criteria. With the 'base case' scenario there are 56 decision variable values. So, it must be borne in mind that sensitivity tests are not required in themselves but only as a means to ascertaining the robustness of one or two key variables. Otherwise the sheer number of results will make it difficult to draw any meaningful conclusions.

## 5 COMMERCIAL OVERVIEW

Traffic depends on the economic growth of the country and regions, it is imperative that traffic risk may be shared by the concessionaire with the government. This could be sharing profit or loss, when traffic goes beyond an agreed envelope. By way of risk mitigation, the concession arrangement should provide for extension of the concession period in the event of a lower than expected growth in traffic. Conversely, the concession period may be reduced if the traffic growth exceeds the expected level. An alternative way of sharing risk is to share profit or loss, if traffic levels increase by more than say 20% or reduced by 20% respectively.

Operational risk shall be left with the concessionaire, as it is better managed by applying value engineering and project management techniques.

### 5.1 Risk Identification and Allocation

Risk workshop for risk identification, quantification of each of the identified risks, estimation of the probabilities and preparation of the risk matrix will be conducted. Costing the risk matrix in conjunction with the financial model will be done thereafter which will reflect the risk as shown in the table:

#### Identification of Risks and Mitigation Measures

No.	Risk	Explanation	Mitigation	Bearer
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No.	Risk	Explanation	Mitigation	Bearer
1.	Demand risks	The risk of not meeting the projected traffic/ users that could result into insufficient revenue.	Conducting Demand survey	Public and Private Partners
2.	Environmental and social risks,	The risk of the existing environmental conditions affecting the project and the subsequent risk of damage to the environment communities	Conduct ESIA and disclose all known environmental issues to the Private Partner.	Private and Public Partners
3.	Design and Construction risks	Design fails to meet specifications and Application for detailed building approvals from regulatory authority-may be local or regional	Consultation with relevant authorities and interested and co-operation of local authority; appointment of experienced and reputable Designers and Contractors	Private Partner
4.	Maintenance risks	Lack of maintenance of the facility	Maintenance schedule adherence	Private Partner
5.	Operating risks	Risk that forecast traffic revenue is not achieved. Specific risks: • Lower than expected traffic volume;	Updated traffic model and Traffic counts to support model;	Public and Private Partners
6.	Financing Risks	Fluctuation in interest rates period to financial close	Fixed interest rate funding; and Bidders to indicate hedging policy in bids.	
7.	Political risks,	Political stability of the country in which the project is located	Provision in the Contract	Government
8.	Legal Risk	Invalid PPP agreement. Unlawful administrative act. Failure of Project.	Due diligence to ensure proper authority on part of executing authority	Terminator

## **5.2 Illustrative PPP model**

The proposed Public – Private Partnership (PPP) Model for this project is **Design, Build, Finance, Operate, Maintain and Transfer (DBFOMT)**. During project implementation, the private investor will design, build, finance, maintain, operate and also continue to recover its money invested based on agreed formula, and without compromising provision of services. Hence, all assets will be transferred to the government after completion of concession period. Through this Model significant risks will be transferred to the Private Sector.

## **5.3 Expected Market Readiness**

Several private companies have shown interest in investing on Toll roads in Tanzania including this project road which is expected to serve a potential number of vehicles plying to and from Dar es salaam port to neighbouring land linked countries of Rwanda, Burundi, Uganda and DRC. This shows there is a private sector appetite for this particular project. However, further studies for market readiness will be done.

## **5.4 Road Users and Demand Forecast**

The road users and demand forecast, Volumetric Traffic Counts, Speed Delay Surveys, Origin and Destination Surveys and Animal crossing surveys will be carried out along Morogoro - Dodoma road in order to establish traffic patterns and volumes currently using the road. These will form a basis for future traffic projection that will be used as an important input data for upgrading the project road during its entire design life.

Furthermore, to determine the toll rate of toll road, survey will be conducted on “Willingness to Pay (WTP)” for potential road users in the future. The “Willingness to Pay (WTP)” of the drivers will be surveyed as one of the items of Origin Destination (OD) and Stated Preference (SP) surveys.

# **6 FINANCIAL OVERVIEW**

## **6.1 Project Cost and Project Revenue**

To arrive to the project cost and revenue streams the following will be carried out:

- (i) Preparation of construction unit cost (labor, materials, equipment, profit, etc.)
- (ii) Calculation of direct and indirect cost based on BOQ and review of appropriateness of estimate.
- (iii) The outputs from the demand and revenue modeling will be incorporated into the model as the basis of the revenue assumptions.
- (iv) If TANROADS is required to fund (either by way of revenue or capital subsidy) in order to implement the Project then the amount of funding will be assessed against available budget. This may require interaction with the Ministry of Finance.
- (v) Project costs will be initially in base year values (i.e. when the analysis is undertaken) and contingency cost will be added for each construction year and revenue and costs inflated by an appropriate index.

