The School of St Jude

Build with us!

Request for Proposal (RFP)

TERMS OF REFERENCE: ICT Local Area Network (LAN), Wireless LAN (WLAN) and Data Centre revamping and overhauling for The School of St Jude, Smith Campus, Usa River area.

Want to work with one of the largest charities of its kind in Africa? Are you a reputable Information Technology firm? Do you have experience with Local Area Networks and Wireless Area Networks? Have you designed/built Network infrastructures before? Have you done work in a school environment? Does it sound like we are talking about you…? Keep reading!

About Us
The School of St Jude (TSOSJ) is a pioneering leader in charitable education within Africa. We are giving 1,800 students, quality education, 100's of graduates' access to higher education. St Jude's is funded by generous supporters from around the world who make our mission of giving bright, poor Tanzanian students a free, quality education possible.

Invitation
Interested parties are hereby invited to submit their proposal for; **": ICT Local Area Network (LAN), Wireless LAN (WLAN) and Data Centre revamping and overhauling,"** to The School of St Jude, Smith Campus, Usa River, Arusha.

Submission
All proposals in one original copy, properly filled in, and enclosed in plain envelopes shall be submitted with the necessary documents not later than **14th September 2022 at 9:00am** in a sealed envelope clearly marked;

REQUEST FOR PROPOSAL:

"ICT Local Area Network (LAN), Wireless LAN (WLAN) and Data Centre Revamping and Overhauling"

> To the following physical address:
> The Head of Purchasing
> The School of St Jude, Sisia Campus,
> P.O. Box 11875, Arusha

Opening of proposals
> Bids will be opened on **14th September 2022 at 11:00 am** in public. All the Bidders or their representatives are invited to attend the opening ceremony at St. Jude's Boardroom, Sisia Campus. Any of the following reasons will lead to disqualification; Not visiting the proposed site, late submission of proposals, electronic proposals, any form of solicitation and

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proposals not received, will not be accepted for the proposals' opening ceremony for evaluation irrespective of the circumstances.

Notification of outcome

Bidders shall be notified within 30 days of the bid opening. St Jude's reserves the right to disclose how the outcome was obtained.

Tender Reference: **TENDER NO: TSOSJ/2022/ICT LAN/August 2022/007**

Date : 15th August 2022

What you need to apply

To be eligible for consideration of your proposal, bidders should submit the following:

- Name and postal & physical address of the company
- Names of Directors / Owner (s)
- Valid Business licenses and any other applicable trading licences;
- Valid professional & regulatory registrations as relevant for all the proposed teams to be used for the design & build
- VAT and Tax Identification Number (TIN) registration
- A list of referee companies/NGOs that you have worked with under *ICT Local Area Network (LAN), Wireless LAN (WLAN) and Data Centre Revamping and Overhauling* approach in the last twenty-four (24) months.
- If any association of parties is proposed (e.g. a Joint Venture, etc.), then the bidder must include the structure of the proposed association including the names of all the parties of the proposed association

1. **Objective**

The main objective is to revamp the existing LAN and WLAN, secure and well-managed LAN and Internet services to meet the needs of students and staff using it.

The LAN connection is being used for data, security cameras, video conferences, websites, Virtual Learning Environment (VLE) and Library Management System (LMS) and other Cooperate applications, which are hosted in the campus and provide services accordingly.

In this regard, TSOSJ will require a unified Wired and Wireless Local Area Network (LAN) installed and configured at the site using Fibre and CAT6 Specifications.

2. **Proposed Solution**

With ever-increasing users in the network every year, TSOSJ plans to improve the current network to withstand user traffic. Monitor the activities and traffic of users with proper network management system and tools, extending the LAN to give internet

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services to students and staff. Implement new technology to smoothen future escalation and better utilization of resources in order to meet its strategic plan goals.

3. **3. Technical Requirements**

3.1 Local Area Network

Supply and Installation of structured LAN Cabling, which should include:

- Industry standard Cat6 Cable, face plates, patch panels, fly leads, patch cords and any other appropriate accessories.
- LAN should include the copper cabling based on Unshielded Twisted Pair wires
- Installation of network ports/outlets, patches and switches.
- The LAN is to use Cat6 UTP copper wiring for horizontal cabling (Industry standards 1000 Base-T, Power over Ethernet 802.3af or 802.3at).
- New CAT6 cables to be routed to the wiring cabinets located at existing strategic locations on each floor.
- Fibre wiring through multimode fibre optic connections.
- All floor switches should be connected to Core Switch in the Data centre or allotted strategic areas by fibre
- Each wiring must be properly protected and fixed to the walls and ceilings by using the technology standards to avoid electrical interference and maximum throughput.
- External wiring should be protected from environment.
- The solution must be aesthetically well presented.
- Point-to-point, port-by-port testing of the complete wiring solution.
- Labelling of ports on both ends as well as labelling of patch panels and the data cabinets as well following the best practice standards
- Service provider must indicate in detail how the new LAN will be installed without disrupting day-to-day operations.
- To follow the guidelines described in the rest of this document

