

ADDENDUM NO.1

TENDER NO. ICTA/OT/02/2023-2024

DATE: 24th July, 2023

TENDER NAME: PROCUREMENT OF DIGITAL SUPERHIGHWAY: BACKBONE &METRO

S.No		BIDDER'S CONCERNS/OBSERVATIONS/COMMENTS	Comment	CLARIFICATION/ RESPONSE
1.	Carrier grade Routers	ITT 1.1 Bidders that were awarded any Lot during the previous bidding are NOT qualified to participate in this tender re-advertisement.	<p>According to the invitation to tender document ICTA/OT/02/2023-2024. (Procurement of Digital Super Highway-Backbone &Metro Connectivity on a Three Year Framework-(Framework Contract) RE-ADVERTISEMENT)</p> <p>We would like to know the scope of eligibility?.</p> <p>Does the limitation of this eligibility cover this tender only i.e. DIGITAL SUPER HIGHWAY - BACKBONE AND METRO (FRAMEWORK CONTRACT) or Both BACKBONE AND METRO together with LAST MILE DIGITAL WIFI.</p> <p>Does an award in one tender affect eligibility in the other tender?</p>	A company or joint venture that has previously secured a contract for the "Digital Superhighway Backbone and Metro" is prohibited from bidding on the re-advertised "Digital Superhighway Backbone and Metro" tender.
2.	Pre-tender Conference	8 Pre-Tender Meeting and a pre-arranged pretender visit of the site of the work	Is there any pre-bid conference for this tender?	There is No pre bid conference

3.			Please clarify if the prime bidder has to submit all the PRELIMINARY documents or it is also required from JV partner if any	In case of a Joint Venture, the Prime bidder must meet all the Preliminary Mandatory requirement
4.	Page 35	<p>Performance on similar projects:</p> <p>a) Provide similar projects: -</p> <p>i) One project of at least Kes. 100 million in the last 5 years from the closing date of this tender. OR</p> <p>ii) Two projects of at least Kes 50 million each in the last 5 years from the closing date of this tender. OR</p> <p>iii) Three projects of at least Kes 33 million each in the last 5 years from the closing date of this tender or equivalent. Similarity being in complexity and scope. This must involve supporting and implementation of IP network, GPON network and ADSS FOC stringing. (The bidder should provide current certified Communication Authority of Kenya returns showing existing customers, NMS reports and Network Asset Ownership insurance)</p>	Please clarify what document is required in" Current certified Communication Authority of Kenya returns showing existing customers, NMS reports and Network Asset Ownership insurance"	<p>The clause "The bidder should provide current certified Communication Authority of Kenya returns showing existing customers, NMS reports and Network Asset Ownership insurance".</p> <p>Applies to bidders who are ISPs in nature of business.</p>
5.	Page 36	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	Please clarify the no. of Technical staff to be trained whether it is 5 person or Twenty	The staff to be trained are 5(Five)

6.		<p>1. Item No.1 of the technical evaluation criteria, section (a) states:</p> <p>The bidder should provide current certified Communication Authority of Kenya returns showing existing customers, NMS reports and Network Asset Ownership insurance</p>	<p>According to the Communications Authority (CA), certified returns, NMS reports and Network Asset Ownership insurance is not provided by CA. They however can provide the updated license to substantiate this requirement. Kindly give more clarity on this issue.</p>	<p>This requirement applies to bidders who are ISPs by nature of their business.</p> <p>NMS reports and Network Asset Ownership insurance are not required from CA but rather from any other valid sources.</p>
7.	Carrier grade Routers	1x 8 Port 40/100G Line Card	<p>For a high-bandwidth line card, it is recommended that interfaces are in different slots. Having all the interfaces in one line card and it fails means services will be interrupted until it is replaced.</p> <p>For redundancy design can separate line boards with varying port densities per line card be provided with minimum 2 * 40/100G port?</p>	The total 40/100G port density should be 8. This can be achieved in 1 card or several cards
8.	Carrier grade Routers	Qos: More than 3 million queues per system	<p>The backbone network carries integrated services and is unaware of specific services. It only needs to perform traffic priority scheduling. Generally, each logical port has eight QoS queues to ensure priority-based traffic scheduling, 100,000 - 200,000 queues per system is often sufficient for the backbone router. Can the bidder provide within the optimal range of above 200K queues per system?</p>	QOS requirement remains as per the tender document.
9.	Small Entry level Enterprise Firewall	Intelligent uplink selection - Supports service-specific PBR and intelligent uplink selection based on multiple load balancing algorithms (for example, based on bandwidth	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	SD-WAN requirement in the firewall is mandatory.

