

**KISII COUNTY ASSEMBLY**

**TENDER DOCUMENT FOR SUPPLY, DELIVERY, INSTALLATION, CONFIGURATION AND COMMISSIONING OF SERVER ROOM**

**SITE: KISII COUNTY ASSEMBLY OFFICES**

**Tender No. KCA/S/007/2017-2018**

**TECHNICAL SPECIFICATIONS**

**Invitation**

**TenderRef. No: KCA/S/007/2017-2018**

**TenderName**: **SUPPLY, DELIVERY, INSTALLATION, CONFIGURATION AND COMMISSIONING OF SERVER ROOM**

Kisii County Assembly (KCA)invites sealed bids from eligible candidates for SUPPLY, DELIVERY, INSTALLATION, and CONFIGURATION AND COMMISSIONING OF SERVER ROOM

A complete set of technical specification documents may be obtained for free by interested candidates at the Kisii County Assembly.

Prices quoted should be net inclusive of all taxes, and delivery costs, must be in Kenya Shillings and shall remain valid for120 days.

Completed documents are to been closed in plain sealed envelopes clearly marked “**SUPPLY, DELIVERY, INSTALLATION, CONFIGURATION AND COMMISSIONING OF SERVER ROOM**”

“Tender Reference No. KCA/S/007/2017-2018 “and should be addressed to:

THE CLERK

Kisii County Assembly

P.O.Box 4250 – 40200

Kisii

This Invitation is open to all eligible candidates. Successful candidates shall provide the services for the stipulated duration from the date of commencement (hereinafter referred to as the term).

The procuring entity’s employees, committee members, board members and their relatives (spouse and children) are not eligible to participate in the bid unless where specially allowed undersection131of the Act.

Candidates shall provide the qualification information statement that the bidder (including all members, of a joint venture and subcontractors) is not associated, or have been associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by the Procuring entity to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the services under this Invitation.

Bidders involved in corrupt or fraudulent practices or debarred from participating in public procurement shall not be eligible.

The Bidder shall bear all costs associated with the preparation and submission of its bid, and the procuring entity, will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the tendering process.

Procuring entity requires that bidders observe the highest standard of ethics during the procurement process and execution of contracts.

Procuring entity will reject a proposal for award if it determines that the bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;

If a bidder who is found to have indulged in corrupt or fraudulent practices risks being debarred from participating in public procurement in Kenya.

**Definitions**

In this Contract, the following terms shall be interpreted as indicated:

1. The Procuring Entity/Purchaser is **Kisii County Assembly, P.O.Box4252-40200 Kisii. Kenya** and includes the Procuring Entity’s legal representatives successors or assigns.
2. **“The Contract”** means the agreement entered into between the Purchaser and the Supplier, as recorded in the Contract Agreement Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
3. **“The Contract Price”** means the price payable to the Supplier under the Contract for the full and proper performance of its contractual obligations.
4. **“The Goods”**–Means all equipment machinery, Services and/or other materials which the supplier is required to supply to the purchaser under the contract.
5. **“The Service”** means those services ancillary to the supply of the Goods, such as transportation and insurance, and any other incidental services, such as installation, commissioning, provision of technical assistance, training, and other such obligations of the Supplier covered under the Contract.
6. **“GCC”** means the General Conditions of Contract contained in this section.
7. **“LAN”** Local Area Network
8. **“HDC”** Horizontal Distribution Centre
9. **“The Bidder”** means the individual or firm who participates and submits a bid.
10. **“OEM”** Original Equipment/Software manufacturer
11. **“WAN”** Wide Area Network
12. **“RFID”** Radio Frequency Identification
13. **“mA”** Milli Ampere
14. **“V”** Volts
15. **“W”** Watts

FORM OF TENDER

Kisii County Assembly

P.O. Box 4550 – 40200

Kisii

SUPPLY, DELIVERY, INSTALLATION, CONFIGURATION AND COMMISSIONING OF SERVER ROOM

Tender Reference No. KCA/S/007/2017-2018

In accordance with the Instructions to Tenderers, Conditions of Contract, Specifications and Bills of Quantities for the execution of the above named Works, we, the undersigned offer to construct, install and complete such Works and remedy any defects therein for the sum of:

KShs ............................................................................................... [Amount in figures]

Kenya Shillings………………………………………….....…………………….…

……………………………………………………………………... [Amount in words]

We undertake, if our tender is accepted, to commence the Works as soon as is reasonably possible after the receipt of the Employer's Representative's notice to commence, and to complete the whole of the Works comprised in the Contract within the time stated in the Appendix to Conditions of Contract.

We agree to abide by this tender for a period of 120 days from the date of tender opening, and shall remain binding upon us and may be accepted at any time before the expiry of that period.

