

# Republic of the Philippines Benguet State University La Trinidad, Benguet



## PHILIPPINE BIDDING DOCUMENTS

Procurement of Supplies,
Equipment and Materials with
Installation Services for the
Network Infrastructure and last
Mile Fiber Optic Cabling

IB No. 2024-33

Sixth Edition July 2020

#### **Preface**

These Philippine Bidding Documents (PBDs) for the procurement of Goods through Competitive Bidding have been prepared by the Government of the Philippines for use by any branch, constitutional commission or office, agency, department, bureau, office, or instrumentality of the Government of the Philippines, National Government Agencies, including Government-Owned and/or Controlled Corporations, Government Financing Institutions, State Universities and Colleges, and Local Government Unit. The procedures and practices presented in this document have been developed through broad experience, and are for mandatory use in projects that are financed in whole or in part by the Government of the Philippines or any foreign government/foreign or international financing institution in accordance with the provisions of the 2016 revised Implementing Rules and Regulations of Republic Act No. 9184.

The Bidding Documents shall clearly and adequately define, among others: (i) the objectives, scope, and expected outputs and/or results of the proposed contract or Framework Agreement, as the case may be; (ii) the eligibility requirements of Bidders; (iii) the expected contract or Framework Agreement duration, the estimated quantity in the case of procurement of goods, delivery schedule and/or time frame; and (iv) the obligations, duties, and/or functions of the winning bidder.

Care should be taken to check the relevance of the provisions of the PBDs against the requirements of the specific Goods to be procured. If duplication of a subject is inevitable in other sections of the document prepared by the Procuring Entity, care must be exercised to avoid contradictions between clauses dealing with the same matter.

Moreover, each section is prepared with notes intended only as information for the Procuring Entity or the person drafting the Bidding Documents. They shall not be included in the final documents. The following general directions should be observed when using the documents:

- a. All the documents listed in the Table of Contents are normally required for the procurement of Goods. However, they should be adapted as necessary to the circumstances of the particular Procurement Project.
- b. Specific details, such as the "name of the Procuring Entity" and "address for bid submission," should be furnished in the Instructions to Bidders, Bid Data Sheet, and Special Conditions of Contract. The final documents should contain neither blank spaces nor options.
- c. This Preface and the footnotes or notes in italics included in the Invitation to Bid, Bid Data Sheet, General Conditions of Contract, Special Conditions of Contract, Schedule of Requirements, and Specifications are not part of the text of the final document, although they contain instructions that the Procuring Entity should strictly follow.

- d. The cover should be modified as required to identify the Bidding Documents as to the Procurement Project, Project Identification Number, and Procuring Entity, in addition to the date of issue.
- e. Modifications for specific Procurement Project details should be provided in the Special Conditions of Contract as amendments to the Conditions of Contract. For easy completion, whenever reference has to be made to specific clauses in the Bid Data Sheet or Special Conditions of Contract, these terms shall be printed in bold typeface on Sections I (Instructions to Bidders) and III (General Conditions of Contract), respectively.
- f. For guidelines on the use of Bidding Forms and the procurement of Foreign-Assisted Projects, these will be covered by a separate issuance of the Government Procurement Policy Board.

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# Glossary of Acronyms, Terms, and Abbreviations

**ABC** – Approved Budget for the Contract.

**BAC** – Bids and Awards Committee.

**Bid** – A signed offer or proposal to undertake a contract submitted by a bidder in response to and in consonance with the requirements of the bidding documents. Also referred to as *Proposal* and *Tender*. (2016 revised IRR, Section 5[c])

**Bidder** – Refers to a contractor, manufacturer, supplier, distributor and/or consultant who submits a bid in response to the requirements of the Bidding Documents. (2016 revised IRR, Section 5[d])

**Bidding Documents** – The documents issued by the Procuring Entity as the bases for bids, furnishing all information necessary for a prospective bidder to prepare a bid for the Goods, Infrastructure Projects, and/or Consulting Services required by the Procuring Entity. (2016 revised IRR, Section 5[e])