## **6.2 Financial Performance**

The model will be developed which output the Profit and Loss statement and the Cash Flow statement providing estimates of the key data for each project year. (Other supplementary accounting outputs are usually needed later, such as balance sheets).

## **6.3 Financial Viability Tests: Initial Checking**

The following parameters will be used to analyze the project viability: -

- Profitability/Viability: The Financial Internal Rate of Return/Return on Equity (project FIRR/or ROE). This is based on the same mathematical process as the EIRR but instead uses financial costs and revenues over the project life. Further, it does not use incremental costs and benefits but actual costs and actual revenues.
- Cost recovery; the number of years to pay back the equity investment (the norm is 5-7 years for commercial projects but infrastructure projects may only generate payback over 10-15 years or more).
- Debt Service Cover Ratio (the projected cash flow must, at a minimum, be adequate to finance the projected debt service. (The usual requirement is that the net cash flow each year must be at least 1.2 times (depends on the risk profile) the debt payment due in that year)
- The estimated FNPV. (It may be useful to distinguish the NPV from the

SCBA and financial analysis by using ENPV and FNPV).

- Quantitative risk analysis are also increasingly standard model outputs.
- Together, these make up most of the quantitative basis of bankability, although other aspects can also be important such as non-quantified risk.

#### **6.4 Value for Money (VFM)**

To ensure value for money the following will be implemented:

- A net present value (NPV) analysis of Value for Money comparing the selected bids to PSC.
- Risk transfer objectives and methodology to achieve risk transfer.
- Lender specific issues to be addressed, including ensuring that pricing is fair in relation to risks assumed.
- Negotiating teams and processes, timeframes for the negotiation process to be established.

### **7 ENVIRONMENTAL AND SOCIAL OVERVIEW**

The ESMP specifies mitigation measures to be taken during various phases of project implementation to offset them or minimize them to acceptable levels. Specifically, ESMP summarizes all anticipated significant adverse environmental impacts, and provides responsibilities for implementation of mitigation measures and cost estimates.

TANROADS has conducted preliminary Environmental and Social impact assessment of the project and noted that it is expected to have some beneficial (positive) and adverse (negative) impacts to the adjacent local communities, either directly or indirectly. The positive impacts shall be enhanced and negative impacts mitigated or minimized. The indirect positive impacts expected from the project is creation of temporary employment and income generating opportunities to the local people from the nearby villages.

It is expected that during construction most of unskilled labour shall come from the nearby villages. Some of the local people, especially women will also get opportunity to sell food and other items to the construction workforce. Other

indirect benefits expected from the project include reduced traffic congestion along existing Morogoro - Dodoma road; reduced travel time, stimulation of local economic growth; improved trade with neighbouring countries; and improved transportation of cargo from Dar es Salaam Port.

The improved transportation will also increase opportunity for the local people to get access to social services and external markets for agricultural produce. In this regards the project will lead into increased investment and trade within adjacent village centres and townships, hence improving the socio-economic conditions of the local people. Ultimately, the project is expected to contribute into government efforts towards poverty alleviation among the local communities of the project area, and the nation as a whole.

Environmentally the construction and operation of toll road will minimize air pollution from vehicular emission along the existing road due to reduced traffic congestion. This should be the case because significant volume of traffic will be diverted along the toll road. The number of accidents along the existing road is also likely to be reduced as more vehicles will opt to use the toll road, which is safer than the existing road.

The detailed matrix for the implementation of each stage of the project is indicated in Annex 1 attached herewith.

## **8 LEGAL OVERVIEW**

The Tanzania National Roads Agency (TANROADS) is a Roads Authority as stipulated in the Roads Act No. 13 of 2007. It operates as semi-autonomous entity implementing the day-to-day management of Trunk and Regional Roads Network of Tanzania Mainland.

TANROADS is mandated to plan, design, construct, maintain national roads and development of Airports under the Executive Agencies (The Tanzania National Roads Agency) (Establishment) Order GN. 293 of 2000 as amended by GN. 350 of 2009 and GN. 232 of 2020.