3.2 Wireless Local Area Network

Implement a Full Wireless Environment as detailed below:

- Analysis of the radio frequency environment, optimize Access Points positioning.
- Users will need access to the wireless network. They might not only need connectivity in their offices and conference rooms or class rooms, but they may also need connectivity inside utilities rooms and other areas deemed necessary.
- Ensure to identify whether users are mobile or stationary, which provides a basis for including enhanced roaming in the design.
- Client devices. Ensure the solution accommodates for wireless phones, laptops running Microsoft Windows and Mac Os with integrated 802.11b/g/n/ac radios.
- Identify locations for Access Points.
- Minimize WLAN Interference

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Data Center/Server Room Standards

Component	Standards
Server room physical security	a) Server room must have separate centralized biometric access control preferred a combination of key and lock as well. b) The Data centre/Server room floor should be elevated as per ISO/IEC standards c) Placement of manageable network-based temperature and smoke detectors is a must
Power	b) Power must be conditioned using the existing Backup systems c) Equipment should be on dedicated circuits d) All equipment should be running on the existing inverter system g) Ensure that equipment is properly protected from lightning strikes. Ensure that grounding is adequately implemented so that protection is effective, lightning protection systems and for the electrical power distribution
Climate control	a) The server room must maintain an ambient temperature of 20° to 24°C. The temperature should not exceed. Calculate the heat generated by the equipment, the size of the room, and the cooling load to be able to maintain the ideal temperature. c) There should be a standard airflow mechanism for cooling including an air conditioning unit putting into consideration the heat emitted by the equipment in the server room

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	d) Relative humidity should be maintained at 45%-55%
Environment monitoring	a) Remote alert Smoke and fire detectors should be installed in Server room with alarms notifications as well and not just a siren.
Fire suppression	b) Class I fire Automatic Fire extinguishers must be put inside and by the entrance outside of the room with count 1 gallon (4 litres) per cabinet.

4. **Site Visitation**
   - The Contractor before submitting a proposal is required to conduct a thorough site visit to the new premises with TSOSJ ICT unit to discuss the site lay out and plans to fully understand the nature and scope of the work. At the end of the visit, the contractor will fill the quantities of materials form which is annexed at the end of this document,

5. **TSOSJ will provide the following:**
   - ✓ Switches and Access Points
   - ✓ small form-factor pluggable (SFP) Modules
   - ✓ Air Conditioners for Datacentre
   - ✓ Power Backup systems
   - ✓ Access controls to server Rooms
   - ✓ UTP and fibre cables
   - ✓ Patch Panels
   - ✓ Cabinets
   - ✓ Racks for the Server Room and Cabinets for the Floor Switches
   - ✓ Electrical cables
   - ✓ Faceplates modules
   - ✓ Fire Extinguishers
   - ✓ Smoke and fire detectors
   - TSOSJ may wish to visit the successful Contractor's previous installations.

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▪ The successful Contractor must have a physical presence, including availability of 7x24x365 coverage for technical support and/or helpdesk facilities within Arusha.

6. **5. Expected Key Results**

Working in partnership with TSOSJ ICT Section, the Contractor is expected to undertake the following activities:

• Revamp and or overhaul the existing integrated Local Area Network (LAN).
• Connect all Access/Floor Switches to Core Switch to be in the Data centre via fibre cabling
• Test and Certificate each installed cable
• Label all cabling by using agreed format with the ICT Unit
• Provide documentation details for the new LAN
• Contractor shall also specify the warranty period associated with the supplied LAN products making up the structured cabling solution

7. **Maintenance Services and Warranty**

The Contractor shall provide technical support for a period of 3 months after successful installation of LAN, which includes troubleshooting and replacement of Network Nodes; maintenance of cabling, ducting, nodes.

8. **Documentation**

The documentation is a fundamental element for the operation and especially network maintenance. The Contractor shall also provide complete documentation of IT equipment, LAN architecture design with comprehensive diagram of LAN structure including the exact layout of cables in soft and printed form, after completion

9. **Reporting Mechanisms**

The ICT Contractor will have a dual reporting arrangement: to TSOSJ ICT unit and the Schools Maintenance Section.

10. **Implementation Timeline**

All installation works should be accomplished and commissioned within 21 days after the signing of the Contract.

11. **Payment**

Payment will be 70% upon satisfactory completion and 30% retention amount to cover 3 months' defects liability period.

12. **Qualification Requirements**

TSOSJ needs the following qualifications from the potential offeror:

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a. Solid experience in provision of services in nature, scale and complexity commensurate with the present terms of reference, with already provided services possessing features required by these terms of reference; The company must have at least three similar contracts (similar by scope, nature and amount), preferably with international/ intergovernmental organizations. Evidence of contracts are required; references from other clients are highly welcomed.

b. Qualified and experienced experts in structured Local Area Networks, Network Administration, good customer service and interpersonal skills working under the general supervision and guidance of the department and under the guidance of TSOSJ assigned focal point.

For and on behalf of
The School of St Jude

…………………………
Lister Gerald
/Finance Manager

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