



Republic of the Philippines
SURIGAO DEL NORTE STATE UNIVERSITY
Narciso Street, Surigao City 8400, Philippines



OFFICE OF THE BIDS & AWARDS COMMITTEE

SUPPLEMENTAL/BID BULLETIN NO. 1

Reference No.: PB# 25-07-0024

Title: **Supply and Delivery of Equipment and Materials for ICT Network and Server Operations, Maintenance and Expansion (Re-Bid)**

Subject: Addendum

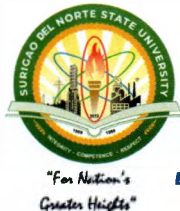
Item No.	Item Description	Detailed Specification / Minimum Requirement
<i>LOT 1 – SERVER ROOM EQUIPMENT – P 1,539,300.00 (ABC)</i>		
Lot 1 – A 1	Server Set(8x 10 cores, 96GB RAM, 24TB NVMe SSDs in RAID-10)	<ul style="list-style-type: none">• Chassis: High-performance, modular, 4U rack server chassis, capable of housing 8 processors and up to 96 DIMM slots (minimum requirement)• Processor: 8 × Intel Xeon Silver 4210, 10-core, 20-thread, 13.75MB cache, 2.2GHz base frequency, 85W TDP (minimum requirement)• Motherboard: Supports future expansion up to 8 CPUs and 1.5 TB RAM; integrated management module• RAM: 9 GB DDR4 ECC RDIMM (6 × 16 GB modules), 2933 MHz or higher; upgradeable to at least 1 TB• Storage: 6 × 4 TB Enterprise-grade SSDs (SATA or NVMe); configured in RAID-10 for performance and redundancy; minimum usable capacity ~20 TB• RAID Controller: Hardware RAID controller supporting RAID 10 with battery backup unit or flash-backed write cache• Network: Dual-port 1GbE or higher integrated NICs; expandable to 10GbE• Expansion: At least 4 PCIe Gen3/Gen4 slots for future expansion With Future Expansion Capabilities; above specs are minimum requirement• Delivery Date is extended up to 60 days
Lot 1 – A 2	Network Firewall Security	<ul style="list-style-type: none">• Rack mount Next-Generation Firewall Appliance• Firewall Throughput: At least 26 Gbps• Next-Generation Firewall (NGFW) Throughput At least 4 Gbps• Threat Protection Throughput At least 2.4 Gbps• SSL/TLS Inspection Throughput At least 1.5 Gbps• Concurrent Sessions: Minimum of 4 million concurrent connections• New Connections per Second: At least 60,000• Network Interfaces: Minimum 8 x 1GbE RJ45 ports, 1 x dedicated management port, 2 x SFP ports• Storage: At least 120GB internal SSD for logging and reporting• Supported Features:<ul style="list-style-type: none">○ Stateful firewall



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		<ul style="list-style-type: none">○ Intrusion Prevention System (IPS)○ Application Control○ URL and Web Filtering○ Antivirus and Anti-Malware○ Zero-Day Threat Protection○ Botnet and Command & Control blocking○ TLS/SSL Deep Packet Inspection○ IPsec and SSL VPN support○ Built-in reporting and analytics● Subscription Inclusions (1-Year):<ul style="list-style-type: none">○ Full NGFW protection license (includes IPS, Web, App Control, AV, sandboxing)○ Centralized management access○ Firmware and security updates○ 24x7 technical support● Power Supply: 100–240V AC auto-sensing, with included power cord● Accessories: Must include mounting kit, power cord, and all required licenses for 1 year● Compliance: Must support industry-standard protocols (e.g., IPv4/IPv6, VLAN, OSPF, BGP, SNMP, NTP, etc.)● With face-to-face Technical Training and Warranty● Delivery Date is extended up to 60 days
LOT 2 – NETWORK AND ACCESS – P 2,221,000.00 (ABC)		
Lot 2 – B 1	Cloud Core Router 72 Cores	<ul style="list-style-type: none">● 72 core TILE GX CPU @ 1 GHz● 16 GB ECC RAM, 128 MB NAND + microSD, 2× M.2 slots (PCIe x4)● 8× 10 Gb SFP+, 1× Gigabit RJ45 management port● Dual hot swappable AC power supplies (100–240 V), 4 fans● 1U rackmount, front-facing ports, LCD touchscreen● RouterOS L6 with routing, firewall, VPN, traffic shaping● Includes rackmount kit & power cables
Lot 2 – B 2	Cloud Core Router 2116-12G-4S	<ul style="list-style-type: none">● 16 core ARM AL73400 CPU @ 2 GHz● 16 GB DDR4 ECC RAM, 128 MB NAND onboard storage, 1× M.2 PCIe slot● 4× 10 Gb SFP+ ports (Layer 3 hardware offloading), 12× 1 Gb RJ 45 + 1× 1 Gb RJ 45 management port● 1U rackmount (443×199×44 mm), front facing ports, 4 fans for active cooling● Dual hot swappable AC power supplies (100–240 V), typical 60 W, max 72 W● RouterOS v7 L6 with hardware offload, full firewall/VPN/QoS/IPsec● Includes rackmount kit, dual power cables
Lot 2 – B 3	Cloud Core Router 2004-16G-2S	<ul style="list-style-type: none">● 1.7 GHz ARMv8 A (Annapurna AL32400) 4 core CPU