TANROADS shall be comply with all applicable Legislations, Regulations and best practices required for implementation of Toll Road Expressway Project. Besides,

TANROADS shall observe the PPP Act Cap 103. Road Act, No. 13/2007, and its Regulations on Road Use Regulation, G.N No. 189, 2010, Road Management Regulation, G.N No. 21, 2009 and Road (Financing and Participation of Public Private Partnership) Regulations- GN No. 442/2013, Land Act No. 4 and Village Land Act No. 5/1999, Environmental Management Act 2004, and its regulation on Environmental Impact assessment and Audit Regulations, 2005, Public Procurement Act, No. 7 of 2011 (as amended in 2013 and 2016); Public Procurement Regulations, G.N. 446 of 2013 (as amended in 2016); Companies Act, No. 12 of 2002; Business Licensing Act, No. 25 of 1972; Contractor Registration Act, No. 17 of 1997; Engineering Registration Act No. 15 of 1997 and Its Regulation of 2010; and Tanzania Investment Act, No. 26 of 1997.

## **9 INSTITUTIONAL ANALYSES AND STAKEHOLDERS OVERVIEW**

Although the institutional structures within the Tanzania National Roads Agency (TANROADS) under the Ministry of Works and Transport for designing and constructing roads are strong, developing toll roads under PPP arrangement requires a completely different approach and outlook. The Government has limited financial capability in delivering such projects, thereby opting for private sector participation.

However, mitigation measures to be applied will include the following:

- Creating the necessary structures to deal specifically with toll road PPPs.
- Investing in appropriate skills development.
- Receiving support from international experts.

### **Stakeholders' Analysis**

The detailed stakeholder identification, consultation and analysis will be done at the feasibility study stage. These will include the government agencies, local NGOs, affected groups and other interested parties.

However, TANROADS has conducted preliminary stakeholders' identification and analysis as attached in Annex 2.

## **10 BUDGET AND ACTION PLAN**

### **10.1 Budget for Project Preparation**

This project Concept Note will be submitted by TANROADS to the MoWT for consideration and recommendation. The estimated Budget for Project Preparation is about TZS 332 Million.

### **10.2 Action Plan**

Project Action Plan



### Action Plan for Morogoro – Dodoma Expressway (258km)

Planned Activities/Milestones	Duration		Costs (TZS)	Responsible		Remarks
	Start	End		Leader	Other Stakeholders	
Submission of Concept Note to MoWT (W) for approval	05 <sup>th</sup> August 2022	05 <sup>th</sup> September, 2022	50.0 million	TANROADS	MoWT (W)	
Submission of Concept Note to MoFP	07 <sup>th</sup> September, 2022	21 <sup>th</sup> September, 2022	NIL	MoWT (W)	MoFP, TANROADS	
Review of the Concept Note by MoFP	22 <sup>th</sup> September, 2022	13 <sup>th</sup> October, 2022	NIL	MoFP	MoWT(W) TANROADS	
Incorporate comments from MoFP.	14 <sup>th</sup> October 2022	11 <sup>th</sup> November, 2022	50.0 million	TANROADS	MoWT (W)/ MoFP	
Procurement of PPP Advisor to conduct Pre-Feasibility and Feasibility Study (PFS)	12 <sup>th</sup> November, 2022	10 <sup>th</sup> March, 2023	50 million	TANROADS	MoWT(W), MoFP, LGAs	
Conducting Pre-Feasibility Study (PFS),	13 <sup>th</sup> March, 2023	12 <sup>th</sup> June, 2023	2,000 million	TANROADS	MoWT(W), MoFP, LGAs/ Consultant	

Planned Activities/Milestones	Duration		Costs (TZS)	Responsible		Remarks
	Start	End		Leader	Other Stakeholders	
Approval of Pre-Feasibility Study (PFS),	13 <sup>th</sup> June, 2023	10 <sup>th</sup> July, 2023	40 million	TANROADS	MoWT(W), MoFP, LGAs/ Consultant	
Conducting Feasibility Study (Including market sound)	11 <sup>th</sup> July, 2023	10 <sup>th</sup> January, 2024	12,000 million	TANROADS	MoWT(W), MoFP, LGAs/ Consultant	
Review of Feasibility Study (FS)	12 <sup>th</sup> January, 2024	12 <sup>th</sup> February, 2024	70 million	TANROADS/ MoWT (W)	MoFP, LGAs/ Consultant	
Submission of FS to MoFP for Approval	14 <sup>th</sup> February, 2024	14 <sup>th</sup> March, 2024	NIL	MoFP/ PPP Steering Committee	TANROADS, MoWT(W)	
Issuing Request For Qualification (RFQ)	15 <sup>th</sup> March, 2024	15 <sup>th</sup> April, 2024	15 Million	TANROADS	PPP Team	
Evaluation of RFQ and Report submission to the Tender Board	16 <sup>th</sup> April 2024	30 <sup>th</sup> April, 2024	30 Million	TANROADS	MoWT (W)	

