REPUBLIC OF KENYA

COUNTY ASSEMBLY OF TAITA TAVETA

TENDER D O C U M E N T FOR

SUPPLY AND INSTALLATION OF STRUCTURED CABELING, IP TELEPHONY AND TRUNKING AT THE COUNTY ASSEMBLY OF TAITA TAVETA

NEGOTIATION NO: 8 7 4 3 1 0

CLOSING DATE: 28th May 2021

TAITA TAVETA COUNTY ASSEMBLY
P.O BOX 1142-80304
Telephone 0718703359/0732604811

Email: clerk@taitatavetaassembly.go.ke
Web: www.taitatavetaassembly.go.ke
Wundanyi, Kenya

SUPPLY AND INSTALLATION OF STRUCTURED CABLING, IP TELEPHONY AND TRUNKING AT THE COUNTY ASSEMBLY OF TAITA TAVETA COUNTY

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The Taita Taveta County Assembly invites eligible competent bidders for the following tender:-

NEGOTIATION NO.	TENDER ITEM DESCRIPTION
874310	**SUPPLY AND INSTALLATION OF STRUCTURED CABLING, IP TELEPHONY AND TRUNKING AT THE COUNTY ASSEMBLY OF TAITA TAVETA**

Tender documents with detailed specifications of the required goods and services may be obtained from **downloaded free of charge** from the County Assembly website www.taitatavetaassembly.go.ke interested bidders are encouraged to respond through the IFMIS supplier portal using Negotiation number **874310**

Completed tender documents must be submitted in enclosed plain sealed envelopes, clearly marked with the **Tender Number** and written the **Item Description** and be deposited in the tender box situated at the **Taita Taveta Assembly premises** so as to be received on or before **28th May, 2021, 10.30am.**

Opening of tender documents will take place immediately thereafter after close time on IFMIS

SPECIFICATION AND BILL OF QUANTITIES for
STRUCTURED CABLING, IP TELEPHONY AND TRUNKING

EVALUATION CRITERIA

Evaluation Criteria:

Financial and Technical proposals shall be subjected to the following evaluation criteria: Evaluation was done as per the criteria provided in the Tender document.

1. Preliminary Criteria:

a. Certificate of Registration.
b. Valid and Current Tax Compliance Certificate.
c. Certificate of Registration with the relevant body
d. Duly filled Confidential Business Questionnaire.
e. Copy of registration certificate National Construction Authority (NCA 6) and above in Electrical Engineering Certificate for Electronic-Telecommunication, structured cabling etc

2. Technical Evaluation:

Attach evidence for each number.

a. Work of similar nature and magnitude-15 Marks
b. Qualifications of personnel- 5 Marks
c. Experience of personnel -10 Marks
d. Financial ability -10 Marks
e. Plant/Equipment/Tools -10 Marks
f. Affirmative action- County based contractors-15 Marks.
g. Litigation history-3 Marks
h. Delivery period-2 Marks
i. Letter of credit line facility from reputable bank – 10 marks.
j. Communication Authority of Kenya (CAK) Telecommunication certificates for Technical Personnel 10
k. Financial Statements for the last three years – 10 marks.

(TOTAL FINANCIAL SCORE – 100 Marks)

ITEM	DESCRIPTION OVERVIEW: **STRUCTURED NETWORK CABLING** The Indicated product brands are only a guide to the quality required. Supply, install test, commission and train in proper working condition the following: Warranty period is 2yrs minimum	UNIT	QTY	UNIT PRICE	TOTAL KSH

SUPPLY AND INSTALLATION OF STRUCTURED CABLING, IP TELEPHONY AND TRUNKING AT THE COUNTY ASSEMBLY OF TAITA TAVETA COUNTY

1	Double data sockets (Faceplate, module and Patrice box) giganet equivalent quality	pc	38		
2	Single sockets (Faceplate, module and Patrice box) giganet equivalent quality	pc	18		
3	Cat 6 utp data cable (preferably giganet/siemon or equivalent quality)	pc	14		
4	42u cabinet (4patch panels , 4 cable organizers, 4PSU and 4 fans)	lot	1		
5	Ups 10 kva with 2 year warranty APC or equivalent	pc	1		
6	24port Cisco catalyst 2960x -24FPS- L - Switch-managed - 24 x10/100/1000 (PoE)X 4X SFP - rack - mountable - PoE + 4 xswitch, or equivalent	pc	3		
7	1 cisco business router 1800 series with with 3 console cables or equivalent	pc	1		
8	wifi extender equivalent to Ubiquiti UAP-3 UniFi IEEE 802.11n 300 Mbps Wireless Access Point or equivalent	pc	3		
9	Supply of rj45 1m patch codes pieces factory made	pc	60		
10	Supply of rj45 3m patch codes pieces factory made	pc	60		
11	Supply and installation of 12 btu air conditioner	pc	1		
11	Supply and mounting of 3 projectors with hdmi 20meters cables with 2 projector screens 3LCD Technology -Resolution WUXGA (1920*1200) -Brightness 3,400 ANSI Lumens -Aspect Ratio 16:10 -Contrast Ratio 15,000:1 -Optional Wireless Connectivity -VGA and 2hdmi ports -White Projector screen size is 96 by 96	Pc	3		
12	Supply and installation of metal trucking 100 by 50mm	pc			
	Total structured cabling cost				