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		<ul style="list-style-type: none">• 4 GB DDR4 RAM, 128 MB NAND storage• 16× 1 Gb RJ 45 ports, 2× 10 Gb SFP+ cages, RJ 45 console port• 1U rackmount with active cooling (2 fans)• Dual redundant AC power supplies (100–240 V)• RouterOS v7 (Level 6) with routing, firewall, VPN, traffic shaping• Includes rackmount kit and power cables
Lot 2 – B 4	CRS 326-24G	<ul style="list-style-type: none">• 1U rackmount, passive cooling, front-facing ports• ARM CPU @ 800 MHz, 512 MB RAM, 16 MB flash storage• 24× 1 Gb RJ 45 Ethernet ports, 2× SFP+ cages (1.25 Gb/10 Gb-compatible)• Dual-boot SwOS/RouterOS (Layer 2 switching + optional Layer 3 via RouterOS)• Supports VLANs, MAC filtering, ACLs, traffic mirroring, broadcast storm control, SNMP• Dual DC power inputs (DC jack + passive PoE IN, 9–30 V), includes 24 V adapter, 24 W max power• Serial console (RJ-45); dimensions 443×144×44 mm; operating – 40 °C to +60 °C; MTBF ~200,000 hrs• Includes rackmount kit, screws, power adapter
Lot 2 – B 5	8 ports Gigabit Manage Switch	<ul style="list-style-type: none">• Ports: 8 × 10/100/1000 Mbps RJ 45 Ethernet ports, auto MDI/MDIX• Management: Web GUI + downloadable utility; supports CLI via Telnet/SSH; SNMP v1/v2/v3• VLAN: IEEE 802.1Q; supports port , tag , and MTU based VLANs; up to 32 VLAN groups• QoS & Traffic Control: Port based/802.1p/DSCP QoS with at least 4 priority queues; rate limiting; traffic monitoring via port mirroring; IGMP snooping; loop & storm control• Performance: Backplane capacity ≥16 Gbps; forwarding rate ≈12 Mpps; jumbo frame support ≥16 KB
Lot 2 – B 6	IPBX Server	<ul style="list-style-type: none">• for VoIP - Base Users: 100• Max Users: 200 (with 1 × D30 DSP module)• Base Concurrent Calls: 30• Max Concurrent Calls: 60 (with D30 DSP)• Expansion Boards: 1• DSP Module: 1 × D30• Operating Temp: 0°C to 40°C• Storage Temp: -20°C to 65°C• Humidity: 10% to 90% non-condensing• FXS Ports: Up to 8 (via module)• FXO/BRI: Up to 8 (via module)• GSM/3G/4G: Up to 4• E1/T1/J1: 1 port via EX30 module
Lot 2 – B 7	Hex Router	<ul style="list-style-type: none">• 5 Gigabit Ethernet ports• CPU: 880 MHz dual-core• RAM: 256 MB