**BIR** – Bureau of Internal Revenue.

**BSP** – Bangko Sentral ng Pilipinas.

Consulting Services – Refer to services for Infrastructure Projects and other types of projects or activities of the GOP requiring adequate external technical and professional expertise that are beyond the capability and/or capacity of the GOP to undertake such as, but not limited to: (i) advisory and review services; (ii) pre-investment or feasibility studies; (iii) design; (iv) construction supervision; (v) management and related services; and (vi) other technical services or special studies. (2016 revised IRR, Section 5[i])

**CDA** - Cooperative Development Authority.

**Contract** – Refers to the agreement entered into between the Procuring Entity and the Supplier or Manufacturer or Distributor or Service Provider for procurement of Goods and Services; Contractor for Procurement of Infrastructure Projects; or Consultant or Consulting Firm for Procurement of Consulting Services; as the case may be, as recorded in the Contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.

**CIF** – Cost Insurance and Freight.

**CIP** – Carriage and Insurance Paid.

**CPI** – Consumer Price Index.

**DDP** – Refers to the quoted price of the Goods, which means "delivered duty paid."

**DTI** – Department of Trade and Industry.

EXW - Ex works.

**FCA** – "Free Carrier" shipping point.

**FOB** – "Free on Board" shipping point.

**Foreign-funded Procurement or Foreign-Assisted Project**— Refers to procurement whose funding source is from a foreign government, foreign or international financing institution as specified in the Treaty or International or Executive Agreement. (2016 revised IRR, Section 5[b]).

**Framework Agreement** – Refers to a written agreement between a procuring entity and a supplier or service provider that identifies the terms and conditions, under which specific purchases, otherwise known as "Call-Offs," are made for the duration of the agreement. It is in the nature of an option contract between the procuring entity and the bidder(s) granting the procuring entity the option to either place an order for any of the goods or services identified in the Framework Agreement List or not buy at all, within a minimum period of one (1) year to a maximum period of three (3) years. (GPPB Resolution No. 27-2019)

**GFI** – Government Financial Institution.

**GOCC** – Government-owned and/or –controlled corporation.

Goods – Refer to all items, supplies, materials and general support services, except Consulting Services and Infrastructure Projects, which may be needed in the transaction of public businesses or in the pursuit of any government undertaking, project or activity, whether in the nature of equipment, furniture, stationery, materials for construction, or personal property of any kind, including non-personal or contractual services such as the repair and maintenance of equipment and furniture, as well as trucking, hauling, janitorial, security, and related or analogous services, as well as procurement of materials and supplies provided by the Procuring Entity for such services. The term "related" or "analogous services" shall include, but is not limited to, lease or purchase of office space, media advertisements, health maintenance services, and other services essential to the operation of the Procuring Entity. (2016 revised IRR, Section 5[r])

**GOP** – Government of the Philippines.

**GPPB** – Government Procurement Policy Board.

**INCOTERMS** – International Commercial Terms.

**Infrastructure Projects** – Include the construction, improvement, rehabilitation, demolition, repair, restoration or maintenance of roads and bridges, railways, airports, seaports, communication facilities, civil works components of information technology projects, irrigation, flood control and drainage, water supply, sanitation, sewerage and solid waste management systems, shore protection, energy/power and electrification facilities, national

buildings, school buildings, hospital buildings, and other related construction projects of the government. Also referred to as *civil works or works*. (2016 revised IRR, Section 5[u])

**LGUs** – Local Government Units.

**NFCC** – Net Financial Contracting Capacity.

**NGA** – National Government Agency.

PhilGEPS - Philippine Government Electronic Procurement System.

**Procurement Project** – refers to a specific or identified procurement covering goods, infrastructure project or consulting services. A Procurement Project shall be described, detailed, and scheduled in the Project Procurement Management Plan prepared by the agency which shall be consolidated in the procuring entity's Annual Procurement Plan. (GPPB Circular No. 06-2019 dated 17 July 2019)

**PSA** – Philippine Statistics Authority.

**SEC** – Securities and Exchange Commission.

**SLCC** – Single Largest Completed Contract.

**Supplier** – refers to a citizen, or any corporate body or commercial company duly organized and registered under the laws where it is established, habitually established in business and engaged in the manufacture or sale of the merchandise or performance of the general services covered by his bid. (Item 3.8 of GPPB Resolution No. 13-2019, dated 23 May 2019). Supplier as used in these Bidding Documents may likewise refer to a distributor, manufacturer, contractor, or consultant.

