

TERMS OF REFERENCE (ToR)

Technical Specification for Vendor Procurement: Supply, Installation, Configuration and Commissioning of Local Area Network Infrastructure

Organization:	World Vision International Sudan
Target Location:	South Kordofan State (Abujebeha) Field Office, White Nile State Field office (Kosti) and Blue Nile Field office (Addamazin)
Release Date:	October 2026

1. BACKGROUND & CONTEXT

World Vision International Sudan (WVS) is a child-focused humanitarian and development organization supporting vulnerable children, families and communities across Sudan. Reliable information and communication technology infrastructure is essential for field coordination, cloud applications, safeguarding, reporting, finance, supply chain and emergency response operations.

Following a technical assessment of the South Kordofan State (Abujebeha)Field Office, White Nile State Field office (Kosti) and Blue Nile Field office (Addamazin), WVS intends to procure a turnkey enterprise-grade local area network based on the Ubiquiti UniFi architecture. The deployment will include centralized security and management, high-capacity PoE switching, Wi-Fi 7 wireless coverage, structured Category 6 cabling, network racks, power distribution and online UPS protection.

The complete solution shall be supplied, installed, configured, tested, documented and commissioned by a qualified vendor, with one year of 24/7 technical support after formal handover.

2. PURPOSE & OBJECTIVE OF THE RFP

The objective of this ToR is to solicit competitive technical and financial proposals from qualified ICT solution providers for the engineering, supply, delivery, installation, configuration, testing, commissioning and support of the approved Ubiquiti UniFi network solution for South Kordofan State (Abujebeha)Field Office, White Nile State Field office (Kosti) and Blue Nile Field office (Addamazin),.

The selected vendor shall transform the approved requirements and Bill of Quantities into a secure, manageable and operational network. The vendor shall submit:

- A technical proposal demonstrating full compliance with this ToR and the stated models and quantities.
- A detailed installation methodology and implementation schedule.
- Manufacturer datasheets, warranty details and product authenticity evidence.
- A financial proposal showing unit prices, taxes, transport, installation and total contract value in USD.
- A support and escalation arrangement covering the one-year service period.

3. SCOPE OF WORK

3.1 Pre-Installation Validation & Logistics

- Conduct a physical site verification before mobilization, confirming cable routes, outlet positions, AP placement, rack locations, electrical supply and earthing availability.
- Validate the quantity and location of the twenty data points and ten wireless access points against the approved floor plan.
- Securely transport, offload and store all equipment. The vendor remains responsible for the equipment until formal acceptance and handover.

- Submit a material inspection request with serial numbers, delivery records and product datasheets before installation.

3.2 Supply and Installation Requirements

- Supply all equipment and materials listed in the approved BoQ. Substitution of stated models shall require prior written approval from WVS.
- Install two network cabinets, associated fans, PDUs, cable management and patch panels in the approved locations.
- Install seven drums of Category 6 U/UTP LSZH horizontal cabling using suitable containment, maintaining separation from electrical cables and avoiding excessive bends or tension.
- Install, terminate, label and test twenty permanent data outlets, including faceplates, keystone jacks, back boxes and rack-side patch panel terminations.
- Install and configure ten Ubiquiti U7 Pro wireless access points in ceiling or wall positions confirmed during the site survey.
- Install and configure the UDM-SE gateway, USW-Pro-XG-24-PoE switch, enterprise HDD and 10G direct attach cable.
- Install and commission one rack-mounted online double-conversion UPS rated 1500VA/1350W.

3.3 Network Configuration & Cybersecurity

- Configure the UniFi management environment and securely transfer administrative ownership and credentials to authorized WVS ICT personnel.
- Configure WAN connectivity, approved DNS and time settings, secure remote administration and configuration backup.
- Create role-based VLANs and wireless networks for staff, corporate devices, guests and infrastructure, as directed by WVS ICT.
- Apply firewall rules, inter-VLAN access controls, WPA2/WPA3 security, guest isolation and management-plane restrictions.
- Enable security monitoring and device alerts available within the proposed platform, subject to WVS-approved settings.
- Update devices to stable, vendor-supported firmware approved by WVS before final commissioning.

3.4 Testing, Commissioning & Handover

- Test every installed data point end-to-end and submit cable test results identifying outlet and patch-panel references.
- Validate wired connectivity, PoE delivery, wireless coverage, roaming, internet access, VLAN segmentation and firewall rules.
- Provide a wireless coverage validation report for the designated office areas and correct material coverage gaps within the approved scope.
- Deliver as-built floor layouts, logical and physical network diagrams, rack elevations, IP/VLAN schedules, asset register and configuration backups.
- Provide practical administrator training for WVS ICT staff covering monitoring, user access, backup, common troubleshooting and escalation.
- Complete user acceptance testing and obtain formal WVS sign-off.

