TAZAMA PIPELINES LIMITED

REQUEST FOR EXPRESSION OF INTEREST (EOI)

CONSULTING SERVICES FOR CATHODIC PROTECTION (CP) STATIONS INTEGRITY, OPERABILITY AND FUNCTIONALITY ASSESSMENT FOR THE ENTIRE TAZAMA PIPELINE NETWORK

Tender No: TLP-301-1026-CP-001

Selection Method: Quality and Cost Based Selection (QCBS)

1. Background

TAZAMA Pipelines Limited owns and operates a 1,710km petroleum products pipeline from Dar es Salaam, Tanzania to Ndola, Zambia. The Infrastructure includes mainline sections, terminal facilities, Tank Farms at Kigamboni, and 7 (Seven) main pump stations alongside intermediate CP rectifier units.

External corrosion mitigation relies on an extensive network of Cathodic Protection (CP) Stations. Specifically, the network comprises 33 CP stations located across Tanzania region and 12 CP stations located across the Zambian region (45 stations in total).

2. Objectives of the Assignment

The main objective is to evaluate the technical integrity, electrical performance, operability, and overall functionality of all Cathodic Protection systems (Impressed Current Cathodic Protection [ICCP] and Sacrificial Anode Systems along the entire TAZAMA pipeline route to prevent external corrosion and secure asset longevity.

That is, to execute a rigorous technical audit, functional test, and performance evaluation of all 33 CP stations in Tanzania and 12 CP stations in Zambia to ensure optimal current distribution, minimize corrosion risks, and generate an actionable rehabilitation report.

3. Importance of this Consulting Service

After this consulting service is done the following will be realized:

- **Asset Preservation**: The TAZAMA pipeline spans over 1,710 kilometers through varying soil compositions, moisture levels, and environments that naturally induce external metal corrosion. Cathodic protection is the primary line of defense preventing electrochemical degradation.
- **Leak and Rupture Mitigation**: An integrity assessment ensures that current output, rectifiers, and anode beds are effectively protecting the steel pipe wall, preventing localized pitting that can lead to catastrophic oil/fuel leaks.

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- **Environmental Protection**: Fuel or refined product leaks can cause severe, widespread ecological damage to soils, water tables, and local communities along the Tanzanian and Zambian corridors. A functional CP network minimizes this risk.
- **Public & Personnel Safety**: Maintaining pipeline structural integrity prevents high-pressure product ruptures, safeguarding workers, nearby populations, and operational infrastructure.
- **Adapting to Product Changes**: The TAZAMA pipeline was successfully converted to transport refined products (Low-Sulphur Gas Oil) rather than crude oil. Operational parameters change with different fluid dynamics, temperatures, and throughputs, making a comprehensive audit of the underlying corrosion protection system vital to match current operating realities.
- **Functional Validation:** This assessment goes beyond simple routine checks by evaluating the holistic operability and functionality of all CP stations, identifying obsolete hardware, power supply failures, or wiring degradations that routine internal maintenance might miss.
- **Extending Asset Lifespan**: Proactive assessments and targeted remediation are significantly cheaper than emergency pipe replacements, spill clean-ups, or unplanned shutdowns.
- **Data-Driven Capital Allocation**: The consultancy report will provide TAZAMA management with a precise blueprint of what needs fixing, replacing, or upgrading, ensuring that capital expenditure (CAPEX) for pipeline maintenance is spent where it is most critically needed.

4. Scope of Services

The consultant shall perform the following tasks, including but not limited to:

- **Inventory & Audit**: Conduct a comprehensive physical audit of all CP stations, transformer-rectifier (TR) units, junction boxes, mid test points, and anode beds across the 1,710 km pipeline path.
- **Operability and Functionality Testing**: (1) Measure pipe-to-soil potentials (ON/OFF potentials) using specialized half-cells; (2) Test the output parameters (voltage and current) of all TR units; (3) Assess the continuity of the pipeline and effectiveness of insulating joints/flanges; (4) Evaluate the status of solar/grid power supply units feeding the CP stations.
- **Anode Bed & Ground-bed Resistance Assessment**: Evaluate ground-bed earth resistance and overall performance efficiency.
- **Gap Analysis & Root Cause Identification**: Identify failed, underperforming, or vandalized CP components and determine the causes of operational bottlenecks.
- **Rehabilitation & Upgrading Blueprint**: Provide detailed engineering recommendations, Bill of Quantities (BoQs), and technical specifications for repairing, replacing, or modernizing substandard CP infrastructure.
- **CPS Readings to be seen at Head office** – Advise excellent computerized SCADA based system for CP real time data to be reflected to the Head office or Regional offices.

5. Key Deliverables and Timeline

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The total duration for this assignment is estimated at Ten (Weeks) from contract effective date.

Milestone / Deliverable	Target Timeline
Inception Report (Work plan, methodology, schedule, and mobilization plan)	End of Week 2
Field Assessment & Diagnostic Report (Data collection across TZ & ZM sections)	End of Week 4
Draft Comprehensive Integrity & Functionality Report (Including findings & proposed BoQs)	End of Week 2
Final Report & Corrective Action Plan (Incorporating TAZAMA feedback)	End of Week 2

6. TAZAMA Pipelines Limited now invites eligible consulting firms to express their interest in providing these services. Interested consultants must provide information indicating that the firm has undertaken similar assignments before and possess required qualifications to perform the services.

The following is the shortlisting criteria:

1. Valid Patents and Companies Registration Agency (PACRA) Certificate
2. Valid Zambia Revenue Authority TAX Clearance Certificate
3. Description of similar assignments undertaken by the firm stating the name, scope, and cost of the comparable assignments.
4. Demonstrated corporate experience of at least 10 years in pipeline corrosion engineering, integrity management, and cathodic protection design/auditing within the oil and gas sector.
5. Successfully completed at least three (3) similar pipeline CP audit or rehabilitation projects of comparable scale (cross-border pipelines > 500 km) in the last 7 years.
6. Ownership/access to state-of-the-art CP testing equipment (e.g., high-impedance voltmeters and GPS synchronized interrupters).

The selection of the successful firm shall be based on Quality and Cost Based Selection (QCBS) Method set out in the Public Procurement (Amendment) Act No. 23 of 2023 and the Public Procurement Regulations of 2022.

7. Submission Mode

This EOI shall be submitted **ONLINE ONLY** through the TAZAMA E-Procurement Portal: Tenders@tazama.co.zm
All submissions must be uploaded in PDF documents. No hard copy submissions will be accepted.

8. Deadline for Submission

The deadline for submission is **30th October, 2026 at 10:00hrs**. The EOI will be opened online immediately thereafter.

9. Further Information

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Further information can be obtained from:
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