**UN** – United Nations.

## Section I. Invitation to Bid

#### **Notes on the Invitation to Bid**

The Invitation to Bid (IB) provides information that enables potential Bidders to decide whether to participate in the procurement at hand. The IB shall be posted in accordance with Section 21.2 of the 2016 revised IRR of RA No. 9184.

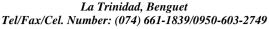
Apart from the essential items listed in the Bidding Documents, the IB should also indicate the following:

- a. The date of availability of the Bidding Documents, which shall be from the time the IB is first advertised/posted until the deadline for the submission and receipt of bids;
- b. The place where the Bidding Documents may be acquired or the website where it may be downloaded;
- c. The deadline for the submission and receipt of bids; and
- d. Any important bid evaluation criteria (*e.g.*, the application of a margin of preference in bid evaluation).

The IB should be incorporated in the Bidding Documents. The information contained in the IB must conform to the Bidding Documents and in particular to the relevant information in the Bid Data Sheet.



## Republic of the Philippines Benguet State University La Trinidad, Benguet





## Rids and Awards Committee

(Goods and Services)

#### INVITATION TO BID FOR

#### Procurement of Supplies, Equipment and Materials with Installation Services for the Network Infrastructure and last Mile Fiber Optic Cabling

(IB No. 2024-33)

1. The Benguet State University (BSU), through the **Special Project (SP) CY 2024** intends to apply the Approved Budget for the Contract (ABC) corresponding to the total cost of each lot to be bid out, as follows:

Lot Number	Quantity	Item Description	Approved Budget for the Contract (ABC) (PhP)
1.	1 lot	Procurement of Supplies, Equipment and Materials with Installation Services for the Network Infrastructure and last Mile Fiber Optic Cabling	1,459,800.00
	Details:	Structured Network cabling at the Research and Extension New Building, scope of work includes indoor fiber optics cabling, structured copper cabling, supply and delivery of Network Equipment, and last mile fiber optics cabling of ICT-NOC to CHK then to NPRCRTC. See detailed TOR	
TOTAL AMOUNT			<b>Php</b> 1,459,800.00

Bids received in excess of the ABC for each lot shall be automatically rejected at bid opening.

2. The Benguet State University now invites for the above Procurement Project. Delivery of the Goods is required within **Thirty** (30) calendar days upon receipt of the notice to proceed. Bidders should have completed, within **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 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.

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 No. 5183.

- 4. Prospective Bidders may obtain further information from Benguet State University and inspect the Bidding Documents at the address given below during working hours 8:00 am to 5:00 pm.
- 5. A complete set of Bidding Documents may be acquired by interested Bidders on **July 29, 2024** from the given address and website(s) below and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount listed below. The Procuring Entity shall allow the bidder to present its proof of payment for the fees in person, or through the landbank link (https://www.lbp-eservices.com/egps/portal/index.jsp).

ITEM	APPLICABLE FEE (PhP)
Procurement of Supplies,	1,500.00
<b>Equipment and Materials</b>	
with Installation Services	
for the Network	
Infrastructure and last	
Mile Fiber Optic Cabling	
F 1 - F 1 -	

- 6. The Benguet State University will hold a Pre-Bid Conference<sup>1</sup> on **August 06, 2024, 2:00 PM (PST)** at BSU RDC Hall, 2<sup>nd</sup> Floor, Admin. Bldg., BSU, La Trinidad, Benguet and/or through video conferencing or webcasting *via* google meet (iih-nrds-cpo), which shall be open to prospective bidders.
- 7. Bids must be duly received by the BAC Secretariat through manual submission at the office address indicated below, on or before **August 20, 2024, 2:00 PM (PST)**. Late bids shall not be accepted.
- 8. All Bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 14.

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<sup>&</sup>lt;sup>1</sup> May be deleted in case the ABC is less than One Million Pesos (PhP1,000,000) where the Procuring Entity may not hold a Pre-Bid Conference.

