

# Republic of the Philippines **Benguet State University**2601 La Trinidad, Benguet www.bsu.edu.ph



## Goods and Services

### SUPPLEMENTAL/ BID BULLETIN Addendum No.

This Supplemental/bid bulletin is being issued to advise prospective bidders to clarify items in the Bidding Documents in response to the clarification from prospective bidders during the Pre-Bid Conference held on August 06, 2024 at 2:00 PM at the Rogelio D. Colting (RDC) Hall. The Bidding Documents and all papers previously issued in relation to the aforesaid project are hereby amended as follows:

PROJECT NO: IB No. 2024-33

PROJECT TITLE: Procurement of Supplies, Equipment and Materials with Installation

Services for the Network Infrastructure and last Mile Fiber Optic Cabling

#### I. Technical Requirement

Item. 3 - Statement of Single Largest Completed Contract (SLCC) equivalent to at least 50% of the **ABC** that is similar nature to the project.

(Note: The ABC shall be based on the total amount of the Lot/s in which the bidder chooses to participate)

#### II. Bid Document Fee

- a. Bid document fee is based on the total ABC of the lot/s the prospective bidder wishes to participate in as per Appendix 8, Guidelines on the Sale of Bidding Documents, item no. 5- Standard Rates.
- **b.** Payment of bid doc fee may be done through the Landbank e-payment portal using the link *https://www.lbp-eservices.com/egps/portal/index.jsp*

#### **III.** Other Technical Requirements

Compliance to Certificate of Site Inspection

#### IV. Section 2 and Section 3

-ITB Clause 19.4: The Project shall be awarded as **One Project having several items that shall be awarded as one contract.** 

#### V. Term of Reference

- Page 14, item B.8: Quantity from 7 pcs to 8 pcs- ₱9,600.00
- Newly Added as part of the TOR

PERFORMANCE TESTING ON CABLE INSTALLATIONS [added]

All fiber-optic cabling installations will be subjected to performance tests using a properly
calibrated OTDR (Optical Time Domain Reflectometer). The installer/supplier will conduct
the test using their own testing equipment under the supervision of Benguet State
University. A duly-signed copy of the results along with a digital copy will be submitted to
the university. The tests to be conducted listed on the table below:

TEST to be Conducted	Description/Remarks	Standard/Reference	
Trace Analysis	Each event will be marked, showing distance and amount of loss	EIA/TIA568	
Calculated Total Insertion Loss	Sum of losses from patch cables, connectors, splices, and the fiber itself.	EIA/TIA568	
Bidirectional Testing	To be performed from both ends of the fiber to provide a more reliable measurement of loss.	ISO/IEC 14763-3	

All copper cabling installations will be subjected to (1) Continuity, (2) Length, and (3) PoE tests. The installer/supplier will conduct the test using their own testing equipment under the supervision of Benguet State University. A duly-signed copy of the results along with a digital copy will be submitted to the university.

#### Fiber-optic cabling requirements: [updated]

i. Mini Figure 8 self-supporting Center Tube Optical cable GYXTC8Y.

ii. Dual Wavelength: 1310nm/1550nm

iii. Attenuation Coefficients: ≤0.36dB/km @ 1310nm | ≤0.22dB/km @ 1550nm

iv. Proof Stress Level: ≥100 kpsi

V. Cable cut-off wavelength: ≤ 1260 nmVi. Structure: Central Tube Type structure

vii. Loose Tube Material: PBT

viii. Outer Jacket: MDPE material

ix. Minimum Static Bending Radius: 10 times cable diameterx. Minimum Dynamic Bending Radius: 20 times cable diameter

xi. Tensile Performance: 1000N

xii. Crush Performance: 1000N/100mm

xiii. Operation Temperature: IEC 60794-1-2 F1,  $-40^{\circ}$ C $\sim$ + $70^{\circ}$ C

xiv. Other parameters meet standard ITU-T G.652.

Table 4. Required Outdoor Fiber-optic cable lengths [updated]

SOURCE	DESTINATION	# OF LINKS	LENGTH (m)	REMARKS
				16/8/4-core FX cable, XS+31DLC10D
NPRCRTC	ICT-NOC	4	160	<u>interface</u>

				16/8/4-core FX cable, XS+31DLC10D
R&E building	ICT-NOC	4	580	<u>interface</u>
				16/8/4-core FX cable, XS+31DLC10D
R&E building	ICT-NOC	4	250	<u>interface</u>
				16/8/4-core FX cable, XS+31DLC10D
CHK building	ICT-NOC	4	450	<u>interface</u>
	TOTAL (8-CORE)	16	1280	Estimated length

#### **Copper Cabling:**

- All copper cables will be enclosed in square/rectangular PVC molding, cable ladder (stainless/galvanized steel), or wire basket/mesh. Flexible corrugated pipes for electrical wiring will be REJECTED. [updated]
- Each room/hall will have at least one (1) copper cable link for the access point/wall plate/wifi device unless specified otherwise in Table 5. [added]
- Each room/hall copper cable link will be sourced from the closest data cabinet unless specified otherwise in Table 5.[added]
- Each room/hall with a wall plate installed will have all its ports extended to the preferred desktop/printer enclosed in square/rectangular PVC moldings and terminated in an I/O box with female RJ-45 connectors.
- All copper cables will be terminated in an I/O box with female RJ-45 connectors except those for the ceiling mounted access points/wall plates/wifi devices.
- All copper cables will be terminated using the T568B wiring scheme in reference to IEEE 802.3 standards. [added]

