

ADDENDUM NO. 3

TENDER NO. ICTA/OT/11/2022-2023

DATE: 22nd February, 2023

TENDER NAME: PROCUREMENT OF DIGITAL SUPERHIGHWAY-LASTMILE & PUBLIC WIFI CONNECTIVITY

S.No	BIDDER'S CONCERNS/OBSERVATIONS/COMMENTS	CLARIFICATION/ RESPONSE
1.	<p>Small Enterprise AP APs must support 802.11 a/b/g/n/ac The required Wi-Fi standards are no longer mainstream and being phased out in the industry. To support high density requirement for APs Wi-Fi 6 (802.11 ax) support is recommended. Is this a mandatory requirement in order to support public -Wi-Fi requirement?</p>	<p>APs must support 802.11 a/b/g/n/ac or high</p>
2.	<p>Quality Assurance, Integration Compliance and Support Guarantees. Since the project is envisioned to integrate to existing high infrastructure featuring advanced technologies, Quality Assurance is paramount and Integration SLAs need to be guaranteed. Is a reference report for quality control mandatory? If yes which such report is required?</p>	<p>The offered active equipment MUST be listed in the relevant category of Gartner's magic quadrant in any of the last three years.</p> <p>https://www.gartner.com/en/research/magic-quadrant</p>
3.	<p>Large Enterprise Switch A flash of 1 GB is sufficient for the device OS logs. One log version generally requires about 300MB. Also, different device architectures optimize for different flash sizes. Can a minimum flash size of 1GB be deemed sufficient if optimized for the Device OS?</p>	<p>The specifications remain as per the tender document. Please refer to tender document-Compliance with technical specifications 2.11</p>
4.	<p>Small Entry level Enterprise Firewall The required router already supports SD-WAN. Mainstream SD WAN functionality is optimized for routers. This functionality will not be of use</p>	<p>The requirement remains as per the tender document. SDWAN capability is required on the firewall.</p>

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	in the envisioned scenarios. Only Checkpoint and Fortinet in the mainstream add this functionality to the firewalls. Other Vendors optimize in routers. Can this requirement be optional if the proposed supplied router supports?	
5.	<p>Medium Enterprise Firewall</p> <p>The required router already supports SD-WAN. Mainstream SD WAN functionality is optimized for routers. This functionality will not be of use in the envisioned scenarios. Only Checkpoint and Fortinet in the mainstream add this functionality to the firewalls. Other Vendors optimize in routers. Can this requirement be optional if the proposed supplied router supports?</p>	The requirement remains as per the tender document. SDWAN capability is required on the firewall.
6.	<p>Large Enterprise Firewall</p> <p>The required router already supports SD-WAN. Mainstream SD WAN functionality is optimized for routers. This functionality will not be of use in the envisioned scenarios. Only Checkpoint and Fortinet in the mainstream add this functionality to the firewalls. Other Vendors optimize in routers. Can this requirement be optional if the proposed supplied router supports?</p>	The requirement remains as per the tender document. SDWAN capability is required on the firewall.
7.	<p>Engineering survey and design -Site</p> <p>Can we have this done per Meter?</p>	This item is quoted per site under the Last mile and Public wifi framework
8.	<p>ADSS Accessory Missing</p> <p>Universal pole Bracket is Missing - Can we provide pricing for the same?</p>	Refer to the tender document item 7.84
9.	<p>Training</p> <p>Professional training and certification to ICTA technical staff for at least 5 (Twenty) staff in English language on the following: Transmission, IP, GPON and Fiber Optics. Training should include understanding of current topologies and technologies as built in the regions, troubleshooting and first line support. Clarify if the Number of Staff is Five (5) OR Twenty (20)</p>	The number of staff is Five (5)

