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ISO 9001:2015



Republic of the Philippines
CAMARINES NORTE STATE COLLEGE
F. Pimentel Avenue, Brgy. 2, Daet, Camarines Norte

OFFICE OF THE BAC CHAIRPERSON FOR GOODS AND SERVICES

May 18, 2022

ADDENDUM NO. 2

Series of 2022

**SUPPLY, DELIVERY, INSTALLATION AND CONFIGURATION OF A
CAMPUS AREA NETWORK FOR THE SMART CAMPUS DEVELOPMENT**

This Addendum No. 2 for the project Supply, Delivery, Installation and Configuration of a Campus Area Network for the Smart Campus Development is being issued in accordance with Revised IRR of R.A. 9184 specifically Section 22.5.2 & 22.5.3

This is to inform the prospective bidders of the final updated terms of reference. Such is reflected in the Bidding Documents under Section VI – Schedule of requirements and Section VII – Terms of Reference.

This Addendum shall form integral part of the Bid documents.


ROSALIE A. ALMADRONES, Ph.D.
BAC Chairperson for Goods and Services



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**TERMS OF REFERENCE
CNSC SMART CAMPUS PROJECT**

I. BACKGROUND

The Camarines Norte State College has been granted funds by the Commission of Higher Education through the Bayanihan 2 – To Recover as One Act for the establishment of a Smart Campus. The aim of the project is to provide assistance through funding, to State Universities and Colleges for their submitted project proposal relative to the implementation of flexible learning in higher education.

The College had submitted three (3) proposals however, due to the limited funds, only one project has been approved by the Commission *En Banc* after a series of deliberations to the CNSC Board of Trustees, Technical Experts from CHED, and DICT, up to the final approval from CHED.

The project is entitled **CNSC Smart Campus: Campus Area Network**. The objectives of the project are the following:

- a. To interconnect all of the campuses of CNSC via a Campus-Wide Area Network (Campus WAN)
- b. To improve internet connectivity of campuses
- c. To utilize new technologies for the computerization of services of the College
- d. To install / setup Wi-Fi Zone on all campuses of the College for the student's online learning

II. Scope of Services

The scope of the project includes the supply/acquisition, delivery, installation, configuration, commissioning, activation, and testing of equipment and services for the Establishment of the Campus Wireless Area Network of Camarines Norte State College including its campuses.

- 1) Project planning inclusive of site survey or inspection prior to installation, activation, and testing of the required Services, mapping, and network diagram.
- 2) All working and supervising personnel assigned in the project should be fully vaccinated, wearing safety gears and equipment, and shall always observe the minimum public health standards set by the DOH and other health and safety requirements of CNSC. It is agreed that CNSC shall not be liable for all or any untoward incidents that may happen towards the contractor's personnel during and until such completion of the project and shall be the sole responsibility of the winning bidder or contractor.
- 3) Provision of labor and minimum number of materials to install the following services:

Items	Specification	Qty
Structured Network Cabling and Wireless Area Network of CNSC Campuses		
WIFI ACCESSIBILITY		
1	WIRELESS ACCESS POINT <ul style="list-style-type: none"> • 2 Gbps to 4 Gbps aggregate wireless throughput • Dual-band 4x4:4 MU-MIMO technology • Support at least 200 concurrent Wi-Fi client devices • Advanced QoS to ensure real-time performance of low-latency applications • Access Point can be managed via Cloud > Customizable Captive Portal > User Accounts Creation 	At least 118 UNITS