Unless and until a formal Agreement is prepared and executed this tender together with your written acceptance thereof, shall constitute a binding Contract between us.

We understand that you are not bound to accept the lowest or any tender you may receive.

Dated this: …………………… day of 20……………..

Signature: …………………………. in the capacity of ………………………………….. Duly authorized to sign tenders for and on behalf of:

…………………………………………………[Name of Tenderer]

Of ……………………………………………..[Address of Tenderer]

**Evaluation and Comparison of Tenders**

Evaluation of Tenders and Award Criteria.

The contract will be awarded on the basis of the offers that are the most economically advantageous.

1. Kisii County Assembly will evaluate and compare the tenders which have been determined to be substantially responsive.
2. Kisii County Assembly evaluation of a tender will exclude and not take into account any allowance for price adjustment during the period of execution of the contract, if provided in the tender.
3. The comparison shall be of the ex-factory/ex-warehouse/off-the-shelf price of the Goods offered from within Kenya, such price to include all costs, as well as duties and taxes paid or payable on components and raw material incorporated or to be incorporated in the Goods.
4. Kisii County Assembly evaluation of a tender will take into account, in addition to the tender price and the price of incidental services, the following factors:
5. The cost of Services.
6. Delivery schedule offered in the tender;
7. Deviations in payment schedule from that specified in the Agreement;
8. **Deviation in payment schedule.**

Tenderers shall state their tender price for the payment of schedule outlined in the Agreement. Tenders will be evaluated on the basis of this price. Tenderers are, however, permitted to state an alternative payment schedule and indicate the reduction in tender price they wish to offer for such alternative payment schedule. Kisii County Assembly may consider the alternative payment schedule offered by the selected tenderer.

**Award of Contract**

**Post-qualification**

The evaluation will be based on the documents submitted by the tenderer. The evaluation will proceed in stages, as described below. Only the offers meeting the requirements of a stage will pass to the next stage of the evaluation. The stages of the evaluation procedure will be:

1. The technical evaluation (quality);
2. The financial evaluation (price).

Only the tenders meeting the requirements of the selection criteria will be evaluated

**Award Criteria**

Award of the contract will be based upon the most responsive Vendor whose offer will be the most advantageous to Kisii County Assembly in terms of cost, functionality, and other factors as specified elsewhere in this document.

The bid will be evaluated using the following process:

Stage 1: Verify each bids compliance to the mandatory Criteria and disqualify any bids that fail to meet these.

Stage 2: For bids that pass the Mandatory Criteria, evaluate and score each one, using the desirable criteria and weights.

**Stage1 – Mandatory Criteria**

The proposal must meet all of the following mandatory criteria and clearly demonstrate that these are met in a substantially unaltered form. If the proposal fails to meet one of these criteria, it will receive no further consideration during the evaluation process and be deemed non-compliant.

1. The proposal must clearly demonstrate the bidders experience and ability to fulfil the service requirements.
2. The bidder must have done a site visit
3. The bidder must provide a detailed design and Network layout of the structured cabling installation works Solution in Kisii County Assembly Offices

**Stage2:-Desirable Criteria**

If the proposal meets the mandatory Criteria it will be further evaluated using the Desirable Criteria. Scores will be recorded for each criterion and a total score will be determined.

The number of points to be given under each of the evaluation criteria is shown in the table that follows:

|  |  |  |
| --- | --- | --- |
|  | CRITERION | Points |
|  | Understanding of proposed installation service requirements | 5 |
|  | Specific experience of the bidder (5)  Specific experience of at least 3years on execution of similar project to a similar organization as Kisii County Assembly.(10 marks ) | 15 |
|  | Use of Original equipment manufacturer to supply/offer service | 10 |
|  | Adequacy of the proposed technical approach, methodology and design plan in responding to the Terms of Reference   1. Technical approach and methodology(15 marks) 2. Work plan/Delivery of solution(10marks) | 25 |
|  | 1. Qualifications, Certification and competence of Key professional staff for the assignment. (10). 2. Experience of at least 3years for personnel to run the service (10). | 20 |
|  | Compliance to specifications of the proposed equipment to be deployed to offer service. | 25 |
|  | Total Score | 100 Points |

**Financial evaluation**

Only tenders scoring 70 points or more (of a maximum of 100 points) against the Technical Award Criteria will have their financial proposal evaluated.

The evaluation will be made on the basis of the Tender Price offered and filled by the tenderers in the Tender Form.

The tender with the lowest Financial Proposal receives 100points. The others are awarded points by means of the following formula:

**Financial Score = (cheapest Price/Price of the tender being considered)\* 30,** whereby“30” is the price weighting indicator for this call for tenders.

The Financial Offers will be checked for any arithmetical errors in computation and summation. Errors will be corrected by the evaluation committee.

