Request for Quotations

	Tender	Description	Qty	Specs
1	653-24	Provision of Lightning Protection & Earthing Systems for 3 LTE sites namely Zengeza3, Zengeza 5 and Unit J Tower light sites ***A mandatory site visit shall be done at Zengeza 3 tower light (****GPS Coordinates -18.014235˚; 31.057237˚****) site on Friday 03 May 2024 at 11am.*** ***Contact Person Eng. David Chikoani*** ***077 347 1076***	3 Sites	Spec attached below

Bidders with outstanding/pending orders for any of the above items will not be considered for supply

TELONE RESERVES THE RIGHT TO INCREASE AND DECREASE QUANTITY

Please note that only bidders registered with Procurement Regulatory Authority of Zimbabwe (PRAZ) shall be considered.

(Please attach Proof of PRAZ registration in the specified category)

Closing date for ALL Tenders: On or before 1100hrs; Thursday 8 May 2024

Quotations should be in US$ payable in local currency at prevailing WBWS bank rate Payment Terms – 30 days

Your Tender should state the price (Please state your VAT status), a firm delivery date Emailed to procurement@telone.co.zw

- **Bidders should also be compliant with the new regulations for FISCAL TAX INVOICE where necessary.**

DETAILED SPECS

The project scope of work shall include the following:

a. Design, installation, testing, and commissioning of the complete lightning protection and earth system (LPES) for the 3 sites.
b. The design shall be in compliance with BS EN 62305, for physical lightning protection, earthing and surge protection.
c. The Lightning Protection an earthing System (LPES) shall cover the 22m long Tower light mast, backup generator and the telecom equipment room/cabinet on site.
d. The contract requirements are to provide both LPS Faraday Cage full coverage in full compliance with BSEN 62305, together with Surge Protecting Devices (SPD) for the main power intake and electronic systems.

The LPES technical specifications are listed below:

1. The LPS protection for the sites shall be class 1 and shall typically comprise of a copper air terminal, copper down conductor, terminating earth rods surge protecting devices (SPD) and the associated earth mats.
2. Contractor **shall provide a design drawing** for their proposed solution showing the position and quantity of the air terminals, down conductor, earth mats, rods, how the generator will be earthed and how to incorporate the Protecting devices (SPD). (**failure to provide this design drawing shall lead to automatic disqualification**)
3. The earth mats shall be a 1.0m by 1.0m made using the standard 25 x 3 mm copper tape.
4. The earth mats and shall be buried at a minimal depth of 2.0m and shall be cross bonded as required by BSEN 62305 (in case where ground conductivity is low, the conductivity shall be increased by applying bentonite clay conductive aggregate or other conductive materials with high moisture retention properties to enable a resistance < 5Ω)
5. The down conductor shall be 25*3mm copper tape and shall be equipped with test joints. The down conductor shall be covered in a steel trunking to a height of at least 15m from ground level.
6. The SPD Class shall be Class 1 for the main service entrance and Class II for secondary switchboards and these shall be able to limit transient voltages and divert surge currents.
7. The earth rods shall be at least 1.6m long and made from copper bonded electrodes (steel core rods with electroplated copper plating)
8. The project shall also include the supply and installation of all equipment and accessories including but not limited to earth mats, compression type copper lugs, copper plated earth rods, 70mm bare copper cables, air termination kits, flex cables, a 400mm* 40mm copper bar for the equipment room/cabinet earth bar.