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10.	<p>Power and Cooling Supply and Install of power cable 25mm², 16mm², 10mm², 6mm² In the Price Schedule, there is request for ONLY 'Supply and Install of power cable' Clarify if Bidder can amend the Price Schedule to accommodate each Cable Size as per the specification in the Technical Requirements</p>	<p>Bidders are not allowed to amend the price schedule. The bidder to provide and quote for up to a maximum 25mm cable</p>
11.	<p>Power and Cooling Supply and Install of yellow green earthing cable 25mm², 16mm², 10mm², 6mm² In the Price Schedule, there is request for ONLY 'Supply and Install of yellow green earthing cable' Clarify if Bidder can amend the Price Schedule to accommodate each Cable Size as per the specification in the Technical Requirements</p>	<p>Bidders are not allowed to amend the price schedule The bidder to provide and quote for up to a maximum 25mm cable</p>
12.	<p>Power and Cooling Supply and Install of circuit breaker MCB ratings 10A, 23A, 32, 63A, 100A In the Price Schedule, there is request for ONLY 'Supply and Install of circuit breaker' Clarify if Bidder can amend the Price Schedule to accommodate each circuit breaker as per the specification in the Technical Requirements</p>	<p>Bidders are not allowed to amend the price schedule The bidder to provide and quote for up to a maximum 100A circuit breaker</p>
13.	<p>Power and Cooling Supply and Install of power Distribution Board 4way, 6way In the Price Schedule, there is request for ONLY 'Supply and Install of power Distribution Board' Clarify if Bidder can amend the Price Schedule to accommodate each power Distribution Board as per the specification in the Technical Requirements</p>	<p>Bidders are not allowed to amend the price schedule The bidder to provide and quote for up to a maximum 6 way board</p>
14.	<p>Power and Cooling Supply and Install Air Conditioning unit 1.Capacity 24,000BTU 2.Operating voltage: 240V AC Clarify the type of Air Conditioning unit: Is it Wall Mount OR Ceiling Mount</p>	<p>The AC can either be wall mount, ceiling mount or free-standing units. The actual implementation design shall be provided to the winning bidder</p>
15.	<p>Supply and Install Marker posts</p>	<p>Yes, the described marker post is the joint marker</p>

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	<p>1. Marker post made of solid hardened plastic material</p> <p>2. The marker posts to be painted white (2 coats) but the base not to be painted.</p> <p>3. The Labelling has text height of 25mm (with J having 60mm height) and 15mm spacing between the lines, all black in colour and sink engraved to 2mm depth.</p> <p>4. Marker labelling will be as follows: J xxx (xx= Joint No) G.O.K-I.C.T. A-202x (x is the year)</p> <p>5. All post surfaces to be fully smooth</p> <p>6. Height of the marker post to be 1500mm with 750mm above the ground surface and 750mm below the ground surface</p> <p>Clarify if the Marker post type is a 'Joint Marker'</p>	
16.	<p>Supply and Install dressed wooden pole</p> <p>Chemical treated wooden pole, 8m and 12M length, top diameter 140-200mm, top cover should be galvanized steel material, the diameter should be 100mm more than top diameter of the pole.</p> <p>Are there any other accessories other than 'Two thimble eye bolts, 0.25-inch-thick strand wire concrete attached anchor bolt'</p>	<p>Other accessories are defined under accessories category. Please refer to the price schedule from item 7.81 to 7.86</p>
17.	<p>Supply and Install Concrete poles</p> <p>10M length</p> <p>Compliant with KS1933</p> <p>Are there any other accessories other than 'Two thimble eye bolts, 0.25-inch-thick strand wire concrete attached anchor bolt'</p>	<p>Other accessories are defined under accessories category. Please refer to the price schedule from item 7.81 to 7.86</p>
18.	<p>Optical Module</p> <p>7.46, 7.47, 7.55-7.56 Single Module Optical Module</p> <p>If the distance between two sites is longer than 80 km, DWDM devices equipped with coloured optical modules and OAs will be used for transmission. Can the 120 km and 160 km optical modules be removed if the OAs of DWDM devices can meet the requirements?</p>	<p>The SPF specifications remain as per the tender document. Bidders must comply with the specifications and bid for all items in the price schedule.</p>
19.	<p>Optical Module</p> <p>7.43- 7.45, 7.49-7.51 Single Module Optical Module</p> <p>The 1550 nm wavelength is generally used in the industry to transmit signals over a distance longer than 10 km. For distances longer than 10KM,</p>	

