



L E S O T H O
C O M M U N I C A T I O N S
A U T H O R I T Y

REQUEST FOR PROPOSAL (RFP)

Upgrade and installation of Quality of Service system for the
Lesotho Communications Authority (LCA)

05 MAY 2023

1.0 Background

The Lesotho Communications Authority (LCA) is a statutory body established under the Lesotho Communications Act of 2000 and perpetuated under the Communications Act of 2012. Its mandate is to primarily regulate the communications sector comprising of telecommunications, postal and broadcasting services in Lesotho.

In order to meet this specific obligation, the LCA monitors the quality of service (QoS) provided by telecommunications operators and the quality of experience perceived by users.

2.0 Introduction

Pursuant to its mandate and strategic objectives of safeguarding consumer rights and advancing digital inclusion, the LCA is in the process of upgrading the ROMES drive test tool to be a fully functional Quality of Service system.

The main objective of the upgrade is to provide a live monitoring of network performance for mobile technologies, produce customised reports and allow for post-processing of drive tests measurement data.

LCA invites proposals from suitably qualified service providers to submit bids in response to this RFP.

3.0 Scope of Work

The purpose of this RFP is to get professional and credible service providers to provide a working solution that will measure voice and data services parameters as stipulated in the LCA Quality of Service Rules, 2023. The bidders are required to;

- i. Supply, install and configure network performance measurement equipment.
- ii. Integrate the new equipment with the existing ROMES system.
- iii. Provide training to LCA Engineers on the use of the system.
- iv. Propose support and maintenance contract.
- v. Provide a proposed network diagram.
- vi. Provide a detailed project plan.

4.0 Requirements and Technical Specifications

LCA currently runs ROMES 4.21 software with two test phones installed with QualiPoc Android software. The following devices/equipment will be required for the upgrade:

4.1 Monitoring unit

The monitoring unit will be hosted at Abia monitoring station and shall have the following features:

- a. Allow for three (3) concurrent users.
- b. Web-based monitoring and should support Microsoft windows applications.
- c. Dashboard to display probes and scanner results in real-time.
- d. A tailored user's rights for efficient and secure system management.

4.2 Analytics software

The software shall do post-processing of the data collected from test campaigns and must have the following features:

- a. Allow for three (3) concurrent users.
- b. Web-based and should support Microsoft windows applications.
- c. Analyse measurement files from test phones installed with QualiPoc Android software.
- d. Analyse measurement files from the TSME6 scanner.
- e. Produce high level and detailed reports.
- f. Highlight network performance issues.

4.3 Test Phones and Casing

- a. Supply two Samsung Galaxy S22+ test phones which support GSM/UMTS/LTE/5G. The test phones shall be installed with QualiPoc Android software.
- b. Supply two QualiPoc probe casing with two fans and a holding plate.
- c. Supply two USB type C cables of 1m in length.

4.4 Scanner

Replace the existing TSMW scanner with TSME6 which has the following features:

- a. Support GSM/UMTS/LTE technologies.
- b. Work in the frequency range 350MHz to 6 GHz and with receiver bandwidth of 20 MHz.
- c. Support Automatic Channel Detection for different technologies and frequency bands.
- d. Integrated GPS and powered with 12v DC.

4.5 Hardware

Supply the server with the following minimum features:

- a. 12 core Intel processor.
- b. 128 Giga Byte of Random Access Memory (RAM).
- c. 3 Tera Byte of Solid State Drive (SSD).
- d. Microsoft SQL Server 2019 embedded version.

4.6 Technical Feasibility

Technical feasibility shall be demonstrated through a description of the system specifications and features that enable the system to measure network performances against predetermined parameters. The following details shall be provided:

- i. General hardware specifications.
- ii. Automated test call generation.
- iii. Overlay of measured signals on mapping platforms such as google maps.
- iv. Real-time network performance monitoring capability.
- v. Post-processing and analysis of network performance measurement data.
- vi. Ease of mobility of measurement devices.
- vii. Presentation and reporting of network performance.

- viii. Management and configuration of remote measurement devices.
- ix. Management and setup of test campaigns.
- x. User, roles and access rights management.
- xi. Modularity/Scalability of the system to allow for an upgrade.

5.0 Conditions

Bid submissions must meet all the conditions indicated below, failure to comply with conditions 5.1 (a) to 5.1 (c) will lead to disqualification of the bid submission:

5.1 Specific items and conditions

- a. Certified copies of business registration documents.
- b. Current tax clearance certificates.
- c. Company Profile – the company or firm must submit its profile.
- d. The proposal shall include a minimum of three (3) references where similar assignments were undertaken and should specify the contact person(s) and telephone numbers.

NB: The above documents must form part of the technical proposal document of the bid.

5.2 General Terms and Conditions

- a. Lesotho laws SHALL apply.
- b. The financial proposal shall clearly state the bid price in Lesotho Loti (LSL) inclusive of VAT where applicable.
- c. The financial proposal must be valid for at least 60 working days from the submission deadline.
- d. Late submissions shall not be accepted.
- e. LCA will contact the successful bidder only. If you are not contacted within 60 working days from the date of submission, please consider your submission unsuccessful.

5.3 LCA's Rights

- a. This Request for Proposal (RFP) does not commit LCA to pay for any expenses incurred by the bidder in the preparation of responses to this invitation.
- b. LCA reserves the right to accept or reject any response to this RFP.
- c. LCA reserves the right to cancel or withdraw this RFP as a whole or in part without furnishing any reasons and without attracting any liability.
- d. LCA reserves the right to call company representatives to make presentations.
- e. LCA shall not be bound to accept the lowest bid price.

6.0 Submission Format

Bid submissions must meet all the conditions indicated below, failure to comply with the submission format will lead to disqualification of the bid submission:

- a. The bidder must submit one original and four copies of the bid submission document clearly marked "ORIGINAL" and "COPIES" as appropriate for both technical and financial proposals.
- b. Technical proposals must be in a separate package from the financial proposals.
- c. The package containing the technical proposal must be sealed, clearly marked "TECHNICAL PROPOSAL", and the package containing the financial proposal must be sealed, clearly marked "FINANCIAL PROPOSAL".
- d. The technical proposal shall NOT include any financial information.
- e. Both packages must be placed in one outer package clearly marked "TENDER FOR THE UPGRADE AND INSTALLATION OF QUALITY OF SERVICE SYSTEM FOR THE LESOTHO COMMUNICATIONS AUTHORITY (LCA)". Packages shall not bear any identification of the bidder.
- f. All bids shall be physically delivered. Electronic submissions shall not be accepted.

7.0 Timeframes and other details

- a. Any request for clarification on the RFP must be addressed in writing to the Chief Executive Officer at admin@lca.org.ls at least five days prior to the deadline.
- b. The bids must be submitted in the tender box located at the reception on the 1st Floor, LCA building, 30 Princess Margaret Road, Old Europa, Maseru, Lesotho on or before 5 June 2023 at 11 am. No submission will be accepted after the closing time.
- c. Opening of bid documents will be on the same day at 11:15 am at LCA premises.
- d. Interested bidders are invited to the bid opening and only one representative from the bidder will be allowed to attend.
- e. The preferred bidder will be informed in writing and invited for contract negotiations.

8.0 Submission address

All submissions must be delivered and addressed to:

The Chief Executive Officer

1st Floor, Lesotho Communications Authority Building

30 Princess Margaret Road, Old Europa

P. O. Box 15896

Maseru, LESOTHO.