



Kenya Power

The Kenya Power & Lighting Co. Ltd.
Central Office – P.O. Box 30099, Nairobi, Kenya
Telephone – 254-02-3201000
Fax No. 254-02-3201889
Stima Plaza, Kolobot Road

Our Ref: KP1/9A.2/FA/003/ICT/23-24/JN/rmh

3rd May, 2024

ALL PROSPECTIVE BIDDERS,

Dear Sir/Madam,

ADDENDUM NO. 1 TO THE TENDER NO. KP1/9A.2/FA/003/ICT/23-24 FOR PROCUREMENT OF GPON EQUIPMENT AND ACCESSORIES

The following clarifications are made to the specified provisions of the Tender document.

1. RELATIONSHIP WITH THE PRINCIPAL TENDER DOCUMENT

Save where expressly amended by the terms of this Addendum, the Principal Tender Document shall continue to be in full force and effect. The provisions of this Addendum shall be deemed to have been incorporated in and shall be read as part of the Principal Tender Document.

2. CLARIFICATION

The following clarification was made on the tender document and shall be deemed to form the Addendum

Query no	Page No.	Clause No.	Questions	Response
1	77	1.Enterprise ONU – 4 port LAN/WAN (Low Capacity)	<p>1. The ONU model is XGS-PON, but the configured OLT is GPON. As a result, the ONU cannot match the OLT.</p> <p><i>Should the ONU be replaced with a more suitable ONU model, for example, one that supports GPON and 4xGE PoE+?</i></p> <p><i>(XGS-PON and 10GE POE++ are way beyond what is actually possible.)</i></p>	<p>The ONU should remain as is in the tender specifications.</p> <p>The OLT should support both 1G and 10G PON clients services</p>

2			<p>2. The requirements of this model exceed the actual requirements of the indoor model, which will increase unnecessary costs.</p> <p>Should we relax the requirements, such as supporting -20 degrees Celsius to 50 degrees Celsius, supporting 40-56V DC power supply, and more than 1A current, remove IP20?</p>	<p>The device should support -20 to +55 deg Celsius environments</p>
3			<p>3. Generally, the ONU does not provide the Wi-Fi function. The Wi-Fi function is provided by the ONT and AP.</p> <p>Is the Wi-Fi 6 function necessary?</p>	<p>The ONU should support WI-FI-6</p>
4		<p>3. Access point for Outdoor Wi-Fi (Low Capacity)</p>	<p>1. It is recommended that you use the following device parameters to replace the outdoor AP parameters in the bidding document. In this way, we can purchase more APs at the same price while meeting the application requirements. Built-in directional antennas and works simultaneously on the 2.4 GHz (2x2 MIMO) and 5 GHz (2x2 MIMO) frequency bands, achieving rates of up to 0.575 Gbit/s and 1.2 Gbit/s, respectively, and a maximum rate of 1.775 Gbit/s for the device. Interface type : 1 x10/100M/1GE, 1 x SFP, Build in BLE5.2, Built-in antennas. The AP should support IP68, The AP should support Operating temperature: -40°C ~ +65°C.</p> <p>Please confirm whether we need to replace the equipment parameters to obtain more cost-effective products?</p>	<p>Equipment specified in the tender remains as requested for.</p>
6			<p>2. This parameter exceeds the actual requirement. This has exceeded the needs of practical applications.</p> <p>Should we remove this parameter (an access point should have at least one 10GE SFP+)?</p>	<p>The Access Point should support both 1G and 10G PON clients services to maximise on the 1G and 10G PON Services being provided by the OLT</p>
7	78	<p>4. ONU 4 port with POE (High Capacity)</p>	<p>1. The ONU model is XGS-PON, but the configured OLT is GPON. As a result, the ONU cannot match the OLT.</p>	<p>The ONU should remain as is in the tender specifications.</p> <p>The OLT should support both 1G and</p>