ITEM	**IP TELEPHONY**	UNIT	QTY	UNIT PRICE	TOTAL KSH

SUPPLY AND INSTALLATION OF STRUCTURED CABLING, IP TELEPHONY AND TRUNKING AT THE COUNTY ASSEMBLY OF TAITA TAVETA COUNTY

Overview PABX	Supply and installation of IP PABX system telephone systems on two close buildings The PABX System must be a unified communications solution for businesses that provides premium voice, video, messaging, instant messaging and presence, conferencing, video conferencing, contact center services and mobility capabilities This easy-to-manage platform must be business-class, proven unified communications technologies to full advantage and supports flexible deployment models based on the needs—a wide array of IP Phones Should enable session and call control for video, voice, messaging, mobility, instant messaging, and presence. Should allow for effective secure collaboration on any network, with any device, and from anywhere cost-effectively, reliably, and securely. **Handsets should have the following basic features** Call back Call forward Call history Call park Call Pickup Call timer Call waiting Caller ID Meet me conference				
1	PABX – Hybrid Telephony System server form factor rack mount Should support; - • Call manager software. 1 • No additional licenses • IP phone Users 30 • Voice gateway 1 • Operators Consoles 1 • Support IP/VOIP/SIP Trunks • Call pick-up, Optional DISA facility, Advanced Automatic Call Routing • PC Call Management • Call Recording • Audio Conferencing • Interactive Voice Response • Text to Speech	pc	1		

2	Telephone Hand Set for Executives (Cisco or Equivalent) • 10 plus Four-way navigation cluster button • Volume up/down (separate volume levels for the handset, speaker, and ringer) • Mute button (LED), Speaker button (LED), Headset button (LED) • Menu button (browser, options and settings access) • Telephony application button –to return to main telephone screen • Contacts button • History (Call log) button (LED) • Quick-Access voicemail Message button with LED and corner message indicator	pc	6		
3	Telephone Hand Set for Regular Users • Call history • Contacts button • Message management • Provides access to a corporate LDAP directory and personal contacts for ease of dialing • Instant Messaging and Presence Capabilities Speak commands to the Automated Attendant • Graphical user interface for specified mobile devices to enhance communications	pc	20		
4	Other necessary items left that are necessary to complete project as suggested by bidder. (list below and price) a) b)				

Item	Description	Ksh
1	Total for structured network cabling and projector	
2	Total for PABX telephony system	
	Total for structured network cabling, projector and PABX telephony	

SUPPLY AND INSTALLATION OF STRUCTURED CABLING, IP TELEPHONY AND TRUNKING AT THE COUNTY ASSEMBLY OF TAITA TAVETA COUNTY

Item	Description	Qty	Unit	Ksh
	summary			
1	Total for structured network cabling, projector, PABX telephony system and trunking			
2	Allow for Training of 3staff client personnel on operation and maintenance of the Systems installed			
3	Provide a provisional sum of 5% only for project management expense			
4	Allow a contingency sum of 10%			
TOTAL COST INCLUSIVE OF TAXES FOR THE TENDER				

Amount in words Kenya shillings…….....
.....

Tenderes name ……

Signature…….Date ……

KRA Pin No…….. signature……

Witness…….. …….

Address …….Date……..

Technical Specifications

GENERAL

1. These specifications describe the basic requirements for goods. Tenderers are requested to submit with their offers the detailed specifications, drawings, catalogues, etc. for the products they intend to supply.
2. Tenderers must indicate on the specifications sheets whether the equipment offered comply with each specified requirement.
3. All the dimensions and capacities of the equipment to be supplied shall not be less than those required in these specifications. Deviations from the basic requirements, if any, shall be explained in detail in writing with the offer, with supporting data such as calculation sheets, etc. The procuring entity reserves the right to reject the products, if such deviations shall be found critical to the use and operation of the products.
4. The tenderers are strongly advised to visit the site to ascertain various facilitates on the ground that are pertinent to delivery of this tender.
5. It is advisable for bidders to visit site before quoting for clarifications
6. The contactor shall bear all costs of transportation and replacement of parts under warranty. Equipment taken for warranty shall be replaced within 7 working days
7. The contractor will develop and submit a work plan and timetable at the commencement of the assignment

2.0 STRUCTURED NETWORK CABLING 2.1 OVERVIEW OF THE REQUIRED NETWORK

2.1.1 A structured cabling network is desired which will support scalability, reliability and simple network management.

2.1.2 The cabling plant will support data, voice and video services

2.1.3 Bidders are advised to make site visits to establish for themselves the facilities available to support structured cabling and to make accurate measurements of the distances to be covered.