	<ul style="list-style-type: none"> > Network Speed Test / Configuration > Add devices > Free License > Reports Generation • Hardware Type: Outdoor AP • Wi-Fi Standards: IEEE 802.11a/b/g/n/ax (WiFi 6) or higher, compatible to current devices • Channel Bandwidth 2.4G: 20 and 40MHz 5G: 20, 40 and 80MHz • Network Interfaces: 2x autosensing 10/100/1000 Base-T Ethernet Ports • Network Protocols: IPv4/IPv6, 802.1Q, 802.1p, 802.1x, 802.11e/WMM • With embedded security system • WEP, WPA/WPA2-PSK, WPA/WPA2 Enterprise, • Weatherproof Grade: IP66-level weatherproof capability when installed vertically • Compliance: FCC, CE, RCM, IC 	
STRUCTURED CABLING – Inter-Building Connectivity		
2	24 CORE FIBER OPTIC CABLE <ul style="list-style-type: none"> • Component type: Fiber optic cable multimode • Optic fibre type: Armoured • Optic fiber core: 9 µm • Condition of use: Outdoor • Number of optic: 24 • Bending radius: 20 x overall diameter • Standards: TIA/EIA-568-B ISO/IEC 1180 • For Main Campus Backbone 	Minimum of 1500 M
4	8 CORE FIBER OPTIC CABLE <ul style="list-style-type: none"> • Component type: Fiber optic cable multimode • Optic fibre type: Armoured • Optic fiber core: 9 µm • Condition of use: Outdoor • Number of optic: 8 • Bending radius: 20 x overall diameter • Standards: TIA/EIA-568-B ISO/IEC 1180 • For Abano, Entienza, Labo, Mercedes and Panganiban Campus 	Minimum of 3000 M
5	FIBER PATCH CORD <ul style="list-style-type: none"> • LC/UPC Simplex Multimode Fiber Patch Cord • Length/Diameter: 2meter, 2.0mm 	Minimum of 88 PCS
6	COPPER PATCH CORD 2M <ul style="list-style-type: none"> • CAT 6 UTP Patch Cord, • Color: Blue • Length: 2M • Made up of Phosphor bronze with 50 micro-inch gold over 100 micro-inch nickel • Certifications: UL listed, UL/ETL verified, ANSI/TIA-568-C.2, ISO/IEC 11801 class E, EIA/TIA TSB 40 A 	Minimum of 128 PCS
7	24 PORT CAT6 PATCH PANEL <ul style="list-style-type: none"> • Category 6 UTP Cable Shielding Type • 24 Ports RJ45 Connector Type • Capable of minimum 750 cycles of mating • Made up of Phosphor bronze with 50 micro-inch gold over 100 micro-inch nickel • Certifications: UL listed, UL/ETL verified, ANSI/TIA-568-C.2, ISO/IEC 11801 class E, EIA/TIA TSB 40 A 	Minimum of 27 UNITS

	OPTICAL DISTRIBUTION FRAME <ul style="list-style-type: none"> • Number of rack unit: 1U • Number of optic fibre: 24 • Mounting support 19" rack 	Minimum of 27 UNITS
3	At least 6000 VA UPS <ul style="list-style-type: none"> • Capable of True On-line Double Conversion Technology • Capable of Advanced Digital Control Technology • With 0.9 Output Power Factor • Active Harmonic Control Capability • Has LCD Mimic Display Panel • Ability on Smart ECO mode • Input Voltage and Frequency: 110Vac~300Vac** 45Hz~65Hz • Input Phase: Single Phase with Ground • Output Capacity not less than 6000VA/ 5400W • Can handle not less than 6 pcs of batteries • Has Audible and Visual Function Monitoring: Line Failure, Battery Low, Transfer to Bypass, System Fault Conditions • Overload Capacity: 105% continuous, 120% for 30sec., 150% for 10sec. • Outlets: At least 3x IEC-C13 	Minimum of 6 UNITS
10	At least 2000 VA UPS <ul style="list-style-type: none"> • Capable of True On-line Double Conversion Technology • Capable of Advanced Digital Control Technology • With 0.9 Output Power Factor • Active Harmonic Control Capability • Has LCD Mimic Display Panel • Ability on Smart ECO mode • Input Voltage and Frequency: 110Vac~300Vac** 45Hz~65Hz • Input Phase: Single Phase with Ground • Output Capacity not less than 2000VA/ 1800W • Can handle not less than 6 pcs of batteries • Has Audible and Visual Function Monitoring: Line Failure, Battery Low, Transfer to Bypass, System Fault Conditions • Overload Capacity: 105% continuous, 120% for 30sec., 150% for 10sec. • Outlets: At least 3x IEC-C13 	Minimum of 27 UNITS
11	16 PORT GIGABIT DISTRIBUTION SWITCH <ul style="list-style-type: none"> • Interfaces: 8x 10 GE copper + 8x 10 GE SFP+ plus 1x GE OOB management • Packets per Second: 240 mpps • Switching Capacity: 480 Gbps • Latency: less than 1µs • VLANs Supported: 4 K • Packet Buffers: 3 MB • DRAM, FLASH: 512 MB DDR3, 256 MB • CPU: 1.3 GHz (dual-core) • Power Required: 100~240V AC, 50/60 Hz • Compliance: FCC, CE, UL, CSA 	1 UNIT
12	24 PORT GIGABIT DISTRIBUTION SWITCH <ul style="list-style-type: none"> • Interfaces: 24 x 10 Gigabit SFP+ 4 x 10 Gigabit copper ports (combo with 4 x SFP+) 1 x 1 x GE management port • Packets per Second: 240 mpps • Switching Capacity: 480 Gbps • Latency: less than 1µs • VLANs Supported: 4 K 	Minimum of 6 UNITS