3.5 Support Services

- Provide 24/7 technical support for one year from acceptance, including remote diagnostics and on-site intervention when required.
- Provide a documented escalation matrix, support contacts and response arrangements.
- Rectify installation defects and configuration faults attributable to the vendor at no additional cost during the support period.

- Coordinate warranty claims and replacement of defective supplied equipment in accordance with manufacturer warranty conditions.

4. MANDATORY SYSTEM TECHNICAL SPECIFICATIONS

Component	Mandatory Minimum Requirements	Compliant Standards / Notes
Security Gateway / Controller	Ubiquiti UDM-SE Dream Machine Special Edition; centralized UniFi management; firewall, VPN, multi-WAN and integrated storage support.	Quoted model mandatory
Wireless Access Points	Ubiquiti U7 Pro Wi-Fi 7 ceiling/wall-mounted access point; centrally managed; suitable PoE power method.	IEEE 802.11be / WPA security
Core PoE Switch	Ubiquiti USW-Pro-XG-24-PoE; managed PoE switching with high-speed uplink capability.	Managed enterprise switching
10G Interconnect	Ubiquiti UACC-DAC-SFP10G-0.5M direct attach cable.	10G SFP+ DAC
Structured Cabling	Category 6 U/UTP 23 AWG, 305 m box, LSZH jacket, with matching patch panels, jacks, faceplates and patch cords.	ANSI/TIA-568; ISO/IEC 11801
Network Racks	9U and 12U 19-inch cabinets, 600 x 600 mm, with ventilation fans and PDUs.	19-inch rack standard
UPS	Online double-conversion UPS, 1500VA/1350W, rack mounted, single-phase input/output, 208/220/230/240Vac.	Vendor safety certifications
Installation & Support	Installation, configuration, testing, acceptance, documentation and 24/7 technical support for one year.	Turnkey delivery

5. BILL OF QUANTITIES (BoQ)

The following BoQ forms part of the technical requirement. Bidders shall confirm availability, country of origin, warranty, delivery period and any applicable tax or logistics cost. Any departure shall be clearly identified in a bid deviation schedule.

No.	Detailed Item Description	Qty	Unit	Unit Price USD	Total USD
1	Ubiquiti UDM-SE Dream Machine Special Edition	3	Unit		
2	Ubiquiti U7 Pro Wi-Fi 7 ceiling/wall-mounted access point	30	Unit		
3	Ubiquiti USW-Pro-XG-24-PoE	3	Unit		
4	Ubiquiti UACC-DAC-SFP10G-0.5M 10G Direct Attach Cable	3	Unit		
5	FINEN Cabinet 9U 600 x 600 mm, including fan and PDU	3	Unit		
6	Elegant Wall 19-inch 12U cabinet, W=600 mm, D=600 mm, two-fan module with switch and PDU	3	Unit		
7	Premium-Line Category 6 unshielded patch panel, 24 ports, dual-type IDC, black	6	Unit		
8	Premium-Line 1U 19-inch cable management, duct type, black	6	Unit		
9	12-way UK plug extension / PDU, 13A Type-G sockets and plug	6	Unit		

No.	Detailed Item Description	Qty	Unit	Unit Price USD	Total USD
10	Premium Line Germany Category 6 U/UTP installation cable, 305 m box, LSZH, grey, 23 AWG	21	Box		
11	Premium-Line Category 6 U/UTP patch cord, snag-proof, PVC, grey, 0.5 m	75	Unit		
12	Premium-Line Category 6 U/UTP patch cord, snag-proof, PVC, grey, 3 m	60	Unit		
13	Premium-Line Euro II 1-port faceplate, Cat6 90-degree unshielded keystone jack and 86 x 86 x 35 mm back box	60	Set		
14	Online double-conversion UPS with digital control, 1500VA/1350W, rack mounted, 208/220/230/240Vac	3	Unit		
15	Installation and configuration: terminate 20 data points; install/configure 10 APs; install 2 racks including small materials, PVC pipes accessories; testing and acceptance; 24/7 support for one year (for Kosti, Addamazin and Abujebeha	3	Job		
TOTAL CONTRACT VALUE (USD)					

6. DETAILED INSTALLATION PLAN REQUIREMENTS

6.1 Task Breakdown & Schedule

The technical proposal shall include a chronologically structured work plan covering at least the following activities:

- Mobilization, site validation and material inspection.
- Cable pathway and containment installation.
- Cable pulling, termination, labeling and testing.
- Rack assembly, PDU and UPS installation.
- Gateway, switch and storage installation.
- Access point mounting and patching.
- Network provisioning, VLAN and security configuration.
- Coverage validation, acceptance testing and defect correction.
- Training, documentation and formal handover.