NB: All the information and means of proof provided will commit the contractor throughout the duration of the contract.

**Kisii County Assembly Right to Vary Quantity**

Kisii County Assembly reserves the right at the time of contract award to increase or decrease the quantity of goods originally specified in the schedule of requirements without any change in unit price or other terms and conditions.

**Kisii County Assembly Right to accept or Reject any or All Tenders**

Kisii County Assembly reserves the right to accept or reject any tender, and to annul the tendering process and reject all tenders at any time prior to contract award, without thereby incurring any liability to the affected tenderer or tenderers or any obligation to inform the affected tenderer or tenderers of the grounds for Kisii County Assembly’s action.

**Instruction to bidders**

**Prospective bidders’ responsibility**

The bidder is responsible for the following:

* All Bidders shall conduct site survey to all sites. Survey must be conducted for all sites (proposed cable routes, equipment rooms, cabinets, AP mount points etc) prior to submitting the offer.
* The Bidder should make use of all the available resources wherever possible in the Proposal.

**The winning bidder shall:**

* Procure, Supply and install all necessary equipment’s, the supply and installation of required accessories, etc…
* Supply, install and test structured cabling points for data and accessories as well as associated termination accessories needed for the project i.e. Cable ducts; splice boxes, cable trays, duct accessories, materials for new ducts construction ...etc.
* Perform the required works for excavation and civil works, man-hole construction, ducts supply and installation, as well as all required work for successful project completion.
* The winning bidder shall conduct its own research and determine in detail all the documentation required by the county council, national roads authorities, utility companies to obtain the rights of way. Right of Ways are defined as the necessary set of permits, authorizations and private agreements allowing for the construction and installation of the optical fiber infrastructure including, manholes and other required ancillary items on public or private terrain along the routes in accordance with all legal conditions applicable.

**NB:** All supplied materials shall be 100 % new, unused, of high quality and of current technology

* The winning bidder shall comply with all laws, regulations applicable in Kenya in addition to other requirements of different governmental entities.
* The Winning bidder shall maintain a daily progress report and incident report.
* The Winning bidder must provide the employees with ID badges showing their names and responsibilities to be presented to different security authorities.
* The project must be completed within the agreed time-lines, here proposed not to exceed three (3) months. The tenderer must commit to regular progress project review meetings, which shall be held between the tenderer and the County Government at least once every week during the project execution period.
* Upon completion of the project, the tenderer must commit to a least one-week monitoring period before release of the final schedule of payment. This shall allow time for the network behaviour and performance to be observed and the documented findings of the tenderer's signal quality verification tests to be independently confirmed.

**Scope of Work**

The project aims to supply, deliver, install, configure and commission a server room at the County Assembly premises, the installation will include an active power Back up system, Fire suppression, Access Control and storage server for Kisii County Assembly**.**

1. **Power Back up**:

The Bidder should act as a System Integrator for providing an End-to-End solution for the identified location including but not limited to design, supply providing of the required Power Back Up system, battery bank with accessories, inverter peripherals like cables, junction boxes, earthing, etc. and installation, performance testing, commissioning, warranty, annual maintenance, etc. The bidders have to ensure planning and smooth execution of the project. The deliverables:

1. Design, supply, installation, commissioning and successful performance of the power back up system. While designing various components and sub-components of the system the bidder must take all prevailing local conditions as well as all functional requirements in to consideration so as to ensure the committed level of performance.
2. Installation of all necessary protection devices to protect the power back up system from lightening, sudden surges in voltage and current and to ensure safety of the data centre to which the site is connected to. The bidder should also ensure protection of life and property likely to be endangered due to the installed Power back up system.
3. Submission of all details of the installed power back up system, like site details, systems details, installation report, etc. in the formats to be provided at the time of issue of purchase order.
4. There should be an **External Maintenance Bypass Switch**: The bypass switch, enclosed in a box, should be field mounted on the outside of the inverter cabinet or an adjacent wall. This box includes a rotary switch with make before break contacts to provide a single control for transferring to and from maintenance bypass with no load support interruption.
5. There should be a Pure Sine wave Power Output.
6. A Double power rating Surge Capacity which Provides up to twice the rated power output for momentary start-up of inductive loads.
7. A provision for a Built-in 50Amps charge controller.
8. Installation of the Specified 5 No. 200 Ah 12V sealed maintenance free deep cycle batteries.
9. Training at least two designated persons in day to day maintenance and upkeep of the system.
10. Advanced 3-stage battery charger and selector switch for gel or wet cell batteries.
11. Digital LCD display for monitoring battery charge status and battery voltage.
12. **Fire Detection & Extinguishing System**

The scope of fire detection and suppression encompasses the supply, installation, testing and commissioning of Addressable Fire Alarm System and various components, which constitute the system. This system shall be microcomputer based utilizing distributed processing technique. The system shall generally include power supply, indicating devices, cable and accessories etc., complete.