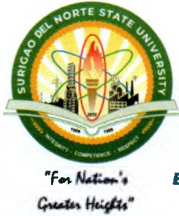


BAGONG PILIPINAS

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		<ul style="list-style-type: none">• OS: RouterOS (Level 4 license)• Power via micro USB or DC jack• Minimum Model: RB750gr3
Lot 2 – B 8	Wifi7 Access Point	<ul style="list-style-type: none">• Wireless Standard: IEEE 802.11be (Wi-Fi 7) tri-band: 2.4 GHz, 5 GHz, 6 GHz• Spatial Streams: At least 6 spatial streams (e.g., 2×2 in each band)• Max Theoretical Throughput: Aggregated ≥9 Gbps (e.g., ~5.8 Gbps on 6 GHz + ~2.9 Gbps on 5 GHz + ~0.7 Gbps on 2.4 GHz)• MU MIMO Support: Downlink/uplink in all 3 bands• Uplink Interface: At least 1× multi-gigabit Ethernet (≥2.5 GbE) with PoE+ support• Power over Ethernet: Compliant with IEEE 802.3at (PoE+); max power draw ~21 W• Antenna Gain: Approx. 4–6 dBi per band (4 dBi @ 2.4 GHz, 6 dBi @ 5 GHz, 5.8 dBi @ 6 GHz)• Transmit Power: ~22 dBm (2.4 GHz), ~26 dBm (5 GHz), ~23 dBm (6 GHz)• Device Capacity: Supports at least 300 concurrent clients; coverage ~140 m²• Form Factor: Ceiling or wall mountable, includes mount kit; compact design (~Ø206×46 mm)
Lot 2 – B 9	Wifi7 Router	<ul style="list-style-type: none">• Wireless Standard: IEEE 802.11be (Wi-Fi 7), dual-band (2.4 GHz + 5 GHz)• Max Theoretical Speed: Up to ~3.6 Gbps aggregate (~2.88 Gbps @5 GHz + ~0.69 Gbps @2.4 GHz)• Advanced Wi-Fi Features: MLO (Multi-Link Operation), 4K-QAM, Multi-RU, OFDMA, MU-MIMO• Antennas / Coverage: 4× high-gain external antennas with beamforming• Ethernet Ports: 1× 2.5 Gbps WAN, 1× 2.5 Gbps LAN, and 3× 1 Gbps LAN, auto-MDI/MDIX• USB Port: 1× USB 3.0 for file/media sharing (FTP, Samba)• VPN Support: LAN/WAN modes, supports OpenVPN, PPTP, L2TP, WireGuard as client/server• Mesh Compatibility: EasyMesh (allows integration with mesh extenders)• Security & QoS: WPA3, SPI firewall, IP/MAC binding, parental controls, HomeShield-level functions
Lot 2 – B 10	24 ports POE Gigabit Manage Switch	<ul style="list-style-type: none">• Ethernet Ports: 24 × 10/100/1000 Mbps RJ 45 with 802.3at/af PoE+ (up to 30 W per port), total PoE budget ≥50 W• SFP Slots: 4 × Gigabit SFP uplink ports• Switching Capacity: ≥6 Gbps; forward rate ≥1 Mpps; jumbo frame support ≥9 KB• Management: Smart management via web GUI, CLI, SNMP, RMON; supports cloud or on-premise controller integration• QoS & L2+ Features: 8 priority queues; 802.1p/DSCP QoS;