6.2 Deployment Methodology & Business Continuity

- The vendor shall describe how existing office connectivity will be protected during deployment and how changeover interruptions will be minimized.
- Any planned service interruption shall be agreed in writing with WVS and scheduled outside critical operating periods.
- The vendor shall protect equipment from dust, moisture, electrostatic discharge, theft and physical damage during transport and installation.
- All cable routes, drilling points and equipment positions shall be approved before execution.

6.3 Health, Safety & Environment (HSE) Plan

- Conduct documented daily toolbox talks and site safety briefings.
- Use safe ladders or scaffolding and fall-protection controls for elevated work.
- Provide and enforce appropriate PPE including eye protection, insulated tools, safety footwear and high-visibility clothing.
- Maintain clean work areas and remove packaging, cable offcuts and debris after installation.

7. QUALITY ASSURANCE, CONTROL & REPORTING

- WVS may inspect supplied materials before installation and reject counterfeit, damaged, used or non-compliant items.
- The vendor shall use manufacturer-approved installation practices and competent technicians.
- All outlets, cables, patch-panel ports, APs, racks and active devices shall carry durable labels matching the as-built documentation.
- Non-conformities identified by WVS shall be corrected by the vendor before acceptance.
- The vendor shall submit an inception note, progress updates, test records, commissioning report and final technical dossier.

8. VENDOR QUALIFICATION & MANDATORY SUBMISSIONS

- Valid company registration, tax documentation and authorization to operate in the relevant location.
- Evidence of relevant enterprise LAN and structured cabling assignments completed within comparable operating environments.
- CVs and certifications of the proposed network engineer and cabling technicians.
- Product datasheets, warranty information and manufacturer or authorized-channel evidence for quoted equipment.
- Detailed work plan, HSE plan, support escalation matrix and delivery schedule.
- Signed compliance matrix indicating Comply, Partially Comply or Do Not Comply against each requirement.

9. TECHNICAL EVALUATION CRITERIA FOR PROPOSALS

Evaluation Criteria Item	Sub-attributes & Quality Parameters Assessed	Weight (%)
Corporate Experience & Staff Qualifications	Relevant enterprise network deployments; qualifications and demonstrated capability of proposed personnel.	25%
Technical Compliance & Product Quality	Alignment with specified models, quantities and standards; completeness of datasheets, warranties and authenticity evidence.	35%
Installation Methodology & Schedule	Quality of site validation, cabling, cutover, configuration, testing and handover methodology.	20%
Support, Documentation & Training	Adequacy of one-year support, escalation, as-built documentation, configuration handover and administrator training.	10%
Health, Safety & Environment	Practical HSE controls for drilling, cable installation, elevated work and site housekeeping.	10%
TOTAL METRIC ALLOCATION		100%

10. DELIVERABLES & ACCEPTANCE

No.	Required Deliverable
1	Approved site validation and implementation plan
2	Complete delivery and installation of all BoQ items
3	Twenty tested and labeled data points
4	Ten installed and configured U7 Pro access points

No.	Required Deliverable
5	Configured gateway, PoE switch, storage and UPS
6	Cable test results and wireless coverage validation
7	Logical/physical topology, rack layout, IP/VLAN scheme and asset register
8	Configuration backup and secure transfer of administrative credentials
9	ICT administrator training and attendance record
10	Commissioning report, defect closure and signed acceptance certificate
11	One-year support and escalation arrangement

11. COMMERCIAL CONDITIONS

- Quoted prices shall clearly state whether taxes, transport, insurance, installation and all ancillary materials are included.
- The vendor shall state the bid validity period, delivery period, warranty period and payment terms.
- Payment shall be processed in accordance with the final purchase order or contract and WVS acceptance procedures.
- WVS reserves the right to verify market pricing, request clarification, negotiate and reject incomplete or non-compliant offers.
- The quantities and total shown in the BoQ are based on the submitted quotation and remain subject to procurement review and formal contracting.