Planned Activities/Milestones	Duration		Costs (TZS)	Responsible		Remarks
	Start	End		Leader	Other Stakeholders	
Issuing Request For Proposal (RFP)	2 <sup>nd</sup> May, 2024	1 <sup>st</sup> July, 2024	15 Million	TANROADS	PPP Team	
Evaluation of RFP and Report submission to the Tender Board for approval (Including Due Diligence report and Value for Money (VFM) report of the proponent investor)	3 <sup>rd</sup> July, 2024	5 <sup>th</sup> August, 2024	100 Million	TANROADS	MoWT (W)	
Submission and Approval of Evaluation Report by PPP steering committee	6 <sup>th</sup> August, 2024	27 <sup>th</sup> August, 2024	Nil	TANROADS	MoWT (W)	
Issuing Notice of Intention to Award to all bidders	28 <sup>th</sup> August, 2024	09 <sup>th</sup> September, 2024	Nil	TANROADS	MoWT (W)	
Issuing Notice of	11 <sup>th</sup> September	13 <sup>th</sup> September,	Nil	TANROADS	MoWT	

Planned Activities/Milestones	Duration		Costs (TZS)	Responsible		Remarks
	Start	End		Leader	Other Stakeholders	
Acceptance to the preferred bidder (Provisional letter of award)	2024	2024			(W)/PPP Center. MoPF, PPP Node, PPRA, CAG, OAG, TRA, IAG	
Formulation of Negotiation Team, Negotiation Plan and Conducting Negotiation.	16 <sup>th</sup> , September 2024	18 <sup>th</sup> October, 2024	30 Million	TANROADS	Negotiation Team, Preferred Bidder	
Submission and Approval of Draft PPP Agreement by PPP steering committee	19 <sup>th</sup> October, 2024	19 <sup>th</sup> November, 2024	Nil	TANROADS	MoWT	
Vetting of Contract and Commercial Closure	20 <sup>th</sup> November 2024	10 <sup>th</sup> December, 2024	Nil	TANROADS	OAG, Preferred Bidder,	

Planned Activities/Milestones	Duration		Costs (TZS)	Responsible		Remarks
	Start	End		Leader	Other Stakeholders	
Financial Closure	10 <sup>th</sup> December, 2024	17 <sup>th</sup> December, 2024	Nil	TANROADS	MoFP, MoWT, Preferred Bidder, Financiers.	

## Annex 1: Identified Significant Environmental and Social Impacts

The followings are the positive and negative impacts to be identified at various phases of project implementation:

*Positive and negative impacts at various phases of project implementation*

<b>Mobilization Phase</b>	<b>Positive impacts</b>	<b>Negative impacts</b>
Loss of farmlands, buildings, businesses and other properties		✓
Disruption of infrastructure and public service utilities		✓
Destruction of burial sites / grave yards		✓
<b>Construction Phase</b>	<b>Positive impacts</b>	<b>Negative impacts</b>
Creation of temporary employment.	✓	
Increased income generation opportunities	✓	
Air pollution		✓
Creation of noise nuisance and vibration		✓
Soil and water pollution		✓
Destruction of natural vegetation and trees		✓
Soil erosion and sedimentation of water courses		✓
Disruption of roads transportation		✓
Disruption of community access to and from their residences		✓
Destruction of adjacent land use and properties		✓
Creation of health and safety risks to construction workers		✓
Increased prevalence of HIV / AIDS and STIs		✓
<b>Demobilization Phase</b>	<b>Positive impacts</b>	<b>Negative impacts</b>
Loss of income generating activities by local people		✓
Loss of temporary employment		✓
<b>Operation Phase</b>	<b>Positive impacts</b>	<b>Negative impacts</b>
Reduced traffic congestion	✓	
Reduced travel time between Morogoro and Dodoma	✓	
Stimulation of local economic growth	✓	
Reduced vehicular emissions	✓	
Improved trade with neighbouring countries	✓	
Improved transportation of cargo from Dar Port	✓	
Increased prevalence of HIV/AIDS and STIs	✓	
Encroachment of road reserve by local people		✓

## ANNEX 2 - STAKEHOLDERS' ANALYSIS

During the development of the project; the stakeholders' analysis was undertaken as indicated below.