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		<p>port/flow rate limiting; VLAN, IGMP snooping, LACP; static routing; DHCP snooping, ACL, port security, storm control, 802.1X, --IP MAC port binding</p> <ul style="list-style-type: none">• PoE Management: 24 PoE+ ports; port-wise power scheduling and monitoring; PoE budget allocation ≥ 50 W• Power & Cooling: Internal PSU (100–240 V AC); max power draw up to ≈ 10 W; two internal fans• Physical Form Factor: 1U rack-mount ($\approx 440 \times 220 \times 44$ mm); metal chassis; includes rack kit and rubber feet
Lot 2 – B 11	16 ports POE Gigabit Manage Switch	<ul style="list-style-type: none">• Ethernet Ports: $16 \times 10/100/1000$ Mbps RJ-45 with 802.3at/af PoE+ (up to 30 W per port)• Uplink Ports: $2 \times 10/100/1000$ Mbps non PoE RJ-45, plus $2 \times$ combo Gigabit SFP (shared)• PoE Power Budget: Minimum 192 W aggregate (up to 250 W total)• Switching Capacity: At least 36 Gbps backplane capacity; forwarding rate ~ 26–27 Mpps; jumbo frames (≥ 9–10 KB)• Management Features: Smart management via web GUI, CLI, SNMP, RMON; QoS (4 priority queues, 802.1p/DSCP, rate limiting), VLAN, IGMP snooping, LACP, ACLs, port security• PoE Management: Port-based power priority, auto recovery, intelligent overload protection• Power & Cooling: Internal PSU (100–240 VAC); maximum power consumption approx. 296 W (with full PoE load); active cooling via fans• Form Factor: 1U rackmount metal chassis ($\sim 440 \times 180 \times 44$ mm); includes rack kit and rubber feet; desktop or rack mountable
Lot 2 – B 12	16 ports Gigabit Manage Switch	<ul style="list-style-type: none">• Ports: $16 \times 10/100/1000$ Mbps RJ 45, auto MDI/MDIX• Management: Web GUI and downloadable utility; SNMP support; features include VLAN, QoS, port mirroring, loop prevention, cable diagnostics• VLAN Support: Port based, tag based (IEEE 802.1Q), MTU based; supports up to 128 VLAN groups• QoS: Port/802.1p/DSCP classification, at least 4 priority queues, rate limiting, storm control• Layer 2 Features: IGMP snooping v1/v2/v3 (up to 128 groups), static link aggregation (up to 8 groups of 4 ports), port mirroring, loop prevention• Performance: Backplane capacity ≥ 2 Gbps; forwarding rate ≈ 3.8 Mpps; jumbo frame support ≥ 9 KB (≈ 10 KB)• Energy Efficiency: Power down idle ports; cable length–based power adjustment; max power draw ~ 11–19 W• Physical: Fanless; rack mountable 1U metal chassis ($\sim 294 \times 180 \times 44$ mm); weight ~ 1.8 kg; power input 100–240 VAC
Lot 2 – B 13	Media converter gigabit	<ul style="list-style-type: none">• Conversion Type: 10/100/1000 Mbps RJ-45 (Ethernet) to 1000 Mbps SFP or SC/LC fiber port• Fiber Interface: One open slot for standard 1000 Mbps SFP module (single-mode or multi-mode); or built-in SC/LC connector



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		<p>depending on type</p> <ul style="list-style-type: none">• Ethernet Interface: One RJ-45 port supporting 10/100/1000 Mbps, auto-negotiation, auto MDI/MDIX• Standards Compliance: IEEE 802.3, 802.3u, 802.3ab, 802.3z
LOT 3 - CABLING MATERIALS, TOOLS AND ACCESSORIES – P 207,200.00 (ABC)		
Lot 3 – C 1	Cable Tie (small, Black)	<ul style="list-style-type: none">• As stated in the description
Lot 3 – C 2	RAM (32GB DDR4) 3200MHz	<ul style="list-style-type: none">• 1X 32GB DDR4• Speed: 3200 MHz
Lot 3 – C 3	CAT6 UTP cable	<ul style="list-style-type: none">• Category 6 (Cat6) UTP Cable, 23 AWG solid bare copper conductor, minimum 250 MHz bandwidth, compliant with ANSI/TIA/EIA-568-C.2 and ISO/IEC 11801 standards, suitable for Gigabit Ethernet, High Quality
Lot 3 – C 4	RJ45 connector pass through 100pcs/box metal shielded	<ul style="list-style-type: none">• Connector Type: RJ45 8P8C Pass-Through Modular Plug• Shielding: Fully shielded with metal housing (STP/FTP compatible)• Cable Compatibility: Suitable for solid or stranded CAT6 / CAT5e UTP and STP/FTP cables• Wire Type: Designed for 23–26 AWG conductors• Pass-Through Design: Allows wires to pass through the front for easy verification and clean trims
Lot 3 – C 5	Fiber Indoor/Outdoor Fiber Optic Cable, Singlemode, 9/125 Micron, Black, Riser Rated, Spool, 1000 feet	<ul style="list-style-type: none">• As stated in the description
Lot 3 – C 6	Crimping tool passthrough	<ul style="list-style-type: none">• As stated in the description
Lot 3 – C 7	468 Network Cable Tester RJ45 RJ11 RJ12 CAT5 LAN Cable Tester Networking Wire	<ul style="list-style-type: none">• Supported Cable Types: RJ45 (CAT5/CAT6 Ethernet), RJ11, RJ12 (telephone lines)• Test Functions: Detects open circuits, shorts, miswires, split pairs, and continuity issues• Remote Unit: Detachable remote tester for testing cables over distance• Indicators: LED indicators for each wire pair (1–8 and G) showing test results• Power Supply: Requires 1 × 9V battery (not included)• Case Material: Durable ABS plastic, compact handheld form factor• Operation: Manual on/off switch, automatic sequential scanning of wire pairs
Lot 3 – C 8	Handheld Network Cable Tester For UTP	<p>Cable Tester for UTP STP RJ45 RJ11</p> <ul style="list-style-type: none">• Test Functions: Detects open, short, miswire, cross-connection,



