



Republic of the Philippines
Department of Education
REGION VIII - EASTERN VISAYAS

INVITATION TO BID

PROCUREMENT FOR THE UPGRADING OF EXISTING NETWORK INFRASTRUCTURE OF DEPED REGIONAL OFFICE VIII

1. The Department of Education Regional Office VIII, through the **General Appropriations Act CY 2021** intends to apply the sum of **One Million Pesos Only (Php1,000,000.00)** being the Approved Budget for the Contract (ABC) to payment for the **PROCUREMENT FOR THE UPGRADING OF EXISTING NETWORK INFRASTRUCTURE OF DEPED RO8**. Bids received in excess of the ABC shall automatically be rejected in accordance with Sec. 31.1 of the Revised IRR of RA 9184 at bid opening.

LOT NO.	DESCRIPTION	CONTRACT DURATION	ABC	PRICE OF BID DOCS
1	Supply and Installation of: ✓ 1 unit Perimeter Firewall ✓ 1 unit Uninterruptible Power Supply (UPS) ✓ 1 unit WAN Router	30 Calendar Days	Php308,687.50	P500.00
2	Supply and Installation of: ✓ 24 units PoE Access Points ✓ 1 unit Data Cabinet ✓ 1 unit Network Rack ✓ 2 units Managed Switch ✓ 2 pieces Patch Panel ✓ Structured cabling of 50 nodes	60 Calendar Days	Php622,018.00	P1,000.00
3	Supply and Installation of: ✓ 1 Air-Conditioning Unit, 2.5 HP ✓ Split-type, Inverter, 11.7 ERR Rating ✓ Remote-Controlled, 230V/60Hz	14 Calendar Days	Php69,294.50	P500.00

Important Notes:

- **See attached required Technical Specifications and/or Terms of Reference;**
- **All LOTS inclusive of Labor and Materials with appropriate warranties, as required;**
- **Winning Bidder(s) must coordinate, one (1) day after issuance of Notice of Award (NOA), with the ORD – ICT Unit (Proponent), to discuss guidelines of the program, delivery schedule(s), and the expectation/s between both parties, Contact No. (053) 832-4625, E-mail address: ictu.region8@deped.gov.ph.**



2. The Department of Education, Regional Office VIII now invites bids for the **PROCUREMENT FOR THE UPGRADING OF EXISTING NETWORK INFRASTRUCTURE OF DEPED RO8**. Bidders should have completed, within the last Five (5) years from the date of submission and receipt of bids, a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II. Instructions to Bidders.

3. Bidding will be conducted through open competitive bidding procedures using a non-discretionary "pass/fail" criterion as specified in the Revised Implementing Rules and Regulations (IRR) of Republic Act (RA) 9184, otherwise known as the "Government Procurement Reform Act". Bidding is restricted to Filipino citizens/sole proprietorships, partnerships, or organizations with at least sixty percent (60%) interest or outstanding capital stock belonging to citizens of the Philippines, and to citizens or organizations of a country the laws or regulations of which grant similar rights or privileges to Filipino citizens, pursuant to RA 5183 and subject to Commonwealth Act 138.

4. A complete set of **Bidding Documents may be purchased** from the DepEd Regional Office No. VIII, BAC Secretariat, located at Government Center, Candahug, Palo, Leyte, upon accomplishing a **Bidder's Information Sheet** (downloadable at: bit.ly/DepEd8-BiddersInformationSheet) and payment in cash of a non-refundable fee by interested bidders **in the amount opposite each Lot** in the Table on Paragraph 1, **to the DepEd Region VIII Cashier**. Only bidders who purchased the Bidding Documents will be allowed to submit bids.

Prospective bidders who intend to **purchase the bidding documents through online banking**, deposit may be done through:

PHILIPPINE VETERANS BANK

Account Name: DepEd RO 8

No.	Fund	Account Number
1.	SEMINAR	0025-002137-001

A scanned copy of the deposit slip together with the **accomplished Bidders Information Sheet shall be sent** to the **BAC Secretariat** (bac.region8@deped.gov.ph), and the official payment receipt with the Bid Documents shall be sent to the bidder through email.