	<ul style="list-style-type: none"> • DRAM, FLASH: 512 MB DDR3, 256 MB • CPU: 800 MHz ARM • Power Required: 100–240V AC, 50/60 Hz • Compliance: FCC, CE, UL, CSA 	
13	<p>24 PORT GIGABIT POE ACCESS SWITCH</p> <ul style="list-style-type: none"> • Interfaces: 24 x 10/100/1000 PoE+ ports 4 x 10 Gigabit SFP+ • Packets per Second: 95.23 mpps • Switching Capacity: 128 Gbps • Latency: less than 1µs • Packet Buffers: 1.5 MB • DRAM, FLASH: 512 MB DDR3, 256 MB • CPU: 1.3 GHz (dual-core) • Power Required: 100–240V AC, 50/60 Hz • Compliance: FCC, CE, UL, CSA 	Minimum of 30 UNITS
14	<p>3FT DATA CABINET</p> <p>W=600mm x D=600mm x 21U</p> <ul style="list-style-type: none"> • Standard: Comply with ANSI/EIA RS310-D, DIN41497 part 1, IEC297-2, DIN41494 part 7, GB/T3047.2-92 standard • Adjustable feet and heavy duty castors are optional • 19" standard installation • Removable Side panels, sidelocks optional • Knock out hole for entering cable on both of top cove and bottom panel • With 1U Horizontal Cable Manager per cabinet • Degree of Protection: IP20 • With 1U Rack Mount Exhaust Fan 	Minimum of 21 UNITS
15	<p>6FT DATA CABINET</p> <p>W=600mm x D=1000mm x 42U</p> <ul style="list-style-type: none"> • Standard: Comply with ANSI/EIA RS310-D, DIN41497 part 1, IEC297-2, DIN41494 part 7, GB/T3047.2-92 standard • Adjustable feet and heavy duty castors are optional • 19" standard installation • Removable Side panels, side locks optional • Knock out hole for entering cable on both of top cove and bottom panel • With 1U Horizontal Cable Manager per cabinet • Degree of Protection: IP20 • With 1U Rack Mount Exhaust Fan 	Minimum of 6 UNITS
16	<p>POWER DISTRIBUTION UNIT</p> <ul style="list-style-type: none"> • Input rating: 16Amp, 230V • Form Factor: Side/1U Rack Mount • Compliance to CE, FCC, REACH, RoHS3 • Protection: 16A fuse • Outlet type: Diversified Outlets & Inlets: Outlet: US NEMA, IEC C13, UK BS1363, German Schuko CEE7/3 or French CEE7/5; Inlet: C20 for different regional power cords (Custom inlet available on request.) • Outlet Control: Outlet switch ON/OFF, In addition to manual on/off, provides 3 kinds of auto outlet control: <ol style="list-style-type: none"> 1. IP-Ping automatically detects a failed system for timely reboot 2. Outlet on/off by sensor condition 3. Outlet on/off scheduling • Enclosure Material: Steel • Outlet quantity: 8 • Control Method: Web-based GUI, SNMP with Enterprise Level IP Authentication <ul style="list-style-type: none"> > Active Directory (AD), Lightweight Directory Access Protocol (LDAPv3 / LDAPS). > Remote Access Dial-In User Service (RADIUS) protocol. or local credential 	Minimum of 27 UNITS

- > Strong passwords and granular user/user group permissions.
- > Support high-speed network IP via 1000Base-T (Gigabit) Ethernet port
- > Allows remote monitoring via the free Graphic User Interface (GUI).
- > Provides local current monitoring via blue LED ammeter.