The deliverables:

1. Fire alarm triggered by smoke.
2. Smoke sensor with CUBUS levelling for automatic adaptation to environmental conditions.
3. Sensitivity towards smoke and heat class can be set to EN%$
4. Integrated short circuit isolator.
5. Alarm filter for reducing the number of deceptive alarms.
6. **Computer Room Air Cooling System**

Air conditioning system shall provide 24x7 cooling and humidity control with redundancy in case of break down

Precision air conditioners complete with all controls, indoor and outside units, with Direct driven Motors and Backward curved blowers, multiple scroll compressors preferably in tandem circuit, electronic expansion valve, hydrophilic fins for IDU Coil complete installation and commissioning for server room.

The vendor is expected to include all auxiliary works like ducting, inlet and drain piping, piping between indoor and outdoor, cabling, acoustic and thermal insulation (Duct and floor for server room), volume control dampers, supply and returns air grills, stands for indoor and outdoor units with related civil works

Automatic monitoring and control of cooling, heating, humidification, dehumidification, air-filtration, etc. should be installed

1. **Access Control System**

The Access Control System shall be deployed with the objective of allowing entry and exit to and from the server room to authorized personnel only. The system deployed shall be based on Biometric Technology. An access control system consisting of a central PC, intelligent controllers, power supplies, proximity cards and all associated accessories is required to make a fully operational on line access control system. Access control shall be provided for doors. These doors shall be provided with electric locks, and shall operate on fail-safe principle. The lock shall remain unlocked in the event of a fire alarm or in the event of a power failure. The system shall monitor the status of the doors through magnetic reed contacts

The system should be designed and implemented to provide following functionality:

1. Controlled Entries to server room
2. Controlled exits from server room
3. Configurable system for user defined access policy for each access point
4. Record, report and archive each and every activity (permission granted and / or rejected) for each access request
5. User defined reporting and log formats
6. Fail safe operation in case of no-power condition and abnormal condition such as fire, theft, intrusion, loss of access control, etc.
7. Day, Date, Time and duration based access rights should be user configurable for each access point and for each user.
8. One user can have different policy / access rights for different access points.

**Fiber installation, termination and testing**

**General**

The fiber optic shall be installed to link up three buildings covering approximately 255m . The installation shall comprise of 8-core fiber cable and shall run through surface pathways (2 feet - depth) using a duct.

The contractor shall furnish and install all equipment, accessories, and materials necessary for a complete, functional and scalable fiber cable link in accordance with the specifications. All the converters used must be capable of achieving 1Gbps throughput and ALL the fiber cable should pass in a conduit.

The design of the installation must illustrate the junctions for conduits coming from different directions, give allowance for maintenance and provide location for bending the conduits without damaging the optical cables.

The contractor must provide an installation plan showing provision of manholes where necessary and fiber boxes locations for future maintenance purpose.

**Route Overview**

The entire fiber optic cable network will have the proper slack built‐in to the design for restoration and splicing.

**Fiber Optic Cable**

All fiber optic cable shall be OS1 single mode all dielectric, rated for underground installation. This must be installed in a protective duct. Follow proper bending radius for all cabling installations.

**Reference Standards**

IEEE Institute of Electrical and Electronic Engineers

ANSI American National Standards Institute, Inc.

EIA/TIA Electronic / Telecommunications Industry Association

All Federal, State, County and City laws, codes and standards apply

**Splicing**

Splicing of the singe mode fiber optic cable main segment shall be kept to a minimum.

**Restoration**

All areas shall be restored using cabros and/or the materials which existed earlier before excavation.

**Inner duct**

All underground fiber optic cable shall be placed inside inner duct/conduit.

**Warning Tape**

The inner duct should be placed with a warning tape for notification

**Testing**

Final Testing: Fiber optic cable shall be tested for insertion loss by following the EIA/TIA Optical Fiber Link

Performance testing specification.

All spliced strands shall be tested with an OTDR. The strands shall be tested from end to end

**GENERAL SPECIFICATIONS**

**1) Access Control**

1. For access control system the architectural design and the specific controls should allow for integration future expansion.
2. Each door should have ‘locked / not-locked’ monitoring as well as ‘door-position’ monitoring; using monitored mag-locks or monitored electric locks. Double or leaf and a half doors should have double mag-locks, and magnetic reed door contacts on both leaves.
3. All controlled doors without a mechanical means of escape (i.e. lever handle) should be released by the fire alarm system, should be of a ‘fail unlocked’ type, and should conform to the Kisii County Government Fire Officers Fire Safety Technical Guide.
4. The following alarms should be generated in response to the appropriate conditions:

* Unit tamper.
* Door open too long.
* Door forced.
* Door not locked.
* Fire alarm released door (only required on perimeter doors).
* Mains failure.
* Break glass operation.