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	can the bidder provide the Industry recommended 1550nm Single mode SFP?	Yes. The recommendation is agreed, the bidder may use 850nm or 1310nm or 1550 nm SFPs to achieve the specified signal distances.
20.	Optical Module 7.57-7.58 Multi-Module Optical Module The 850 nm wavelength is generally used in the industry to transmit signals for Multimode Transceiver. can the bidder provide the Industry recommended 850 Multi Mode mode SFP?	Yes. The recommendation is agreed, the bidder may use 850nm or 1310nm or 1550 nm SFPs to achieve the specified signal distances.
21.	Supply & Install 4x4 MIMO wireless P2P (2.4Ghz and 5Ghz) Dual band 2.4ghz / 5ghz Since microwave interference mostly affects the 2.4 GHz, backhauling on unlicensed spectrum is often done on 5Ghz. Can support for only 5Ghz be considered responsive?	Yes, both 2.4Ghz and 5Ghz backhauling will be deemed responsive
22.	Supply & Install 4x4 MIMO wireless P2P (2.4Ghz and 5Ghz) 300+ concurrent users Since this is a P2P, the assumption is traffic is aggregated device to device. The number of users supported may depend on the Switch / end devices.	The P2P link must be able to handle aggregated traffic as specified.
23.	Supply & Install 4x4 MIMO wireless P2P (2.4Ghz and 5Ghz) Downlink and Uplink ratio Is there a requisite adjustable uplink and downlink ratio to be configured for example 1:9, 2:8, 3:7, 4:6, 5:5, 6:4, 7:3, 8:2, 9:1 ?	The specification is as per the tender document Item 2.20
24.	Supply & Install 4x4 MIMO wireless P2P (2.4Ghz and 5Ghz) GPS Synchronization, decrease frequency channels, anti-interference. for location analysis and remote maintenance Does the system need to support exclusive GPS synchronization, decrease frequency channels, anti-interference? If yes please clarify.	The specification is as per the tender document item 2.20
25.	The following specification in the tender need clarity: - The AP should have at least one 5GE Ethernet interface and one 1GE Ethernet interface. and The AP should have at least one 10GE SFP+ interface - these seem to be 2 different product specification.	The outdoor AP must achieve the following revised specs: <ul style="list-style-type: none"> - The AP should support IEEE 802.11ac/ax. - The AP should support 4*4 MIMO. - The AP should support at least 1.2 Gbit/s.

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	<ul style="list-style-type: none"> - The AP should support Operating temperature: -40°C ~ +65°C. - the defined extremes are not practical anywhere in Kenya - The AP should support Bluetooth low energy 5.0 and Bluetooth positioning - this is not a feature for outdoor APs but rather indoor. 	<ul style="list-style-type: none"> - The AP should support OFDMA, MU MIMO. - The AP should have at least two (2) 1GE Ethernet interface. - Support Bluetooth - The AP should support PoE power supply - The AP should support cloud management mode allows users to switch to the cloud mode. - The AP should support IP66/IP67 rating or higher. - The AP should support Operating temperature: - 10°C ~ +45°C. - The AP should support a minimum 16 SSIDs for each radio. - The AP should support a minimum 1024 users. - The AP should support load balancing during smart roaming. <p>Attach brochure</p>

The addendum & clarification form part of the bidding document and is binding on all bidders. The tender closing/opening date has been extended to 28th February 2023 at 10:00am. All other terms and conditions of the tender remain the same.

Stanley Kamanguya, OGW
Chief Executive Officer