



**ZAMBIA RAILWAYS LIMITED**  
A Member of **IDC** Industrial Development Corporation Group of Companies

## **INVITATION FOR EXPRESSIONS OF INTEREST**

**REFERENCE NO : ZRL/EOI/001/2022**

**TENDER TITLE : CONSULTANCY SERVICES FOR THE DETAILED INSPECTION, DESIGN, TENDER DOCUMENT PREPARATION AND CONSTRUCTION SUPERVISION OF THE BOMBWE BRIDGE.**

### **1.0 INTRODUCTION**

Zambia Railways Limited (the Client) was allocated funds from the Government of the Republic of Zambia and intends to apply part of the funds to payments under the contract for Consultancy Services for the Detailed Inspection, Design, Tender Document Preparation and Construction Supervision of the Bombwe Bridge.

The existing bridge has outlived its design life and requires remedial actions to support train operations in the interim. The consultant will be expected to undertake detailed inspections of the existing bridge and propose appropriate short-term rehabilitation measures including their cost estimates.

A detailed inspection of the existing substructures located next to the operational bridge including the railway embankment approaches for a replacement bridge meant to link the replacement bridge to the railway shall also undergo a detailed inspection to establish, particularly the structural integrity of the reinforced concrete substructures. The Consultant will also be expected to prepare detailed designs of the replacement bridge superstructure including Bidding Documents for the construction of the replacement bridge. The consultant shall further undertake the necessary Environmental and Social Impact Assessment for the project.

Zambia Railways Limited (ZRL) now invites eligible consultants to express interest in providing these services.

### **2.0 PROJECT BRIEF**

The project is estimated to take thirty-three (33) months and consists of a five-span railway bridge of approximately 75 m total length. The bridge is designed with substructures comprising four reinforced concrete piers and abutments whose foundations are piled.

The consultancy services are envisaged to cover the following:

- a) Detailed inspection of existing operational bridge
- b) Detailed inspection of replacement bridge substructure and design of superstructure.
- c) Preparation of Tender documents
- d) Supervision of works for a replacement bridge
- e) Post Construction services

### **3.0 QUALIFICATIONS OF CONSULTANTS**

#### **a. Team Leader**

The Proposed specialist must have an educational background of Bachelor in Engineering (Civil) or Equivalent with international experience as team leader /Senior Bridge Engineer in design and/or supervision of railway bridges of which there must be at least one 80m Steel Railway bridge. The proposed specialist shall have atleast 20 years of professional experience in the field of assignment.

#### **b. Bridge Design Engineer/Substructure**

The Proposed specialist must have an educational background of Bachelor in Engineering (Civil) or Equivalent with proven experience in design of different types of bridges and culverts. The proposed specialist shall have at least 15 years of professional experience in the field of assignment.

#### **c. Bridge Design Engineer/Superstructure**

The Proposed specialist must have an educational background of Bachelor in Engineering (Civil) or Equivalent with proven experience in design of different types of railway bridges and culverts. The proposed specialist shall have at least 10 years of professional experience in the field of assignment.

#### **d. Geomatic Engineer**

The Proposed specialist must be a qualified surveyor with an educational background of Bachelors' degree in Geomatic Engineering or Land Surveying with at least 10 years of professional experience in road/railway surveying, data computation, drawings production and interpretation.

#### **e. Railway Engineer**

The Proposed specialist must have an educational background of Bachelor in Engineering (Civil) or Equivalent with proven experience in design of Railways. Experience of railway construction supervision is preferable. The proposed specialist shall have at least 15 years of professional experience in the field of assignment.