Three (3) sets (Original, Copy 1, and Copy 2) **of the technical and financial documents shall be submitted**, in hard copies, **on or before** the **opening of bids** schedule, **while the** duly signed (per page) **bid documents** (also in 3 sets) **shall be submitted by the winning bidder**, in hard copies, **on or before** the agreed schedule of **the Post Qualification** activity.

Since the **Opening of Bids shall be conducted online, documents submitted via email** to the official email address of the BAC **shall also be accepted** provided that the following conditions are met, to wit:

- Send hard copies via courier. Provide the BAC a proof of waybill. Expected date of arrival of documents is before the opening of bids.
- An email of the bidding documents/technical and financial documents shall be sent to the BAC official email address before the opening of bids in Portable Document Format

(PDF) and must be password-protected. Bidder shall only divulge/provide to the BAC, the document password during the time their document/s are being scrutinized.

- c) If the hard copies of the documents do not arrive as scheduled, the appreciation of the documents shall be through online reading, as sent.
- d) However, the original printed documents shall be opened during the post qualification activity and cross-validated with those sent online. In the event, that there is inconsistency, the data on the printed copies shall prevail.

Bidding Documents may also be downloaded free of charge from the website of the Philippine Government Electronic Procurement System (PhilGEPS) and the website of the Procuring Entity, provided Bidders shall pay the non-refundable fee for the Bidding Documents not later than the submission of their bids.

5. The Department of Education, Regional Office VIII will hold a **Pre-Bid Conference** on **June 1, 2021, 10:00 AM** at the **DepEd Regional Office VIII, Candahug, Palo, Leyte**, which shall be open only to all interested parties who have purchased the Bidding Documents.

6. **Bids must be delivered** to the BAC Secretariat, **DepEd Regional Office VIII, Candahug, Palo, Leyte 6501, before 10:00 AM of June 15, 2021**. All Bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in ITB Clause 18.

Bid opening shall be on **June 15, 2021, 10:00 AM at the DepEd Regional Office VIII, Candahug, Palo, Leyte**. *Physical attendance of bidders/representatives during the Pre-Bid Conference/Bid Opening activities shall not be allowed during the COVID-19 pandemic.* Late bids shall not be accepted.

Note: *Participants are informed that the **Pre-Bid Conference and Opening of Bids during the COVID-19 Pandemic shall be broadcasted/shared to prospective bidders who wish to attend the said procurement activities online, via Google Meet. Hence, interested bidders shall provide the BAC Secretariat (bac.region8@deped.gov.ph) their respective Gmail addresses at least one (1) day before, so that they can join the procurement videoconference(s).***

ACTIVITY	DATE & TIME OF CONDUCT	VENUE
Pre-Bid Conference	June 1, 2021 10:00 AM	DepEd Regional Office VIII, Candahug, Palo, Leyte
Opening of Bids	June 15, 2021 10:00 AM	

7. Only duly authorized representatives are allowed to purchase bidding documents. Letter of Intent, Special Power of Attorney should be dated not later than the date invitation was posted. Certificate of PhilGEPs Registration are required.

8. The Department of Education, Regional Office VIII reserves the right to accept or reject any bid, to annul the bidding process, and to reject all bids at any time prior to contract award, without thereby incurring any liability to the affected bidder or bidders.

9. For further information, please refer to:

RACHEL R. CUEVAS

Head, BAC Secretariat

DepEd Regional Office VIII

*Government Center, Candahug, Palo,
Leyte*

Tel. No. (053) 888-9349

E-Mail: bac.region8@deped.gov.ph

Prepared by



RACHEL R. CUEVAS

EPS, Quality Assurance Division
Head, BAC Secretariat

Concurred:



JIM ALBERT A. LAGADO

ITO I, ICT Unit
End User / Proponent

Approved:



BEBIANO I. SENTILLAS, CESO V

OIC, Office of the Assistant Regional Director
BAC Chairperson

LOT 1

TECHNICAL SPECIFICATIONS AND/OR TERMS OF REFERENCE

1. Perimeter Firewall

Technical Specifications:

- Must accommodate unlimited users or 8,000,000 active connections
- Virtual Private Network
- Bandwidth Management
- Multiple Link Management
- Comprehensive on Appliance Reporting
- With all subscription services (preloaded software with lifetime subscription)
 - Gateway Anti-Virus
 - Gateway Anti-Spyware
 - Gateway Anti-Spam
 - Intrusion Detection and Prevention Systems
 - Content Filtering
- Must have comprehensive training on installation, configuration, deployment of rule sets and system navigation and best practice guide in administering the equipment and subscribed services
- Warranty: 3 years parts and services from date of acceptance and on-site service
- CPU Cores: Four Cores
- Networking: 2x 10GbE Intel x553 SFP+ Ports; 8-port 1Gbps Marvell 88E6190 switch, uplinked at 5 Gbps (2x 2.5 Gbps) to Intel SoC for LAN; Virtual Machine Device Queues reduce I/O overhead
- Storage: 256 GB M.2 SATA SSD
- Memory: 24 GB via SODIMM

2. Uninterruptible Power Supply (UPS)

Technical Specifications:

- Brand New
- Output power capacity: 2,700Watts / 3,000VAMax
- Configurable Power: 2,700Watts / 3,000VA
- Nominal Output Voltage: 230V or 240V
- Output Frequency (sync to mains): 50/60 Hz +/- 3 Hz
- Nominal Input Voltage: 230V
- Input frequency: 50/60 Hz +/- 3 Hz Auto-sensing
- Typical recharge time: 3hour(s)
- Surge energy rating: 365Joules
- Warranty: Three (3) years on battery, parts and service

3. WAN Router

Technical Specifications:

- Brand New

- LAN interface: 16 10/100/1000 Ethernet (8 Data, 8 Power over Ethernet)
- Routing: Static routing; Dynamic routing; RIP v1 and v2; Inter-VLAN Routing
- Must have VPN Security
 - IPSec
 - Point-to-Point Tunneling Protocol (PPTP)
 - Layer Two Tunneling Protocol (L2TP)
- Must support Network Address Translation (NAT)
 - VPN NAT
- Must have Quality of Service (QoS)
 - Low-Latency Queuing (LLQ)
 - Weighted Fair Queuing (WFQ)
- Provides Knowledge Transfer/Training of the set-up for the end user
- Warranty: 3 years parts and services from date of acceptance and on-site service
- Number of VLANs: Up to 32VLANs
- Spanning tree
- Load balancing
- Firewall:
 - Stateful Packet Inspection (SPI) firewall, port forwarding and triggering, Denial-of-Service (DoS) prevention, software-based DMZ
 - DoS attacks prevented:
 - SYN Flood
 - Echo Storm
 - ICMP Flood
 - UDP Flood
 - TCP Flood
 - Blocks Java, cookies, active-X, HTTP proxy

TERMS OF REFERENCE:

1. Supplier must install the perimeter firewall and the UPS to the data cabinet or network rack.
2. Supplier must test the hardware functionality of the perimeter firewall, UPS, and the WAN router.
3. Universal power adapter/s must be provided by the supplier if the device/s does not have a standard plug.
4. Two (2) pieces 5-meter Cat6 patch cords must be provided by the supplier.
5. Nos. 1 and 2 must be done in the presence of an ICT Unit personnel of DepEd RO VIII.

Prepared by:

JIM ALBERT A. LAGADO
Information Technology Officer I

LOT 2

TECHNICAL SPECIFICATIONS AND/OR TERMS OF REFERENCE

1. PoE Access Point

Technical Specifications:

- Brand New
- Built-in Antenna
- Standards: IEEE 802.11ac, 802.11a, 802.11n, 802.11g, 802.11b, 802.3af, 802.3u, 802.1X (security authentication), 802.1Q (VLAN), 802.1D (Spanning Tree), 802.11i (WPA2 security), 802.11e (wireless QoS), IPv4 (RFC 791), IPv6 (RFC 2460), 3x3 MIMO with 3 spatial streams at 5 GHz and 2.4 GHz
- Device Management: Web browser, Simple Network Management Protocol (SNMP) v3, Bonjour
- Interface: 2- 10/100/1000 Ethernet, with support for 802.3at at PoE
- Authentication: 802.1x, PPSK, PEAP, RADIUS
- Data Encryption: WPA (TKIP), WPA2 (AES), WPA-PSK
- Features:
 - Load balancing based on the number of users or traffic
 - Bandwidth control
 - Manual or automatic configuration
- Power Requirement: Power over Ethernet (PoE)
- Multiple mounting options: ceiling or wall
- Provides Knowledge Transfer/Training on the set-up for the end user
- Warranty: 3 years parts and services from date of acceptance and on-site service