Table 5. Indoor Copper Cabling Endpoint Distribution [added]

ROOM/ HALL	# of LINKS	REMARKS (numbers indicate # of links)		
CARNATION HALL	3	1F data cabinet to Wall plate (1), Wall plate backup link (1), presenter (1)		
EVERLASTING HALL	8	1F data cabinet to presenter front wall (2), presenter side wall (2), secretariat back wall (4)		
CORCAARD	8	2F data cabinet to wall plate (2) preferred desktop (6)		
VPRE STAFF	10	1F data cabinet to preferred desktop(8), printer(2)		
OVPRE	3	2F data cabinet to VPRE desktop (1), assistant (1) and Wall plate (1)		

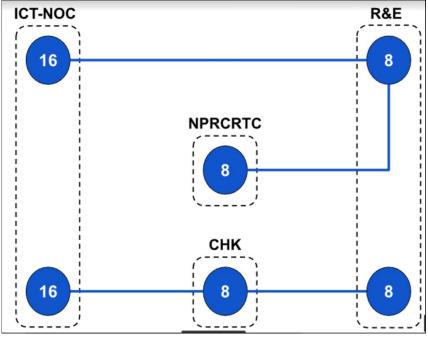


Figure 1. Outdoor Fiber-optic Network [updated]

#### **Network Monitoring Workstation [updated]**



• Network Monitoring Workstation. CPU: 7 nm, 8-Cores, 16 Threads, 16 MB L3 Cache Memory, 45 W TDP, 3.2 GHz, Up to 4.4 GHz Boost Clock Speed, Turbo Boost, Hyper-Threading, Up to 4266 MT/s Memory Frequency, Dual-Channel Support, Quad-Channel Support; Mini PC; Compatible to any Linux variant; 32GB DDR4 RAM, 500GB NVME SSD, 802.11ac WiFi, at least 22-inch LED/IPS widescreen monitor, keyboard & mouse combo.

#### WORK AND FINANCIAL PLAN [updated]

A.2. Structured Copper Cabling - all floors, CAT6 cables will be used for links between network devices. CAT6 cables will be used for endpoints. Ethernet cables to be used must contain the Underwriters Laboratories (UL) badges/marks. Ethernet cables to be used must be made of pure copper. Copper-clad aluminum cables will be REJECTED. All copper cables will be enclosed in square/rectangular PVC molding, cable ladder (stainless/galvanized steel), or wire basket/mesh. Cable raceways will be secured to walls/ceilings using rivets/screws. Cable raceway installations must allow easy access and replacement of cable runs. Cable raceway installations must have ample space for additional cable runs. Endpoints are terminated using duly-rated data outlets. 3	1 lot	360,000.00	360,000.00
Endpoints are terminated using duly-rated data outlets. 3 meter CAT6 patch cords will be provided per port.			

B.14. Network Monitoring Workstation. CPU: 7 nm, 8-Cores, 16 Threads,16 MB L3 Cache Memory, 45 W TDP, 3.2 GHz, Up to 4.4 GHz Boost Clock Speed, Turbo Boost, Hyper-Threading, Up to 4266 MT/s Memory Frequency, Dual-Channel Support, Quad-Channel Support; Mini PC; Compatible to any Linux variant; 32GB DDR4 RAM, 500GB NVME SSD, 802.11ac WiFi, at least 22-inch LED/IPS widescreen monitor, keyboard & mouse combo. 12-month warranty on materials and workmanship under normal use and service by the manufacturer, except in case of damage caused by mechanical, electrical, or other accidental or intended damages caused by improper use or due to wind, rain, fire, or other acts of nature. On-call/next-business-day support must be provided by the local supplier/dealer.	1	46,000.00	₱46,000.00
C. 1 lot Network Cabling			
C.1. Outdoor Fiber Optic Cabling.  ANSI/TIA568.3-D, EIA/TIA 598, ANSI/TIA-758-B, EIA-443 Compliant. 16/8/4-core, 1310nm/1550nm Dual Wavelength, single mode, Mini Figure 8, Self- supporting, outdoor fiber-optic cables from ICT-NOC to R&E building-CHK building and the R&E building to the NPRCRTC. Support messenger wire must be grounded at both ends. Use proper grounding materials. Cable installations must comply with the Philippine Electronics code. LC UPC terminated fiber-optic patch panels will be used. 1-meter long LC-LC fiber-optic patch cords will be provided for every available fiber-optic pair. A data cabinet will be provided for any location that has none to secure the fiber-optic installation. Warranty is 5 years minimum on materials, Warranty is 1 year on workmanship.	1 lot	183,000.00	₱183,000.00

- The supplier/bidder is in charge of permits and other requirements pertaining to the use of Beneco Poles.

This Supplemental Bid Bulletin No.2024-\_\_\_\_ shall form part of the Bidding Documents. Any provision in the Bidding Documents and other documents in consistent herewith is hereby amended, modified and superseded accordingly. Other provisions shall remain in full force and effect.

#### (SGD)

#### **SAMUEL SALAY POLIDEN**

Chairperson

Bid and Awards Committee (Goods and Services)