ERCAMPUS CONNECTIVITY

SD-WAN for Main Campus (Note: May be omitted if the offered next-gen firewall has SD-WAN functionality)

- Cellular: Yes, up to 3
- Ethernet WAN: 2(GE)
- Ethernet LAN: 8(GE)
- Stateful Firewall Throughput: 12Gbps
- VPN Throughput (no encryption): 1Gbps
- VPN Throughput (256-bit AES): 600Mbps
- SFP LAN/WAN: 2 (10G SFP+)
- VPN Hot Failover: Yes
- VPN WAN Smoothing: Yes
- VPN Bandwidth Bonding: Yes
- Central Management: Yes
- Content Filtering: Full
- Load Balancing Algorithms: 8
- Certifications: FCC, CE, RoHS
- Bandwidth Aggregation
- Perpetual Software License per appliance / device

1 UNIT

18

SD - WAN for Extension Campuses (Note: May be omitted if the offered next-gen firewall has SD-WAN functionality)

- Ethernet WAN: 3(GE)
- Ethernet LAN: 3(GE)
- Stateful Firewall Throughput: 1Gbps
- VPN Throughput (no encryption): 150Mbps
- VPN Throughput (256-bit AES): 150Mbps
- VPN Hot Failover: Yes
- VPN WAN Smoothing: Yes
- VPN Bandwidth Bonding: Yes
- Central Management: Yes
- Content Filtering: Full
- Load Balancing Algorithms: 8
- Certifications: FCC, CE, RoHS
- Bandwidth Aggregation
- Perpetual Software License per appliance / device

5 UNITS

NETWORK SECURITY

19

NEXT-GENERATION FIREWALL

PERFORMANCE:

- Firewall Layer 3 throughput: At least 50 Gbps
- Concurrent Sessions: at least 4,000,000
- New Connections: at least 300,000 per second

INTERFACE:

- 6*10/100/1000 Base-T Interface, 4* 1G SFP and 2*10G SFP+

MANAGEMENT:

- Web Interface via secure encrypted connection
- Policy Configuration Modules for the following functions
 - Stateful firewall
 - DDos Prevention, ARP spoofing prevention
 - Anti-Virus
 - Anti-Malware, On-premise artificial intelligence based malware detection engine

2 UNITS

- Intrusion Prevention System
- SSL Decryption
- Risk assessment by on-demand and real-time scanner
- Cloud sandboxing
- Cloud threat intelligence
- IPsec VPN
- SSL VPN
- User authentication and grouping
- Web(URL) filtering, Application Control, Bandwidth management
- Report center
- Security Protection: Pre-attack, During-attack, Post-attack
- Security Protection: Business Systems and Network Users
- Support static and dynamic package filtering, Inspection on well-known protocols of FTP, HTTP, SMTP, RTSP, H.323 (Q.931, H.245, RTP/RTCP), SQLNET, NMS, PPTP, TCP, UDP...
- Deployment: Support following deployment options
 - Gateway (Route mode)
 - Bridge mode
 - Mirror mode
 - Multiple Bridge mode (2- 4 bridges)
- Intrusion Prevention System
- APT Prevention
- Risk Assessment and Prevention
- Anti-Virus
- Content Security
- Access Management
- Reports Generation

4 UNITS

20

NEXT-GENERATION FIREWALL

PERFORMANCE:

- Firewall Layer 3 throughput: At least 4.9 Gbps
- Concurrent Sessions: at least 1,200,000
- New Connections: at least 30,000 per second

INTERFACE:

- 6*10/100/1000 Base-T interface,

MANAGEMENT:

- Web Interface via secure encrypted connection
- Policy Configuration Modules for the following functions
 - Stateful firewall
 - DDoS Prevention, ARP spoofing prevention
 - Anti-Virus
 - Anti-Malware, On-premise artificial intelligence-based malware detection engine
 - Anti-phishing
 - Intrusion Prevention System
 - SSL Decryption
 - Risk assessment by on-demand and real-time scanner
 - Cloud sandboxing
 - Cloud threat intelligence
 - IPsec VPN
 - SSL VPN
 - User authentication and grouping
 - Web(URL) filtering, Application control, Bandwidth management
 - Report center

- Security Protection: Pre-attack, During-attack, Post-attack
- Security Protection: Business Systems and Network Users
- Support static and dynamic package filtering, Inspection on well-known protocols of FTP, HTTP, SMTP, RTSP, H.323 (Q.931, H.245, RTP/RTCP), SQLNET, NMS, PPTP, TCP, UDP...