2. Data Cabinet

Technical Specifications:

- Height: 42U and not more than 17.5in
- Width: 600mm
- Depth: 1070mm
- Net Weight: not more than 130KG
- Mounting Depth: 191MM (minimum)
- Weight Capacity (Static Load): 907KG
- Weight Capacity (dynamic load): 907KG
- Must have integrated electrical grounding
- Must have Keyed-alike doors and side panels
- Must have easily removable cable access roof
- Must have cable access openings with pre-installed brushes
- Must have half-height side panels and option with brush strips
- Warranty of five (5) years repair or replace
- With at least one (1) 16A metered rack power distribution unit, 8 sockets

3. Network Rack

Technical Specifications:

- 1 feet height
- Wall-mounted rack
- Bare structure with four (4) standard holes vertical mounting rails
- 2-vented detachable side panels w/ lock and louvers
- Vented detachable flexi glass front door w/ lock
- Electrical power 4 outlets 3 prong 220V power strip
- Clip nuts included
- U Height: 12U

4. Managed Switch

Technical Specifications:

- Brand New
- Device Type: Stackable Managed Gigabit Switch
- Ports Qty: 24 x 10/100/1000 + 4 x Gigabit SFP (2 combo)
- Power over Ethernet: PoE+ (24 ports)
- IPv4/IPv6 static routing, VLAN
- MAC Address up to 16K
- Switching capacity: 56 Gbps
- Switch throughput: 42 Mbps
- Flow control/full duplex capability
- Auto-negotiation, Auto MDI/MDI-X
- IEEE 802.1x Authentication with Dynamic VLAN assignment
- Quality of service
- Security Features:
 - Access Control Lists (ACL)
 - Storm Control
 - DHCP snooping
 - IGMP snooping
 - IP source guard
 - Dynamic ARP Inspection (DIA)
- Management
 - Secure Shell (SSH)
 - Simple Network Management Protocol (SNMP)
- Compliant standards: IEEE 802.3, IEEE 802.3u, IEEE 802.3z, IEEE 802.1D, IEEE 802.1Q, IEEE 802.3ab, IEEE 802.1p, IEEE 802.3x, IEEE 802.3ad (LACP), IEEE 802.1w, IEEE 802.1x, IEEE 802.1s, IEEE 802.3af PoE, IEEE 802.3at PoE, IEEE 802.3az
- Provides Knowledge Transfer/Training on the set-up for the end user
- Warranty: 3 years parts and services from date of acceptance and on-site service

5. Patch Panel

- The termination panels shall support the appropriate Category 6 applications and facilitate cross connection and interconnection using modular patch cords. The panels shall be sized to fit an EIA standard, 19-inch relay rack, or be capable of mounting to a wall.
- The panel shall:
 - Be made of black anodized aluminum, in 16-, 24-, 32-, 48- and 96-port configurations.
 - Accommodate at least 24 ports for each rack mount space (1rms = 44.5mm [1.75in]).
 - Have circuit boards tested in both directions as required by ANSI/TIA/EIA-568-B and ISO/IEC 11801.
 - Utilizes full retention force technology with optimized pair balance design and linear crosstalk response to address applications up to 250 MHz.
 - Have termination accomplished with a single conductor impact tool.
 - Be backwards compatible to allow lower performing categories of cables or connecting hardware to operate to their full capacity.
 - Have rear protective strain relief caps with side or rear entry, which can be installed onto cable before or after termination.
 - Support industry standards for T568A or T568B wiring options on each individual outlet.
 - Allow for a minimum of 200 re-terminations without signal degradation below standards compliance limit.
 - Have modular ports compliant with FCC CFR 47 part 68 subpart F and IEC 60603-7 with 50 micro inches of gold plating over nickel contacts.
 - Be fully enclosed front and rear for physical protection of printed circuit boards.
 - Have a rear cable management bar for strain relief.
 - Have port identification numbers on both the front and rear of the panel.
 - Have an optional adhesive circuit identification and color-coding designation strips provided with the panel.
 - Provide self-adhesive, clear label holders and white designation labels with the panel, with optional color labels available.
 - Be made by an ISO 9001
- Electrical Specifications:
 - ANSI/TIA/EIA-568B and ISO/IEC 11801 category 6 compliant.
 - Be currently pending UL VERIFIED for TIA/EIA category 6 electrical performance.
 - B UL LISTED 1863 and Cul c22.2 approved.