2.1.4 Static and/or dynamic IP addressing and sub-netting will be used to realize Virtual Local Area Networks (VLAN) within the LAN. All active components used in the network must be able to facilitate management of the network from a central as well as a remote location and must have integrated IOS software. All active components used and their accessories for each solution must be from the same manufacturer

2.2 SCOPE OF THE STRUCTURED NETWORK INSTALLATION

2.2.1 The installation will consist of a star topology horizontal UTP subsystem originating from switches and terminating at Data points with RJ45 sockets. For each data point, a patch cord of appropriate length with RJ45 connectors at both ends will be required to connect the Data point to the network interface adapter. Good cable management practice must be adhered to and proper labeling used for easy identification.

2.2.2 The locations for the horizontal distribution cabinets for the building and floors by the contractor in consultation with the client to decide the most economical positions, but must be in a secure rooms.

2.2.3 Where cables cannot be run in the building trunking within the walls or floor, surface pathways using metal trunkings will be installed.

2.2.4 The Contractor will be responsible for the supply of all materials and components necessary to complete the installation of the structured cabling system.

2.2.5 The horizontal cabling will include outlets and consolidation or transition points, connectors, mechanical terminations and patch cords that compose horizontal cross-connect. The cables will be routed in existing wall ducts and terminated on patch panels and at data outlets.

2.2.6 The contractor will be responsible for pulling, terminating and testing all circuits installed and each cable shall be assigned a unique cable number

2.2.7 Metal trunking used (where applicable) will have dimensions of 50mm X 100mm with two compartments.

2.3 VARIATION OF THE SCOPE OF WORK

The client reserves the right at the time of the contract to vary the scope of the work, including amending the quantity of the data points, goods and materials. Such amendments should not result in any changes to any unit prices, other than where pricing was expressly specified to be subject to discount or other reduction on account of higher volume.

2.4 INSTALLATION PRACTICE

2.4.1 GENERAL

2.4.1.1 The Contractor will be required to install cabling in accordance with International Structured Cabling System designs. Each subsystem will be implemented using category 6 compliant components and be deployed according to ANSI/TIA/EIA-568-A and ISO/IEC 11801 standards.

2.4.1.2 All network components should be connected to the earth wire with the general specifications of this document, the local regulations in force and the manufacturer's recommendations.

2.4.1.3 All routing layout for cable paths must consider the cable minimum radius of curvature to be supported and the existing facilities, in order not to interfere with the access to maintenance activities.

2.4.1.4 All aspects of the cabling infrastructure should make provision for possible extensions.

2.4.1.5 All adapters must be compatible with the transmission capacities of the equipment to which they connect.

2.4.1.6 All cables and connectors must be labeled.

2.4.1.7 The contractor will be required to comply with the manufacturers recommended installation practices.

2.4.1.8 The contractor will be required not to interfere and configure with existing infrastructure of internet from ICTA

2.4.2 HORIZONTAL CABLING FOR THE LOCAL AREA NETWORK

2.4.2.1 The primary media for horizontal cabling will be 4-pair Unshielded Twisted Pair (UTP), which must meet or exceed ANSI/TIA/EIA 568-B.2-1 and ISO/IEC 11801:2002(E).

2.4.2.2 Unshielded Twisted Pair (UTP) Category 6 quality cable will be employed.

2.4.2.3 Each room to be networked shall have all plates installed and each outlet terminated with 8-pin modular jacks (RJ-45).

2.4.2.4 Each designated network interface will have capacity to support Gigabit Ethernet speed.

2.4.2.5 Cables will not be crushed using cable ties.

2.4.2.6 Cable conduits must not be overfilled.

2.4.2.7 All cables must pass through metal trunking and should not be visible from the outside 2.4.2.8 There shall be no splicing of any of the cables installed. Intermediate cross-connects and transition points are not allowed.

2.4.2.9 Data outlets shall be mounted on the trunking.

2.4.3 PATCH PANELS

2.4.3.1 Patch panels must be equipped with RJ45 contacts of category 6 sockets with a capacity of 24 and must be rack mountable.

2.4.3.2 All panels and racks must be earthed to provide electrical safety for users and screening to prevent electromagnetic radiation.

2.4.3.3 Except for the patch cords used to connect NICs to the RJ45 sockets, all patch cords must be labelled at each extremity with soft PVC support and indelible marking (stamping or similar method). For all other components, the label type should be of stiff plastic PVC type.

2.4.4 NETWORK CONTROL EQUIPMENT

2.4.4.1 Active devices used at the LAN edge will have 24 ports and 48 ports for connection to the horizontal cabling and uplink/cascade as may be appropriate and support Power-over-Ethernet, PoE and indicated in the specifications.

2.4.4.3 Switches must be rack mountable in standard racks.

2.4.4.4 Active devices for horizontal cabling will support layer 2 switching and 10/100/1000 Mbps autosensing and for backbone cabling 1000Mbps and 10G capable.

2.4.4.5 Active devices used at the aggregation/distribution layer of the LAN must layer 3 switching.

2.4.5 EQUIPMENT CABINETS

2.4.5.1 All cabinets for active devices must conform to good practices specifications and with forced cooling.

2.4.5.2 The exact placing of the cabinets should be defined at the start of the works.

2.4.5.3 Equipment cabinets must provide enough space to accommodate the cabling, cabling management,

equipment racks, panels, network control devices as required, and the locations should provide for convenient access to operational personnel.