	<ul style="list-style-type: none"> - Gateway (Route mode) - Bridge mode - Mirror mode - Multiple Bridge mode (2- 4 bridges) • Intrusion Prevention System • APT Prevention • Risk Assessment and Prevention • Anti-Virus • Content Security • Access Management 	
IP PBX EQUIPMENT (VOIP PHONES)		1 UNIT
21	IP PBX MAIN EQUIPMENT <ul style="list-style-type: none"> • Supports up to 100 lines and 8 Trunks • Built-in conferencing & meetings platform; supports desktop and SIP endpoints • API available for third-party integrations, including CRM and PMS platforms • Three Gigabit auto-sensing RJ4 network ports with integrated PoE+ and support NAT router • Automated NAT firewall traversal service facilitates secure remote connections • Supports Full-Band Opus voice codec and H.264/H.263/ H.263+/H.265/VP8 video codec, jitter resilience up to 50% packet loss • Advanced security protection with secure boot, unique certificate and random default password to protect calls and accounts • Analog Telephone FXS Ports: 8 RJ11 Ports and PSTN Line FXO Ports: 8 RJ11 Ports • Network Interfaces: Three self-adaptive Gigabit ports (switched, routed, or dual mode) with PoE+ • Peripheral Ports: 2*USB 3.0, 1*SD card interface • Telephony Operating System: Based on Asterisk version 16 • Maximum Attendees of Conference Bridges: 10 Video Conference rooms and up to 80 parties with 1080p, assuming 4 video feeds + 1 screen sharing (H.264 & Opus) Voice Conference: Up to 300 parties (G.711) 	1 UNIT
22	IP PBX VoIP GATEWAY <ul style="list-style-type: none"> • PSTN Failover on power failure • Supports a wide range of caller ID formats • Supports T.38 Fax for creating Fax over-IP • SRTP security encryption technology • Telephone Interfaces: 8 RJ11 FXO ports • Network Interfaces: 10M/100Mbps, dual RJ45 ports • Voice-over-Packet Capabilities: G.168 compliant Echo Cancellation, Dynamic Jitter Buffer, Modern detection & auto-switch G.711 • SIP Server Profiles & Accounts Per System: Up to 2 distinct SIP server profiles per system and an independent SIP account per port • IP Signaling: SIP (RFC 3261) • Short & Long Haul: REN3: Up to 150ft on 24AWG line • Caller ID: Bellcore Type 1&2, ETSI, BT, NTT, and DTMF-based CID • Compliance: EN55022/EN5504 and FCC part 15 Class B, UL 	1 UNIT
23	HYBRID PHONE <ul style="list-style-type: none"> • 2 lines, 2 SIP accounts, up to 2 call appearances • TLS and SRTP security encryption technology to protect calls and accounts • 3-way audio conferencing for easy conference calls • Electronic Hook Switch (EHS) support for Plantronics headsets • Automated provisioning options include TR-069 and XML config files • Network Interfaces: Dual switched auto-sensing 10/100 Mbps Ethernet ports, integrated PoE • Graphic Display: 132 x 48 (2.95") backlit graphical LCD display 	50 UNITS

	<ul style="list-style-type: none"> • Telephony Features: Hold, transfer, forward (unconditional/no-answer/busy), 3-way conferencing, call park/pickup, shared-call appearance (SCA) / bridged-line-appearance (BLA), Downloadable phone book (XML, LDAP, up to 1000 items), call waiting, call history (up to 200 records), off-hook auto dial, auto answer, click-to-dial, flexible dial plan, hot desking, personalized music ringtones, server redundancy & fail-over • Feature Keys: 2 line keys with dual-color LED and 2 SIP accounts, 3 XML programmable context-sensitive soft keys, 5 (navigation, menu) keys, 13 dedicated function keys for Mute, Headset, Transfer, Conference, Send And Redial, Speakerphone, Volume, Phonebook, Message, Hold, Page/Intercom, Record, Home 	
24	<p>IP VIDEO PHONE</p> <ul style="list-style-type: none"> • 16 lines with up to 16 SIP accounts • Built-in megapixel camera for video calling with a privacy shutter • Runs on Android 7.0 operating system • Built-in Bluetooth for syncing with mobile devices and connecting Bluetooth headset • Dual-switched auto-sensing 10/100/1000Mbps network ports • Integrated dual-band WiFi (2.4GHz & 5GHz) • Built-in PoE/PoE+ to power the device and give it a network connection • Speakerphone with HD acoustic chamber, advanced echo cancellation & excellent double-talk performance • 4-core 1.3GHz ARM Cortex A53 processor with 2GB RAM and 8GB eMMC Flash • 7" (1024x600) capacitive 5-point touch screen TFT LCD • TLS and SRTP security encryption technology to protect calls and accounts • 7-way audio conferencing & 3-way 720p 30fps HD video conferencing capability • Camera: Tilttable mega-pixel CMOS camera with privacy shutter, 720p 30fps • Sample Applications: Local apps: Contacts, Call History, File Manager, MPK, Settings, Browser, Voicemail, Clock, Recorder, GS Market, etc. Supports third-party Android apps such as Microsoft Teams API/SDK available for advanced custom application development 	1 UNIT
25	<p>CIVIL WORKS, FIBER OPTIC CABLE BURIAL, ROUGHING INS COMPLETE WITH BOXES, HANGERS AND SUPPORTS</p> <ul style="list-style-type: none"> • Material inclusion and scope of works: • PVC Pipe • PVC flexible conduit • Plastic molding • Connectors • Junction, pull box and utility boxes • Grounding rod and accessories • Electrical consumables • Chipping and restoration works 	1 LOT
26	<p>ENGINEERING SERVICES: INSTALLATION, TESTING, AND COMMISSIONING</p> <ul style="list-style-type: none"> • Scope of works: • Design and Consultancy • Project management and supervision • Cable pulling and layout • Installation & mounting of equipment • Testing and commissioning • Configuration, programming & customization • End-user's training • Documentation (as-built plan, operations manual, turnover/closed-out documents) • Mobilization and demobilization 	1 LOT