1. Exit buttons should be of the green dome type on a stainless steel plate marked ‘Press to exit’.
2. Break glass units should be green, and of a three pole type. Positive and negative supply to the lock MUST both be broken on operation of the break glass. The other pole should be used to monitor the break glass status.
3. The Contractor will be required to install cabling in accordance with International Structured Cabling System designs. Each subsystem will be implemented using Category 6A or above compliant components and be deployed according to ANSI/TIA/EIA-568-B and ISO/IEC 11801 standards.
4. 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.
5. All routing layout for cable paths must consider the copper or optic cable minimum radius of curvature to be supported and the existing facilities, in order not to interfere with the access to maintenance activities.
6. All aspects of the cabling infrastructure should make provision for possible extensions.
7. All adapters must be compatible with the transmission capacities of the equipment to which they connect.
8. All cables and connectors must be labelled.
9. The contractor will be required to comply with the manufacturers recommended installation practices.

**2) Power Solution Specifications**

UPS 30Kva with extended run

* 30kVA with 5 Battery modules (at least 5hrs runtime on battery at 4000 Watts)
* Internal Maintenance Bypass
* Parallel Capability

Availability

**-** Dual mains input to increase availability by allowing the UPS to be connected to two separate power sources.

- Scalable runtime to allow additional run time to be quickly added as needed

- Hot-swappable batteries to ensures clean, uninterrupted power to protected equipment while batteries are being replaced

- Generator Compatible to ensure clean, uninterrupted power to protected equipment when generator power is used.

- Automatic internal bypass to supply utility power to the connected loads in the event of a UPS overload condition or fault.

- Battery modules connected in parallel to deliver higher availability through redundant batteries.

**Serviceability**

- User-replaceable batteries to increase availability by allowing a trained user to perform upgrades and replacements of the batteries reducing Mean Time to Repair (MTTR)

- Battery replacement without tools to allow quick, easy battery replacement.

- Automatic self-test to ensure periodic battery self-test ensures early detection of a battery that needs to be replaced.

- Shippable with modules installed to enable pre installation UPS staging and testing and faster installation

- Modular design for fast serviceability and reduced maintenance requirements via self-diagnosing and field replaceable modules

**Manageability**

**-** Network manageable to provides remote management of the UPS over the network

- LCD display Alpha-Numeric Display which displays system parameters and alarms.

- Audible Alarms to provide notification of changing utility power and UPS conditions.

- Programmable frequency to ensure compatibility with different input frequencies.

- LED status indicators to quickly understand unit and power status with visual indicators.

**Protection**

* Frequency and voltage regulation to give higher application availability by correcting poor frequency and voltage conditions without using the battery
* Safety-agency to ensure the product has been tested and approved to work safely with the approved connected service provider equipment and within the specified environment
* Cold-start capable to provide temporary battery power when the utility power is out

**3) Fire Detection & Extinguishing System specifications:**

**For the IP addressable fire panel:**

1. Three common relays, freely programmable, monitored, floating TTY or RS485 interface.
2. Short circuit and open circuit loop operation.
3. Connection to graphical supervisor.
4. 2 outputs for connecting acoustic sounders.
5. Simple configuration and programming on the key pad.
6. Operating panel with alphanumerical display.
7. Event memory for up to 10000 events.
8. Rated voltage 230 VAC, 50Hz.
9. Simultaneous connection of network repeater and supervisory system

**For the Extinguishing Control Panel:**

1. Compact extinguishing panel controlled by double microprocessor.
2. Easy configuration by means of inbuilt micro switches.
3. Operating modes: Automatic, manual and disabled.
4. Relays for pre-alarm, alarm in extinguishing progress and fault relay.
5. Software for status visualization from PC with remote connection.

**For Detectors:**

1. **Smoke Detectors**: Aspirating Smoke detectors, which have an active linear smoke aspirating system, which consists of one or two aspirating lines, each with smoke sensing element with one inbuilt smoke sensor.

Operating voltage 10.5 to 30VDC.

Alarm current.

Aspirating pressure.

Aspirating noise.

Protection category.

Plug & play function (simple installation and commissioning).

Laser based smoke detection programmable alarm threshold value.

Dual flow detection.

Using the onboard Ethernet interface you can monitor the detector from any internet browser.

1. **Automatic fire detectors:** The detector will have to combine scattered light smoke detector and temperature detector for early detection of smouldering or open fires without smoke formation. The detector can be programmed and used, depending on the type of system and depending on the area in which it is to be deployed as a smoke detector, as temperature detector or a combined detector. The basic specifications are as follows:

Fire alarm triggered by smoke or heat.