STRUCTURED CABLING OF FIFTY (50) NODES

TERMS OF REFERENCE AND TECHNICAL SPECIFICATIONS:

1. The Cat6 UTP cable that will be used for the structured cabling shall have the following minimum technical specifications:
 - a. The copper cable shall either be 4-pair 100 Balanced or Unshielded Twisted Pair (UTP) cable with rip cord and dielectric central isolation member
 - b. Shall comply to the following standards:
 - i. ANSI/TIA/EIA-568B.2-1
 - ii. ISO/IEC 11801:2002 2nd Edition (Category 6)
 - iii. IEC 61156-5 1st Edition
 - iv. LSOH: IEC 332: Part 1, IEC 754 and IEC 1034
 - v. UL CM11
 - c. Minimum bend radius 1.00"
 - d. 100% of final production reels are tested to 550 MHz
 - e. Must be 0.57mm (0.23in) (24AWG) solid bare copper
 - f. The maximum jacket diameter (for 4-pair UTP cable) shall not exceed 6.35mm (0.25in) sequential meter, markings on jackets are appropriate for the environment in which it is installed.
 - g. Be made by an ISO 9001 Certified Manufacturer
2. The Cat6 Information Outlet/Modular Jacks that will be used shall:
 - a. Utilize full retention force technology with optimized pair balance design and linear crosstalk response to address applications up to 250 MHz.
 - b. Be backwards compatible to allow lower performing categories of cables or connecting hardware to operate to their full capacity.
 - c. Allow for a minimum of 200 re-terminations without signal degradation below standards compliance limit.
 - d. Support industry standards for T568A or T568B wiring options on each individual outlet.
 - e. Be constructed of high impact, flame-retardant thermoplastic.
 - f. Be made by an ISO 9001 Certified Manufacturer
 - g. Have the following electrical specifications:
 - i. ANSI/TIA/EIA-568-B and ISO/IEC 11801 category 6 compliant.
 - ii. Be UL VERIFIED for TIA/EIA category 6 electrical performance.
 - iii. Be UL LISTED 1864 and CUL c22.2 approved.
3. All faceplates shall:
 - a. Be applicable to copper applications.
 - b. Have written on designation labels for circuit identification together with a clear plastic cover.
 - c. Be available in single-gang and double-gang configurations.
 - d. Have optional modular furniture adapters available.
 - e. Have stainless steel options available.
 - f. Have surface mount boxes and standoff rings available for both single and double gang faceplates.



- g. Be made by an ISO 9001 Certified Manufacturer
 - h. Color: White
4. The patch cords for access points and computers shall have the following minimum technical specifications:
- a. At least 2.0 meters at work area or longer considering the distance of the devices from information outlet
 - b. Factory Machine Made and Injection Molded
 - c. Snag less Boot Design for easy handling
 - d. CAT6 550Mhz rated
 - e. UTP Unshielded Twisted Pair
 - f. CM Type PVC Jacket
 - g. 24AWG 4 Pair Stranded Core Copper
 - h. Gold Plated Contacts
 - i. UL/ETL listed and RoHS Compliant
5. The 50 nodes structured cabling shall be used for the following devices:
- a. 24 units wireless access points
 - b. 2 units ethernet switches (provided by DepEd R.O. 8)
 - c. 2 units outdoor access points (provided by DepEd R.O. 8)
 - d. 22 units computers of the Office
6. Outdoor Cat6 UTP cables must be used if the cable will be exposed outside buildings (refer to the attached network plan). The outdoor Cat6 UTP cable shall have the following specifications:
- a. Conductor
 - i. Stranding: Solid
 - ii. Material: BC - Bare Copper
 - b. Insulation
 - i. Material: PO - Polyolefin
 - c. Standards and Compliance
 - i. NEC / UL Compliance: Article 800, CMR;CMX-Outdoor;CMG
 - ii. CEC / C(UL) Compliance: CMX-Outdoor;CMG
 - iii. TIA/EIA Compliance: ANSI/TIA-568.2-D Category 6
7. UTP cables that will hang across buildings shall be installed with support and protection from easily breaking and/or dropping.
8. UTP cables installed in ceilings must be placed in a PVC pipe, conforming to the percent (%) fill as per standard.
9. UTP cables dropping on walls must be placed in a PVC molding.
10. The length of patch cords connecting the patch panel and the switch must be one (1) meter.
11. Two (2) units of DepEd R.O. 8's ethernet switches must be installed on a flat wood shelf provided by the supplier.
12. Two (2) units of DepEd R.O. 8's outdoor access points must be installed on a stable pole provided by the supplier.