Qualification Requirements

- 1) Notarized warranty and after-sales support statement from the bidder that it has authorized technical support/service center with complete spare parts, equipment, tools and trained certified technicians and certified professional engineers and/or manufacturer certified engineer who are competent and qualified to provide after-sales service.
- 2) Warranty must be inclusive of 24x7 technical support, maximum of three (3) hours of response time upon receipt of the call. If the said problem has not been resolved after three (3) hours, the Contractor needs to provide a technician on-site for troubleshooting within five (5) calendar days. A free service unit must be provided within ten (10) calendar days from receipt of the call if the problem has not been solved.
- 3) With at least two (2) reference sites with the successful implementation of equipment/devices similar to the requirement for at least five (5) years, together with the corresponding Certificate of Acceptance/Satisfactory Performance (complete with the name of the contact person, telephone and fax numbers and email address)
- 4) Certification from the product manufacturer/distributor on the following:
 - That the bidder is authorized to supply the components of the project.
 - Manufacturer/reseller certificate of the products being offered
- 5) Under Scope of Works:
 - The bidder/supplier shall submit a Project Management Plan during the bid submission. The plan should include the following:
 - Project Implementation Plan and Schedule for the required number of days of delivery
 - List of Personnel to be assigned to the project
 - Acceptance
 - The bidder/supplier shall have an experience in IT and project management of the similar project.
 - The bidder/supplier shall appoint competent personnel to be assigned in the project with the following field of skills and expertise:
 - Information Technology Officer, who is fully knowledgeable in the administration and implementation of the project.
 - A Project Manager Professional (PMP) with demonstrable experience in handling related project engagements and is knowledgeable with the latest ICT technologies development and infrastructure, and must be a certified PMP for the last 3 years.
 - Certified Safety Officer who shall oversee safety protocols including COVID -19 related protocols at the project.
- 6) Bidder/supplier's technical personnel who will be assigned to the project such as engineers, officers, and technicians must be certified (must submit resume and certifications of the personnel including the project manager, IT officer, and safety officer to be assigned during the bid opening)
 - Notarized warranty and after-sales support statement
 - Project Implementation Plan and Schedule
 - List of Personnel to be assigned to the project

7) Certificate of Site Survey

- Supplier/Bidders are required to conduct a site inspection to ensure security, and efficiency of the required services.
- Supplier/Bidders must obtain a Certificate of Site Survey.
- Certificate should be duly signed by the MIS Head.

- 8) The bidder/supplier shall have a valid Certificate of Dealership for WDN (Wireless Data Network) issued by the National Telecommunication Commission (NTC)
- 9) The bidder/supplier should have a licensed Professional Electronics Engineer and two (2) other professional fields that are relevant to the project and should be an organic or full-time employee for at least 3 years in the company certifying the performance of the proposed system adhering to the technical requirement of the project. A Notarized service record or Certificate of Employment should likewise be provided.
- 10) Actual Site Survey on all campuses of the College may be done starting Tuesday, May 17 to Friday, May 20, 2022, from 8-5 PM only.