			Should the ONU be replaced with a more suitable ONU model, for example, one that supports GPON and 4xGE PoE+? (XGS-PON and 10GE POE++ are way beyond what is actually possible.)	10G PON clients services
8			2. The requirements of this model exceed the actual requirements of the indoor model, which will increase unnecessary costs. Should we relax the requirements, such as supporting -20 degrees Celsius to 50 degrees Celsius, supporting 40-56V DC power supply, and more than 1A current, remove IP20?	The device should support -20 to +55 deg Celsius environments
9			3. Generally, the ONU does not provide the Wi-Fi function. The Wi-Fi function is provided by the ONT and AP. Is the Wi-Fi 6 function necessary?	The ONU should support WI-FI-6
10	78	5. ONT Indoor WiFi 240 VAC (High Capacity)	1. The description is ONT, but the parameter is AP. Which equipment is needed in this item?	
11	78	6. Access point for Outdoor WiFi (High Capacity)	1. It is recommended that you use the following device parameters to replace the outdoor AP parameters in the bidding document. In this way, we can purchase more APs at the same price while meeting the application requirements. Built-in directional antennas and works simultaneously on the 2.4 GHz (2x2 MIMO) and 5 GHz (2x2 MIMO) frequency bands, achieving rates of up to 0.575 Gbit/s and 1.2 Gbit/s, respectively, and a maximum rate of 1.775 Gbit/s for the device. Interface type : 1 x10/100M/1GE, 1 x SFP, Build in BLE5.2, Built-in antennas. The AP should support IP68, The AP should support Operating temperature: -40°C ~ +65°C. Please confirm whether we need to replace the equipment parameters to obtain more cost-effective products?	The specification remain as is in the tender That is no replacement of the product is possible

12			<p>2. This parameter exceeds the actual requirement. This has exceeded the needs of practical applications.</p> <p>Should we remove this parameter (an access point should have at least one 10GE SFP+)?</p>	<p>The Access Point should support both 1G and 10G PON clients services to maximise on the 1G and 10G PON Services being provided by the OLT</p>
13	78	7. Router IP/SD-WAN	<p>One GE WAN optical port can meet the bandwidth and configuration requirements.</p> <p>Are you sure you want to change two WAN optical ports to one GE optical port?</p>	<p>Since the equipment will be used in electrically noise environment such as KPLC substations the optical ports are required to avoid damage through electromagnetic induction /noise</p>
13	79	8. Optical Line Terminal OLT (Indoor)	<p>1. Generally, the 10G upstream optical module complies with the 10 km and 40 km standards.</p> <p>Which standard is preferred in the bidding document? It's suggested that separate OLT main equipment and SFP to meet different scenarios</p>	<p>The OLT should support up to 40km distances</p>
14	79	9. Router IP/SD-WAN - Ruggedised	<p>AR routers with 10 x 10GE SFP+ are mainly used in the headquarters campus network, which is far beyond normal last mile requirements and is very expensive.2 x GE combo ports and 8 x GE RJ45 LAN ports can meet SD-WAN requirements.</p> <p>Can we delete the 10*10G SFP+ parameter?</p>	<p>Maintain the 10 x10GE ports</p> <p>RJ45 port scan be drooped from the tender specifications</p>
15	80	10. Optical Line Terminal OLT (outdoor)	<p>1. Generally, the 10G upstream optical module complies with the 10 km and 40 km standards.</p> <p>Which standard is preferred in the bidding document? It's suggested that separate OLT main equipment and SFP to meet different scenarios?</p>	<p>The OLT should support up to 40km distances</p>
16	81	13. FDT/FAT Complete with 1:4 Splitter	<p>1. FAT and FDT are often referred to as two different devices, and the parameters here are more like an FDT than a FAT.</p> <p>Are there any parameter requirements for the FAT?</p>	<p>We refer the first level splitter as Fibre Distribution Terminal (FDT) which is preferably 1:2 or 1:4 fibre optic splitter. We refer to second level splitter as Fibre Access Terminal (FAT) as it is more close to the clients' side of network.</p>

3. TENDER SECURITY

The validity of tender security shall be considered from the initial tender closing date of **3rd May, 2024**.

4. CLOSING DATE

The Tender closing date is extended from **3rd May, 2024** to **10th May, 2024** at 10.00 am.

All other terms and conditions remains as per the Principal Tender Document (PTD)

Yours faithfully,

For: **THE KENYA POWER & LIGHTING COMPANY PLC**



DR. JOHN NGENO, OGW
GENERAL MANAGER, SUPPLY CHAIN AND LOGISTICS