13. The supplier shall provide and install the necessary materials to power-up devices that cannot be powered up by ethernet.
14. PoE access points must be wall-mounted unless the ICT Unit decide that other access points be mounted on the ceiling.
15. Services must include:
 - a. Site Survey
 - b. Physical Installation
 - c. Testing
 - d. Labelling/Tagging
16. Five (5) years performance warranty on cables and other passive components.
17. Repair or replacement of any failed component should be carried out within seven (7) calendar days after it was reported by the DepEd R.O. VIII.

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Information Technology Officer I

LOT 3

TECHNICAL SPECIFICATIONS AND/OR TERMS OF REFERENCE

1. Air-conditioning Unit

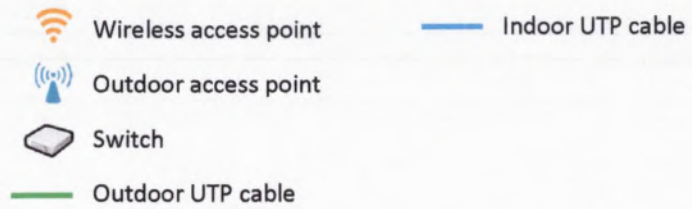
Technical Specifications:

- Brand New
- Aircon Type: Split
- Cooling Capacity: 2.5HP
- Inverter Technology
- Energy Efficiency Ratio (ERR) Rating: 11.7
- Input Power: Single 230V/60Hz
- Remote Controlled
- Warranty:
 - Five (5) year warranty on compressor
 - One (1) year warranty on parts & labor/service
- All accessories and works necessary to complete the installation and testing must be included.
- Must have user manual.