IV. Technical Requirements

- 1) Bidders must submit a detailed work plan specifying installation design, detailed activities, connectivity diagram from end-user premise up to the last mile, and timelines in order to determine compatibility with the existing Camarines Norte State College Local Area Network configuration.
- 2) Bidders are also required to submit detailed activities in a Gantt chart indicating the detailed activities and to submit all documents as indicated in the bid docs

V. Approved Budget for the Contract (ABC)

The total ABC for the project is **TWENTY-TWO MILLION SEVEN HUNDRED THOUSAND PESOS (Php 22,700,000.00)** inclusive of all applicable government taxes and service charges.

VI. Duties and Responsibilities of the Winning Bidder

- a. The winning bidder must comply with all the requirements stipulated in this Terms of Reference and any addendum that will be provided by the Camarines Norte State College before the opening of bids.
- b. Complete the delivery, installation, and configuration of all the requirements in this Terms of Reference and any addendum that will be issued by the CNSC within One Hundred Twenty (120) calendar days from the receipt of the Notice to Proceed.
- c. Testing and monitoring activities shall be done by the winning bidder prior to full turnover and acceptance of the project by CNSC
- d. Provide necessary technical support to CNSC technical personnel during and upon completion of the project
- e. The winning bidder must all maintain and ensure that all equipment is working in its optimum condition until the termination of this contract or three (3) years after the issuance of Certificate of Project Completion and Acceptance by CNSC to the winning bidder.
- f. The winning bidder must have standby replacement units or equipment that can be used in case the same has been found defective. It is understood that as part of the Warranty, all equipment that will be replaced and other similar maintenance and repair services shall be

- g. Provide and submit a detailed and comprehensive Completion Report, 30 days after Issuance of Certification of Project Completion and Acceptance by CNSC
- h. Assign a dedicated support team or personnel to handle troubleshooting and conduct repairs in case of minor and major outages.
- i. Provide 30 days of actual technical training to select CNSC technical personnel.
- j. Abide by all existing policies, rules, and regulations at all times. Ensure that all data that will be gathered shall be treated with the strictest confidentiality.
- k. Report to the Program / Project Leader any issues that may be encountered during the duration of the project.
- l. Provide all login credentials of the routers, modems, and other installed equipment upon completion of the project to the Program / Project Leader

VII. Warranty and Maintenance

The project shall have a minimum of three (3) years warranty on all equipment and services. It is understood that all equipment for replacement along with its re-configuration and other similar activities shall be included in the Maintenance Agreement and shall form part of this Terms of Reference. During this three-year warranty, the winning bidder must supply all necessary equipment and services at no cost to CNSC to ensure that the installed Network is fully functional 24/7.

VIII. Duties and Responsibilities of the CAMARINES NORTE STATE COLLEGE

- a. Provide necessary permits to all working and supervising personnel of the contractor in entering the vicinity of any CNSC campus
- b. Responsible for the safe custody and use of the equipment installed by the Contractor
- c. Issue Certificate of Inspection and Acceptance / Certificate of Project Completion and Acceptance upon completion and full delivery of all required deliverables
- d. Conduct assessment/evaluation of the contractor 60 days before the end of the Contract.
- e. Report any issues to the winning bidder that may be encountered from time to time relative to the use of the installed wireless network communications.
- f. Provide the payment according to the winning bidder subject to applicable government and procurement rules and regulations.

IX. OTHERS

- 1. All equipment, materials, devices, and other relevant structures that will be procured and constructed shall be properly turned over to the CNSC Smart Campus Program Leader included in the Completion Report.
- 2. It is understood that all equipment, materials, and devices shall be the property of Camarines Norte State College after project completion or once turned over by the Winning Bidder.
- 3. All or any damage to CNSC properties and other related incidents shall be the responsibility of the winning bidder during the duration of the contract and shall likewise cause the repair, restoration, and replacement of said property/equipment if there's any.

Certified Correct:

RAYMOND Q. ZARATAR
End User/MIS Head

Bryan Arellano
BRYAN R. ARELLANO
TWG Member

Julio B. Cas
ENGR. JULIO B. CAS
TWG Member

[Signature]
DR. DANIEL E. MALIGAT, JR.
TWG Member

[Signature]
EDGAR BRYAN B. NICART
TWG Member

[Signature]
ENGR. KRISTOFFER JAN B. NOTARIO
TWG Member