#### **f. Environmentalist**

The Proposed specialist must have an educational background of Bachelor in Environmental Science /Engineering with proven experience in environmental assessment and mitigation with specialized knowledge in safety issues in bridge projects. The proposed specialist shall have at least 12 years of professional experience in the field of assignment.

g. Procurement Specialist

The Proposed specialist must have an educational background of Bachelor in Purchasing and Supply, Chartered Institute of Purchasing and Supply (CIPS) or equivalent or Bachelor's degree in Engineering with extensive experience in preparation of bid documents for railway and bridge projects with fair knowledge in international contract. Knowledge of Zambian Procurement law is preferable. The proposed specialist shall have at least 10 years of professional experience in the field of assignment.

h. Resident Engineer – Bridge

The Proposed specialist must have an educational background of Bachelor in Engineering (Civil) or Equivalent with proven experience in construction supervision of bridges of which there must be at least one 80m long Steel girder bridge.

The proposed specialist shall have at least 15 years of professional experience in the field of assignment.

i. Resident Engineer – Railway

The Proposed specialist must have an educational background of Bachelor in Engineering (Civil) or Equivalent with proven experience in construction supervision of railway.

The proposed specialist shall have at least 15 years of professional experience in the field of assignment.

j. Quantity Surveyor

The Proposed specialist must have an educational background of Bachelor in Quantity Surveying or Equivalent with experience in preparation of BOQ and Cost estimates for railway/road and bridge projects, knowledge in Construction of bridges and railways. The proposed specialist shall have at least 10 years of professional experience in the field of assignment

k. Geotechnical Engineer

The Proposed specialist must have an educational background of Bachelor in Geotechnical Engineering or Equivalent with experience of Geotechnical study, analysis, and testing of soil samples for rail/road and bridge works. The proposed specialist shall have at least 10 years of professional experience in the field of assignment.

l. Construction Planner

The Proposed specialist must have an educational background of Bachelor in Engineering (Civil) or Equivalent with proven experience in construction planning and execution of railway bridges.

The proposed specialist shall have at least 10 years of professional experience in the field of assignment.

m. Hydrologist/Hydraulic Engineer

The Proposed specialist must have an educational background of Bachelor in Engineering (Civil) or Science with experience of field Hydrology, for bridge design and analysis of hydrological conditions. The proposed specialist shall have at least 10 years of professional experience in the field of assignment.

#### **4.0 ELIGIBILITY**

The Expression of Interest is to both Local and International Consultancy firms. The international consultancy firms shall comply with section 113 (d) of the Zambia Public Procurement Regulations of 2022 which mandates them to partner with Citizen Bidders.

Interested consultants / partnerships must provide information indicating that they are qualified to perform the services (proof of company registration, valid tax compliance certificates, brochures, description of similar assignments, experience in similar conditions, availability of appropriate skills among staff, etc.) and additional information as mentioned below:

- a) Name, address, telephone ,fax numbers and email address
- b) Organization Structure of the firm
- c) Present work load(amount and type of work, country and assignment and experts deployed)
- d) Any other details deemed fit to enable the Client to appreciate their relevant capability.

#### **5.0 SUBMISSION**

Expressions of Interest clearly marked “**CONSULTANCY SERVICES FOR THE DETAILED INSPECTION, DESIGN, TENDER DOCUMENT PREPARATION AND CONSTRUCTION SUPERVISION OF THE BOMBWE BRIDGE-ZRL/EOI/001/2022**” must be submitted to Zambia Railways Limited addressed to the Manager Procurement and Supplies, corner of Ghana and Buntungwa avenue, P.O Box 80935, Kabwe, Zambia on or before 5<sup>th</sup> September 2022 **at 10:30hrs Local time.**

Expressions of Interest can also be accessed on the Zambia Railways website [www.zrl.com.zm](http://www.zrl.com.zm) and <https://sararail.org>.

For any Clarifications email [mehetabel.mumbwala@zrl.com.zm](mailto:mehetabel.mumbwala@zrl.com.zm) and [sampaya.sankombo@zrl.com.zm](mailto:sampaya.sankombo@zrl.com.zm)

Manager Procurement and Supplies  
Zambia Railways Limited