S/N	STAKEHOLDER	STAKEHOLDERS EXPECTATIONS	OUTCOME	IMPACT OF NOT MEETING EXPECTATION	PRIORITY
1.	PO – RALG, MoWT, MoFP, MoLHHS, MoW, MoE, MoM, MoIA, MoNRT, NEMC, NARCO	<ul style="list-style-type: none"> <li>i) Accurate and timely provision of information;</li> <li>ii) Accountability and transparency;</li> <li>iii) Accurate and timely report;</li> </ul>	<ul style="list-style-type: none"> <li>i) Information on Human Resources, Financial, Operations, Environmental and Legal matters;</li> <li>ii) Performance Reports;</li> <li>iii) Budget Estimates;</li> <li>iv) Technical support</li> </ul>	<p>Minimum technical and financial support</p> <p>Not meeting the country's outlined targets and objectives and goals</p>	H
2.	Development Partners (Bilateral and Multilateral Institutions)	<ul style="list-style-type: none"> <li>i) Quality of roads</li> <li>ii) Timely and accurate reports</li> <li>iii) Adhere to agreed reporting and tender documents standards</li> <li>iv) Project economic viability and environmental sustainability</li> </ul>	<ul style="list-style-type: none"> <li>i) Roads Information.</li> <li>ii) Feasibility proposals for financing</li> <li>iii) Information regarding institutional support.</li> <li>iv) Reports and tender documents</li> </ul>	<p>Minimum technical and financial support</p>	H

S/N	STAKEHOLDER	STAKEHOLDERS EXPECTATIONS	OUTCOME	IMPACT OF NOT MEETING EXPECTATION	PRIORITY
3.	Parliament	<ul style="list-style-type: none"> <li>i) Timely and accurate information and reporting;</li> <li>ii) Adherence to Budget</li> </ul>	Information on Operations, Budget estimates, Responses to raised issues.	Minimum managerial support	H
4.	Service Providers (Consultants, Contractors, Suppliers, Financial Institutions and Media)	<ul style="list-style-type: none"> <li>i) Prompt payments;</li> <li>ii) Adherence to procurement Regulations and guidelines</li> <li>iii) Equal opportunities.</li> </ul>	<ul style="list-style-type: none"> <li>i) payments for works, goods and services;</li> <li>ii) Business information and opportunities.</li> </ul>	<ul style="list-style-type: none"> <li>i) Slow progress</li> <li>ii) Loose good will of the Institute</li> <li>iii) Cost and time escalation</li> </ul>	H
5.	Regulatory Institutions (PPRA, ERB, CRB, NEMC, TCAA, PPAA, EGA, AQRB OSHA, Mining Commission, NCC, TRA, TBS, NBS, GPSA)	<ul style="list-style-type: none"> <li>i) Adherence to respective regulations</li> <li>ii) Timely and appropriate practical training</li> </ul>	<ul style="list-style-type: none"> <li>i) Information on Operations;</li> <li>ii) Performance Reports; and</li> <li>iii) Mentoring of graduate professionals.</li> </ul>	<ul style="list-style-type: none"> <li>i) Minimum support</li> <li>ii) Not meeting the country's outlined targets and objectives and goals</li> </ul>	H
6.	Road Users	<ul style="list-style-type: none"> <li>i) Reliable, efficient, and safe infrastructure and</li> </ul>	<ul style="list-style-type: none"> <li>i) Road and Airport infrastructure and</li> </ul>	Minimum technical and financial support	H



S/N	STAKEHOLDER	STAKEHOLDERS EXPECTATIONS	OUTCOME	IMPACT OF NOT MEETING EXPECTATION	PRIORITY
		facilities; ii) Timely, clear and reliable awareness iii) Standard roads	facilities; ii) awareness on safe use of facilities	Not meeting the country's outlined targets and objectives and goals	
7.	Employees	i) Timely payments; ii) Conducive working environment; iii) Professional development; iv) Motivation; v) Effective communication vi) Clear job descriptions; vii) Recognition viii) Participatory planning and decision-making; ix) Job security; x) Promotion; xi) Equal opportunity and xii) Adherence to rules and regulations.	i) Working environment ii) Remuneration iii) information iv) Career and Professional Developments.	i) Riots ii) Minimum support iii) Loose good will of the Institute iv) Cost and time overruns	H
8.	Learning	i) Timely provision of	i) Practical training and	i) Less collaborations	M

S/N	STAKEHOLDER	STAKEHOLDERS EXPECTATIONS	OUTCOME	IMPACT OF NOT MEETING EXPECTATION	PRIORITY
	Institutions	data on research areas ii) Reliable and facts-based curriculum requirements iii) Fair assessment of field students	research opportunities; and ii) Curriculum requirements iii) Information and data; iv) Supervision and recommendations of field students	and partnership ii) Minimum technical support	

NOTE: H – High Priority, M – Medium Priority, L – Low Priority