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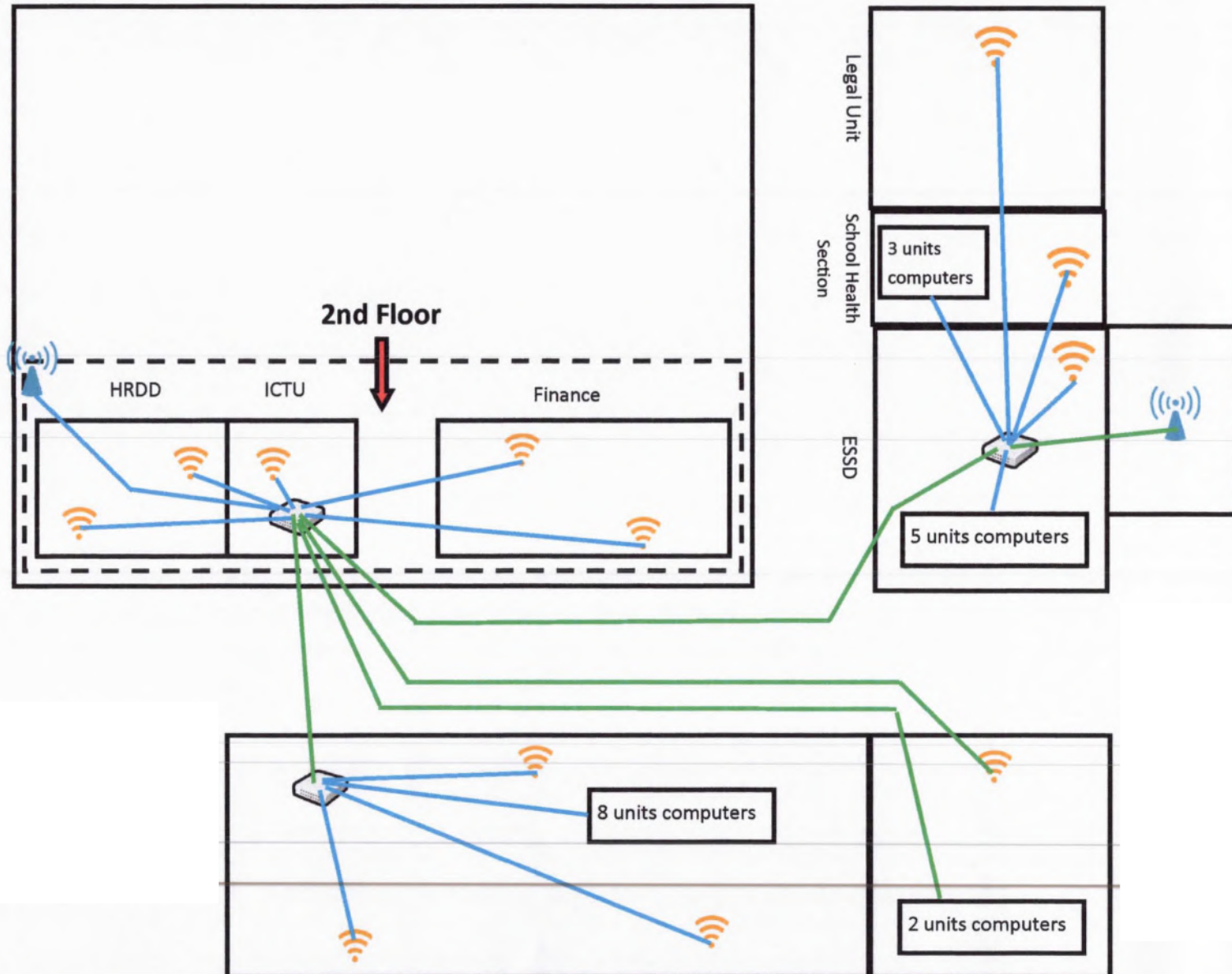
JIM ALBERT A. LAGADO

Information Technology Officer I



Network Plan

1st Floor



Structured Cabling End-to-End Configuration Table

DESTINATION	NO. OF NODES	DEVICE OUTPUT	SOURCE	REMARKS
CLMD	1	switch	ICTU	16-port Switch (device provided by DepEd; installed on a flat rack that is provided by the Supplier)
	3	Wireless access point/s	CLMD	
	8	computer	CLMD	
PAU	2	computer	ICTU	
	1	Wireless access point/s	ICTU	
ESSD	1	switch	ICTU	16-port Switch (device provided by DepEd; installed on a flat rack that is provided by the Supplier)
	1	Wireless access point/s	ESSD	
	5	computer	ESSD	
School Health	3	computer	ESSD	
	1	Wireless access point/s	ESSD	
Legal	1	Wireless access point/s	ESSD	
ORD	2	Wireless access point/s	ICTU	
Finance	2	Wireless access point/s	ICTU	
HRDD	2	Wireless access point/s	ICTU	
ESSD	1	Outdoor access point/s	ESSD	Outdoor access point provided by DepEd
QAD	2	Wireless access point/s	ICTU	
Cash Section	1	Wireless access point/s	ICTU	
OARD	1	Wireless access point/s	ICTU	
PPRD	2	Wireless access point/s	ICTU	
FTAD	4	computer	ICTU	
	1	Wireless access point/s	ICTU	
BAC Sec	1	Wireless access point/s	ICTU	
HRDD Beam (facing Admin)	1	Outdoor access point/s	ICTU	Outdoor access point provided by DepEd
ICTU	1	Wireless access point/s	ICTU	
Lobby	2	Wireless access point/s	ICTU	

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 **JIM ALBERT A. LAGADO**, Information Technology Officer I