Smoke sensor with CUBUS levelling for automatic adaptation to environmental.

Sensitivity towards smoke and heat.

Temperature based smoke evaluations.

Alarm filter for reducing the number of deceptive alarms.

Smoke and heat sensitivity.

c) **Audio Visual alarm devices:** The alarm signalling device offers a selection of 32 acoustic signals. These devices have the following specifications:

Operating voltage -12 to 30 VDC.

Alarm current@12 VDC - approximately 7mA

Sound level @24 VDC - 103dB.

**4) Air condition system**

Two air conditioner systems should be installed with an existing one on a master slave basis with auto failover.

The following are the specifications for air-conditioner to be supplied and installed.

1. Triple Power Protector
2. Digital Inverter Motor
3. Auto Clean (Self Cleaning)
4. Virus Doctor
5. Easy Filter
6. 4 Airflow Control Steps
7. Optimal Single Blade
8. Auto Air Direction Control (Up/Down)
9. Auto Air Direction Control (Left/Right)
10. Filter Cleaning Indicator
11. Display on/off / Beep on/off
12. Single User Mode
13. 2 Step Cooling
14. Indoor Temperature Display
15. Fan Mode
16. Good Sleep
17. Comfort Cool / Fast Cool
18. Dehumidification
19. Crystal Gloss Finish
20. Multi-Channel Condenser (Outdoor Unit)
21. Anti-corrosion Fin (Outdoor Unit)

**5) Storage Server Requirements**

a) 16 TB Raw capacity useable capacity of centralized storage

b) RAID protection

c) Support for NAS,SAN, iSCSI, CIFS, NFS

d) Support for SCSI, SATA, SAS, FC

e) Support for Snapshots

f) Support for centralized backup

g) Support for future need for slower disks for archival data

h) Support for extension to support future disaster recovery needs (Replication)

i) Protection against network security threats

j) Compliance with legislations on the process of storing, managing, and archiving data,

k) Data integrity and privacy

l) Support for future explosive data growth caused by concurrent requirement for historical, integrated, and granular data.

m) Support for future need for alternate storage mechanisms so that infrequently used “dormant data” can be stored in a more cost-effective manner.

p) Support for increased number of users including data miners, explorers, departmental users, multidimensional users, power users, and executive users.

1. **Cabinet and cable Tray Installation**
2. Dimension for each Server Rack

2200 mm (Height) x 600 mm (Width) x 1800 mm (Depth, including Rack + Cold and Hot Aisle Containment)

1. Carrying capacity

Carrying capacity must be minimum of 500 kg

1. Rack PDU

2 number of 32A PDU in each with Rack 16 sockets (12 IEC C13 & 4 IEC C19).

1. Base plinth

Base plinth with minimum of 100 mm height

1. Cable Provisioning

Cable entry provision from top & bottom both side of rack. Vertical Cable manager on both LHS & RHS on rear side

1. Security

Front Rack doors must be provided with locks per door with Gas spring to be provided on front doors of racks

Door and Top Panel Door and top panel must be with toughened glass / polycarbonate sheet.

Automatic opening of containment door after power failure for better air circulation

Quantity

Two racks

1. **Fiber Installation termination and testing**

The characteristics of each single mode optical fibre in the optical fibre cable will adhere to the ITU-T’s recommendation G.652 and as follows:

**Transmission wavelength:** 1310 nm and suitable for 1550 nm

**Attenuation:** Not greater than 0.40 dB/km at an optical . Wavelength of 1310 nm and 0.30 dB/km at 1550 nm.

**Point Discontinuity** Not greater than 0.1 db at 1310 and 1550 nm

**Cable Cut-off Wavelength**< 1260 nm

**Zero dispersion** 1312 +/- 10nm

**Dispersion Slope Zero dispersion Wavelength** ≤0.093ps/ (nm 2 -km)

**Identification of Individual Fibres** The colours of individual fibres and tubes as well as other cable components shall allow for the unique identification of individual fibres within the cable and shall be in accordance with AS/ACIF S008:2006.

**Point Loss in Un-Installed Cable** For the un-installed optical fibre cable there shall be no point loss (of any cause) in any single fibre, whose average two way attenuation exceeds 0.01 dB at 1310 nm and 1550 nm

**Cable Design The** cable is to be of non-metallic construction. The cable will incorporate a strength member of glass reinforced plastic or equivalent.

The optical fibres shall not be constrained firmly against other fibres, strength members, moisture barrier compound or any other cable components in order that the fibre strain is de-coupled from the strain in other components when the cable is under tension.