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	STP CAT5 CAT6 RJ11 RJ45 Crimper Telephone Cable Wire tracker LAN Tester Network Tool	<ul style="list-style-type: none">continuity issue; wire mapping; cable length not specifiedIndicators: LED indicators for each wire pair; easy-to-read displayAutomatic efficient scan for the miss wiring, disorder cable, open and short circuit;TEL BNC test available(Adapter needed);Remotely test cable up to 1000 ft in length (remote kit included);Protective power switch for low power consumption;High-quality protective case provides more secure protection;Judge continuity of the cables or wires;Track the cables or wires, and diagnose the breakpoint;Receiver the tone signal on the cables or wires (telephone line);Identify the state in the working telephone line (clear ring, busy);Send a single solid tone or a dual alternating tone to the object cables or wires.Color: OrangeEmitter: 10mA Receiver: 30mASignal transfe mode: Digital signalSignal output level: 8Vp-pSignal transfer distance: 3KmDimension:Transmitter: 126x49x34mm Reveiver:175x42x25mm
Lot 3 – C 9	100PCS SC Connector SC-UPC Fast Connector	<ul style="list-style-type: none">As stated in the description
Lot 3 – C 10	100PCS SC Connector SC-UPC Fast Connector	<ul style="list-style-type: none">As stated in the description
LOT 4 – SYSTEM PRESENTATION AND CONTROL EQUIPMENT – P 220,000.00 (ABC)		
Lot 4 – D 1	98" Interactive Board for system management with roller stand	<ul style="list-style-type: none">'Display Size: 98 inches diagonalScreen Type: LEDResolution: 3840 (H) × 2160 (V) Ultra High Definition (UHD)Color Depth: 10-bit, 1.07 billion colorsActive Display Area: Approximately 2159 mm (W) × 1214 mm (H)Brightness: Minimum 450 cd/m²Contrast Ratio: Minimum 1200:1 (may vary depending on panel manufacturer)Viewing Angle: 178° (horizontal and vertical)Display Protection: 4 mm tempered explosion-proof glassBacklight Life: Minimum 50,000 hoursOS Version: Android 14.0 or higherCPU: Octa-core ARM Cortex-A55, 1.2GHz or higherGPU: ARM Mali-G52 MP2 or equivalentRAM: Minimum 8GBStorage (ROM): Minimum 128GBNetwork Support: LAN and Wi-Fi 2.4GHz/5GHzProcessor: Intel Core i5, 11th Gen or equivalentRAM: Minimum 16GBStorage: 128GB SSD or higherGraphics: Integrated Intel HD Graphics



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		<ul style="list-style-type: none">• OS: Compatible with Windows 10 Pro or Windows 11 Pro• Wireless: IEEE 802.11 b/g/n• Technology: Infrared (IR) touch• Touch Points: Minimum 20-point multi-touch• Response Time: ≤6ms• Built-in Camera: 13 MP minimum• Microphone: With 8-directional voice pickup (or equivalent beamforming mic array)• Speakers: Built-in stereo, 20W × 2, 8Ω• Input Ports:• HDMI-in• USB 2.0 × 2• LAN (RJ45) × 1• Touch USB × 1• RS232 × 1• TF Card Slot × 1• MIC-in × 1• OPS Slot × 1• Output Ports:• Line-out × 1• HDMI-out × 1• Coaxial × 1• Front Ports:• USB 3.0 × 3• Touch USB × 1• HDMI-in × 1• Type-C × 1
LOT 5 – NETWORK BACKUP POWER – P 530,500.00		
Lot 5 – E 1	3/4 electrical PVC moulding	<ul style="list-style-type: none">• As stated in the description
Lot 5 – E 2	silicon sealant (clear)	<ul style="list-style-type: none">• As stated in the description
Lot 5 – E 3	8kW Solar Inverter	<ul style="list-style-type: none">• Single Phase Solar Inverter
Lot 5 – E 4	200AH LiFePO4 powerwall solar battery	<ul style="list-style-type: none">• As stated in the description

- SLCC from a two-year completed contract to a three-year completed contract and supported with at least Satisfactory in the Supplier's Performance Evaluation Result.
- 2 years Warranty

For your guidance and information.

MR. JONAS ROBERT L. MIRANDA
BAC Chairperson

Received by the Bidder: _____