		ratio and link health status) in multi-egress scenarios. Firewall should have SD-WAN capability. At least Two (2) WAN ports	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?	
10.	DWDM Equipment	The configured transmission capacity must be at least 100Gbps.	The configured transmission capacity of 100Gbps is sufficient. However, given future scope is not indicated being a framework tender, Future capacity expansion should be supported. What is the required future capacity expansion requirement per wavelength?	The configured transmission capacity must be at least 100Gbps.
11.	DWDM Equipment	Device DWDM / OADM must accommodate ROADM functionality if required and Tunable Transponder.	Device DWDM / OADM must accommodate ROADM functionality if required and Tunable Transponder. To support fast rerouting incase of fiber cuts, is the optical-layer ASON mandatory? If yes this has not been clearly indicated as a requirement. Successful case deployment and implementation of optical layer ASON must be provided?	Yes, optical layer ASON is Mandatory.
12.	DWDM Equipment	The offered system shall support any-rate services,	For future multi service support or any rate services such as 2Mbits to 100Gbits, does the system need to support this on one wavelegth at the same time? If yes, this has not been clearly defined in the requirement.	Yes, the system needs to support multiplexing any rate on one wavelength.
13.	DWDM Equipment	The typical configuration of the Backbone DWDM equipment	To allow complete bid response to the DWDM requirement, a typical configuration of the Backbone DWDM equipment is required, Is there a typical configuration such as no of Subrack with power modules.	The technical requirements for DWDM remain the same as per the tender document. Configurations of DWDM shall be customized to backbone

			<p>no of Main control and cross-connection board</p> <p>no of 10G line side board and x ports any-rate tributary board</p> <p>no of 100G line side board and 100G tributary board etc.? If yes, and since this is only a typical configuration. In the future, will BOMs other than the configuration list be added to adapt to different scenarios?</p>	<p>and metro during survey and design.</p> <p>The bidder is expected to quote for a typical DWDWM configuration that works without need for extra BoMs. The bidder shall take care of any Extra Support more than 2 directional</p>
14.	DWDM Equipment	The typical configuration of the Metro DWDM equipment	<p>To allow complete response to the DWDM requirement , a typical configuration of the Metro DWDM equipment is required, Is there a typical configuration such as ;</p> <p>No of Subrack with power modules.</p> <p>Main control, 10 G muxponder board, OA, XFUI etc.?</p> <p>if yes , and since this is only a typical configuration, In the future, will BOMs other than the configuration list be added to adapt to different scenarios?.</p>	<p>The technical requirements for DWDM remain the same as per the tender document. Configurations of DWDM shall be customized to backbone and metro during survey and design.</p> <p>The bidder is expected to quote for a typical DWDWM configuration that works without need for extra BoMs. The bidder shall take care of any Extra BoM cost. Support more than 2 directional</p>
15.	Quality Assurance, Integration Compliance and Support Guarantees.	Quality Assurance requirement	<p>Since the project is 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>Reference report is not a requirement.</p>

16.	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 -Wifi requirement?	The operating temperature requirement is hereby adjusted to: 0-40 °C
17.	Small Enterprise Switch	Operating Temperature: -20 ~ 70 °C	The required temperature is largely required for industrial switches. The standard range of 0 ~ 40 °C is sufficient to cover optimum temperature adaptation. Can this be considered responsive?	
18.	Small Entry level Enterprise Firewall	Intelligent uplink selection - Supports service-specific PBR and intelligent uplink selection based on multiple load balancing algorithms (for example, based on bandwidth ratio and link health status) in multi-egress scenarios. Firewall should have SD-WAN capability. At least Two (2) WAN ports	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?	SD-WAN requirement in the firewall is mandatory.
19.	Medium Entry level Enterprise Firewall	Intelligent uplink selection - Supports service-specific PBR and intelligent uplink selection based on multiple load balancing algorithms (for example, based on bandwidth ratio and link health status) in multi-egress scenarios. Firewall should have SD-WAN capability. At least Two (2) WAN ports	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?	SD-WAN requirement in the firewall is mandatory.

20.	Large Entry level Enterprise Firewall	Intelligent uplink selection - Supports service-specific PBR and intelligent uplink selection based on multiple load balancing algorithms (for example, based on bandwidth ratio and link health status) in multi-egress scenarios. Firewall should have SD-WAN capability. At least Two (2) WAN ports	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?	SD-WAN requirement in the firewall is mandatory.
21.	Large Enterprise Switch	Flash - At least 2 GB	A flash of 1 GB is sufficient for the device OS logs. One log version nerally 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?	Flash memory for the large enterprise switch must be At least 2 GB.
22.	Quality Assurance, Integration Compliance and Support Guarantees.	Quality Assurance requirement	Since the project is 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?	Reference report is not a requirement.
23.	Outdoor AP	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	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 specifications.	The outdoor AP must achieve the following revised specs: -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.

				<ul style="list-style-type: none"> -The AP should support OFDMA, MU MIMO. -The AP should have at least two (2) 1GE Ethernet interface. -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>
24.		<p>We requests an extension for the tender submission deadline for the OPEN NATIONAL TENDER FOR DIGITAL SUPER HIGHWAY - BACKBONE AND METRO (FRAMEWORK CONTRACT) - READVERTISEMENT. The tender reference number is ICTA/OT/02/2023-2024, and the original closing date is scheduled for the 28th of July 2023.</p>	<p>We kindly seek this extension due to the necessity of ensuring meticulous document preparation and submission. The ongoing protests in the country have significantly impacted our operations, making it challenging to meet the current deadline. Therefore, we would be grateful if you could grant us an</p>	<p>The Tender closing date has been extended by a further one (1) week. The New closing date is Friday 4th August, 2023.</p>

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The addendum & clarification form part of the bidding document and is binding on all bidders. All other terms and conditions of the tender remain the same.

CEO, ICT Authority