AGREEMENT

THIS AGREEMENT dated ……..… day of ……..………… in the year ………….…. By and between **KISII COUNTY ASSEMBLY** with its administrative offices located at Kisii Town (hereinafter called "the Employer")

AND

……………………………………………………………………………………………

Whose registered office is situated at ……………………………………………………

(Hereinafter called "the Contractor")

Employer and Contractor hereby agree as follows:

**ARTICLE 1 – WORK**

* 1. Contractor shall complete all work as specified or indicated in the contract documents. The Contract documents constitute the following in order of priority;

1. Agreement
2. Contractors Tender
3. Conditions of Contract
4. Specifications
5. Bill of Quantities

**ARTICLE 2 – THE PROJECT**

1. The Project for which the Work under the Contract Documents may be the whole or only a part is generally described as follows:

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

**ARTICLE 3 – PAYMENT PROCEDURES**

1. The Employer shall pay the Contractor in stages as per the following schedule;
2. Advance Payment: ...………. **% of Contract Price** on Order (LPO)
3. First Stage: ................... **% of the Balance** on Delivery
4. Third Stage: ...................... **Final Payment** on Project Completion

IN WITNESS WHEREOF, Employer and Contractor have signed this Agreement; all portions of the Contract Documents have been signed or have been identified by Employer and Contractor or on their behalf.

This Agreement will be Effective on the date on which the Agreement is signed.

|  |  |
| --- | --- |
| EMPLOYER | CONTRACTOR |
| KISII COUNTY ASSEMBLY | .................................................................. |
| Signed: ................................................................... | Signed: .................................................................. |
| Title: ................................................................... | Title: .................................................................. |
| Date: ................................................................... | Date: .................................................................. |
| OFFICIAL STAMP | COMPANY STAMP |

BILLS OF QUANTITIES

Pricing Of Preliminaries Items

Prices will be inserted against item of preliminaries in the Contractor's Bills of Quantities and specification. Where the Contractor fails to insert his price in any item he shall be deemed to have made adequate provision for this on various items in the Bills of Quantities. The preliminaries form part of this contract and together with other Bills of Quantities covers for the costs involved in complying with all the requirements for the proper execution of the whole of the works in the contract.

Special Notes to Bills of Quantities

The Bills of Quantities form part of the contract documents and are to be read in conjunction with a contract drawings and general specifications of materials and works.

The prices quoted shall be deemed to include for all obligations under the Contract including but not united to supply of materials, labour, delivery to site, storage on site, installation, testing, commissioning and all taxes

If prices omitted from any item, section or part of the Bills of Quantities shall be deemed to have been included to another item, section or part thereof.

The brief description of the items given in the Bills of Quantities is for the purpose of establishing standard to which the Contractor shall adhere. Otherwise alternative brands of equal and approved quality will be accepted.

Should the Contractor install any material not specified here in before receiving written approval from the Project Manager, the Contractor shall remove the material in question and, at his own cost, install the proper material.

The grand total of prices in the price summary page must be carried forward to the Form of Tender for the tender to be deemed valid.

**SUPPLY AND INSTALLATION OF PROPOSED SERVER ROOM EQUIPMENTS**

**Grand Total of Summary of Tender**

|  |  |  |
| --- | --- | --- |
|  | **DESCRIPTION** | **COST** |
| A | Power backup system |  |
| B | Air condition system |  |
| C | Access control system |  |
| D | Fire Detection & Extinguishing System |  |
| E | Storage Server Supply and Installation |  |
| F | Cabinet and cable Tray Installation |  |
| G | Fiber Termination |  |
| Grand Total of Summary of Tender | |  |

Name and Rubber stamp of the bidder …………………………………………………….

Name of Authorized Officer ……………………………………………………………………

Sign ………………………………………………………………….

1. **Power backup system**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Description | Qty | Unit | Unit Rate | Total |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |
| 4 |  |  |  |  |  |
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**Total Carried to summary of Tender\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. **Air condition system**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Description | Qty | Unit | Unit Rate | Total |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |
| 4 |  |  |  |  |  |
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**Total Carried to summary of Tender\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Conditions**

1. **Access control system**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Description | Qty | Unit | Unit Rate | Total |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
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**Total Carried to summary of Tender\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. **Fire Detection & Extinguishing System**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Description | Qty | Unit | Unit Rate | Total |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |
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**Total Carried to summary of Tender\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. **Storage Server Supply and Installation**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Description | Qty | Unit | Unit Rate | Total |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
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**Total Carried to summary of Tender\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. **Cabinet and cable Tray Installation**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Description | Qty | Unit | Unit Rate | Total |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
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**Total Carried to summary of Tender\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. **Fiber Termination**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Description | Qty | Unit | Unit Rate | Total |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
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**Total Carried to summary of Tender\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Security & Liability**

That in the event of loss of property occurring in the organization’s premises whilst the Contractors personnel are carrying out the work(s) aforesaid on the premises and furtherintheeventthatthelossisprovedtohavebeencausedbytheContractorspersonnel,the Contractor shall indemnify the institution in full for such a loss.

