



REQUEST FOR EXPRESSIONS OF INTEREST FOR THE PROVISION OF CONSULTING SERVICES FOR AERIAL LIDAR AND BATHYMETRIC SURVEY FOR WEST LUNGA II HYDROPOWER SITE IN MWINILUNGA DISTRICT, NORTH-WESTERN PROVINCE OF ZAMBIA – ZESCO/010/2023

In the quest to increase generation capacity, mitigate hydrological risk and to provide balancing power for sustainable integration of non-dispatchable renewables, ZESCO Limited has continued to identify hydropower potential sites for possible development. One of the potential sites proposed for Power Generation is West Lunga II located in Mwinilunga District, North-Western Province of Zambia.

PROJECT BACKGROUND

West Lunga II is a greenfield hydropower project on located on West Lunga River with a proposed installed capacity of 44 MW. The project is envisioned as a run of river scheme with an embankment dam, waterways, transmission, and support infrastructure. West Lunga II hydropower project was conceptualised by ZESCO in 2019 as a mitigation measure for hydrological risk in the wake of the impact of climate change on power generation in Zambia.

The technical pre-feasibility study and Environmental Social Impact Assessment (ESIA) screening for the project were completed in March 2020 and August 2020, respectively. ZESCO plans to conduct full feasibility studies to produce bankable documents for the project. Therefore, as part of the preparation for full feasibility studies, aerial lidar and bathymetric surveys are required to be carried out so that accurate topographical and hydrographical data can be obtained. This data is also required for defining the extent of geotechnical studies and providing a datum for the installation of a hydrological gauging station.

OBJECTIVE OF THE ASSIGNMENT

Aerial liDAR survey: To establish an accurate Digital Terrain Model (DTM)/DEM for the West Lunga II Hydropower site that is compatible with AutoCAD Civil 3D Software.

Bathymetric Survey: To capture data on West Lunga River to be used for the hydraulic river modelling in determine water surface elevations and water volume capacity.

REQUIRED MINIMUM EXPERIENCE OF THE CONSULTANT

The applicant should demonstrate ability to mobilize equipment and deploy skills necessary to undertake tasks set out in these Terms of Reference. The requested minimum technical and human expertise is as shown below:

- a) The applicant must be registered with Civil Aviation Authority or its international equivalence;

- b) The applicant must be registered with Engineering Institution of Zambia (EIZ) or its international equivalence;
- c) The applicant should have carried out at least two (02) similar assignment involving aircraft-mounted lidar survey and Hydrological/Bathymetric (cross sections) surveys in the last 10 years;
- d) The applicant should submit its Health Safety and Environment (HSE) policy;
- e) Staff requirements are as indicated in the Table below:

Position	Minimum Qualification
Team Leader	Bachelor's Degree in Geomatic Engineering/Land Surveying or equivalent Must have at least 10 Years of professional experience At least 5 of these years must be in Aerial LiDAR survey and bathymetric survey. Must have worked on at least one (1) similar assignment in nature and magnitude Must have project management experience
Lidar Survey specialist	Bachelor's Degree in Geomatic Engineering/Land Surveying or equivalent Must have at least 5 Years of professional experience At least 2 of these years must be in Aerial LiDAR survey and bathymetric survey. Must have worked on at least one (1) similar assignment in nature and magnitude Must be familiar with Zambia survey national grid trigonometric stations
Aircraft Pilot	Licensed Pilot Pilot with valid license issued by Civil Aviation Authority Must have at least 5 years professional experience. Must have survey experience in aerial photography, or aerial LiDAR mapping with at least 2,000 logged flying hours. Must have worked on at least one (1) similar assignment in nature and magnitude.

Interested eligible citizen consultants may obtain further information from the undersigned, during office hours, 08:00 to 12:30 hours and from 14:00 -16:30 hours, local time using contact information as follows: telefax number is +260-211-362314 The email address is procurement@zesco.co.zm and felixmunsaka@zesco.co.zm

The Expressions of Interest should be deposited in the tender box located on the Ground Floor Main Entrance, LDCC Building Procurement Offices P.O. Box 33304 10101, Lusaka, Zambia, clearly marked **'EXPRESSIONS OF INTEREST FOR THE PROVISION OF CONSULTING SERVICES FOR AERIAL LIDAR AND BATHYMETRIC SURVEY FOR WEST LUNGA II HYDROPOWER SITE IN MWINILUNGA DISTRICT, NORTH-WESTERN PROVINCE OF ZAMBIA – ZESCO/010/2023'** in sealed envelopes and addressed to the Head Procurement, ZESCO Limited, Stand No. 6949, Great East Road, Lusaka, Zambia, not later than **Friday, 17 March 2023 at 10:30** hours local time. **HOWEVER, TELEFAX OFFERS WILL NOT BE ACCEPTED. LATE BIDS WILL NOT BE ACCEPTED.**

The closing date for the receipt of the he Expressions of Interest is **Friday 17 March 2023 at 10.30 hours** local time. The bids will be opened immediately thereafter in the Procurement Conference Room, at ZESCO Limited Head Office at the address given below in the presence of applicants or their representatives who choose to attend.

The address (es) referred to above are:

For Inspection, Purchase and Clarifications of Expressions of Interest

ZESCO Limited,
Attention: Felix Munsaka, Head – Procurement,
Ground Floor, Procurement Department Offices Situated at LDCC Building within ZESCO Limited Head Office Premises, Adjacent to ZESCO Limited Filling Station, Stand Number 6949, Great East Road,
P. O. Box 33304, 10101, Lusaka, Zambia.
Tel: +260 211 362315
Email: procurement@zesco.co.zm Website: www.zesco.co.zm

For Submission of Expressions of Interest

ZESCO Limited,
Tender Box located at the Ground Floor Main Entrance of Procurement Department Offices Situated at LDCC Building within ZESCO Limited Head Office Premises, Adjacent to ZESCO Limited Filling Station, Stand Number 6949, Great East Road, P. O. Box 33304, 10101, Lusaka, Zambia.

For Opening of Expressions of Interest

ZESCO Limited,
Main Conference Room, Procurement Department Offices situated at LDCC Building, within ZESCO Limited premises, Head Office, Adjacent to ZESCO limited Filling Station, Stand Number 6949, Great East Road,
P.O. Box 33304, 10101, Lusaka, Zambia

FELIX H. MUNSAKA
HEAD PROCUREMENT