**Standard Of Work**

The contractor will be expected to carry out high quality work using equipment, material and technique suitable for the various equipment to be maintained. The contractor will ensure that the equipment is not damaged and is always left in good working condition.

**Employees Capacity To Contract**

That the Contractor shall only employ personnel who have attained the age of 18 years and above and ensure that the said personnel are properly covered for personal accidents/injury and that the insurance cover is issued by a reputable insurance Company.

**Handling Of Premises, Equipment And Furniture**.

Upon success of tender and award of works, the Contractor’s personnel shall handle the premises (fittings and finishes), equipment and furniture with due care and attention and shall carry out their duties diligently and efficiently and the Contractor shall indemnify the institution for any damage that is caused to the premises or equipment through the careless, negligent or reckless handling of the same by the Contractor’s personnel.

**Health And Safety**

Upon success of tender and award of works, the Contractor shall use appropriate tools.

At all times while carrying out works, the contractor shall consciously display caution signs to warn occupants of any obstruction or hazards such as substances that may cause injury to persons or flammable substances.

**Confidentiality**

This document will maintain as confidential any part or whole of the confidential information that may become accessible to the bidders during the bidding process.

All Contractors will maintain as confidential any part or whole of the confidential information that may become accessible to them during the tender process and contract period.

On award, the Contractor (including its employees or agents) will maintain as confidential and will undertake not to use or disclose to any third party any part or the whole of the confidential information which may become accessible to the Company in the course of undertaking its obligation and agrees not to permit the use or disclosure of such information for any purpose at any time in any way whatsoever.

Without prejudice to the generality of the foregoing the Contractor (including its employees or agents) shall not copy, disseminate, reproduce, tamper with or remove from the institution any document books, letters, papers, financial or other statement, computer or other print-outs or any other records of any nature or description whatsoever belonging to the institution or in the institution.

**STANDARDFORMS**

Tenderers who are not in Kisii County Government’s/Assembly List of Prequalified Bidders for Supply of Goods, Services And Works **MUST** fill the following forms: -

1. Tender Questionnaire
2. Confidential Business Questionnaire

**TENDER QUESTIONNAIRE**

Please fill in block letters.

1. Full names of Tenderer:

............................................................................................................................................

2. Full address of Tenderer to which tender correspondence is to be sent (unless an agent has been appointed below):

..................................................................................................................................................

3. Telephone number (s) of Tenderer:

....................................................................................................................................................

4. Telex/Fax Address of Tenderer:

....................................................................................................................................................

5. Name of Tenderer's representative to be contacted on matters of the tender during the tender period:

....................................................................................................................................................

6. Details of Tenderer's nominated agent (if any) to receive tender notices. This is essential if the Tenderer does not have his registered address in Kenya (name, address, telephone, telex):

..........................................................................................................................

…………………………………………………………………………………………………

Signature of Tender

Make copy and. deliver to:

Kisii County Assembly

P.O.BOX 4250 – 40200 Kisii

Kenya

CONFIDENTIAL BUSINESS QUESTIONNAIRE

You are requested to give the particulars indicated in Part 1 and either Part 2 (a), 2 (b) ;2(c) and (2d) whichever applies to your type of business.

You are advised that it is a serious offence to give false information on this Form.

Part 1 - General

Business Name ........................................................

Location of business premises: Country/Town ......................................................

Plot No. Street/Road ......................................................

Postal Address Tel No .......................................................

Nature of Business ........................................................

Current Trade License No Expiring date..........................................................

Maximum value of business which you can handle at any time:   
Kenya Shillings ..............................

Name of your bankers ..............................

Branch... - ..............................

**Part 2 (a)**- Sole Proprietor

Your name in full ...... Age ..............................

Nationality Country of Origin ................................

Citizenship details ...................................

Part **2**(b) - Partnership

Give details of partners as follows:

Name in full Nationality Citizenship Details Shares

1.............................. .................................................. ........................

2 ..........................

3 ..........................

4................................................................................................................................

Part **2(c)**- Registered Company

Private or Public .................

State the nominal and issued capita of the company:

Nominal KShs

Issued KShs

Give details of all directors as follows:

Name in full Nationality Citizenship Details Shares

1 .....................

2. ........................................

3 ....................

4. ....................

Part **2**(d) Interest in the Firm:

Is there any person/persons in the employment of the Government of Kenya WHO has  
interest in-this firm? Yes/No ... (Delete as necessary)

I certify that the above information is correct.

................................... ......................................... ....................................

Title Signature Date

*\*Attach Proof Of Citizenship*