- 9. Bid opening shall be on **August 20, 2024, 2:15 pm** at the given address below and/or google meet (iih-nrds-cpo). Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.
- 10. The Benguet State University reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Sections 35.6 and 41 of the 2016 revised IRR of RA No. 9184, without thereby incurring any liability to the affected bidder or bidders.
- 11. For further information, please refer to:

BAC Secretariat
Procurement Management Office (PMO)

1st Floor Administration Building,
Benguet State University,
La Trinidad, Benguet
Email: procurement@bsu.edu.ph
Tel. Fax/No. 661-1839/ CP No. 09506032749

12. You may visit the following websites:

For downloading bidding document:
University website: <u>bsu.edu.ph</u> or philgeps posting

Issued on the \_\_\_\_ day of July 2024

(sgd)
SAMUEL S. POLIDEN
Chairperson
Bids and Awards Committee (Goods)

## Section II. Instructions to Bidders

#### **Notes on the Instructions to Bidders**

This Section on the Instruction to Bidders (ITB) provides the information necessary for bidders to prepare responsive bids, in accordance with the requirements of the Procuring Entity. It also provides information on bid submission, eligibility check, opening and evaluation of bids, post-qualification, and on the award of contract.

#### 1. Scope of Bid

The Procuring Entity, *BENGUET STATE UNIVERSITY (BSU)* wishes to receive Bids for the **Procurement of Supplies**, **Equipment and Materials with Installation Services for the Network Infrastructure and last Mile Fiber Optic Cabling** with identification number 2024-33.

The Procurement Project (referred to herein as "Project") is composed of *one* (1) lot, the details of which are described in Section VII (Technical Specifications).

#### 2. Funding Information

- 2.1. The GOP through the source of funding as indicated below for *CY 2024* in the amount of **One Million Four Hundred Fifty-Nine Thousand Eight Hundred Pesos Only.**
- 2.2. The source of funding is:

Special Project - CorCAARRD- 2024

#### 3. Bidding Requirements

The Bidding for the Project shall be governed by all the provisions of RA No. 9184 and its 2016 revised IRR, including its Generic Procurement Manuals and associated policies, rules and regulations as the primary source thereof, while the herein clauses shall serve as the secondary source thereof.

Any amendments made to the IRR and other GPPB issuances shall be applicable only to the ongoing posting, advertisement, or **IB** by the BAC through the issuance of a supplemental or bid bulletin.

The Bidder, by the act of submitting its Bid, shall be deemed to have verified and accepted the general requirements of this Project, including other factors that may affect the cost, duration and execution or implementation of the contract, project, or work and examine all instructions, forms, terms, and project requirements in the Bidding Documents.

#### 4. Corrupt, Fraudulent, Collusive, and Coercive Practices

The Procuring Entity, as well as the Bidders and Suppliers, shall observe the highest standard of ethics during the procurement and execution of the contract. They or through an agent shall not engage in corrupt, fraudulent, collusive, coercive, and obstructive practices defined under Annex "I" of the 2016 revised IRR of RA No. 9184 or other integrity violations in competing for the Project.

#### 5. Eligible Bidders

5.1. Only Bids of Bidders found to be legally, technically, and financially capable will be evaluated.

- 5.2. Foreign ownership limited to those allowed under the rules may participate in this Project.
- 5.3. Pursuant to Section 23.4.1.3 of the 2016 revised IRR of RA No.9184, the Bidder shall have an SLCC that is at least one (1) contract similar to the Project the value of which, adjusted to current prices using the PSA's CPI, must be at least equivalent to:

For the procurement of Non-expendable Supplies and Services: The Bidder must have completed a single contract that is similar to this Project, equivalent to at least fifty percent (50%) of the ABC.

5.4. The Bidders shall comply with the eligibility criteria under Section 23.4.1 of the 2016 IRR of RA No. 9184.

#### 6. Origin of Goods

There is no restriction on the origin of goods other than those prohibited by a decision of the UN Security Council taken under Chapter VII of the Charter of the UN, subject to Domestic Preference requirements under **ITB** Clause 18.

#### 7. Subcontracts

7.1. The Procuring Entity has prescribed that **subcontracting** is **not allowed**.

#### 8. Pre-Bid Conference

The Procuring Entity will hold a pre-bid conference for this Project on the specified date and time and either at its physical address and/or through videoconferencing/webcasting} as indicated in paragraph 6 of the **IB**.

#### 9. Clarification and Amendment of Bidding Documents

Prospective bidders may request for clarification on and/or interpretation of any part of the Bidding Documents. Such requests must be in writing and received by the Procuring Entity, either at its given address or through electronic mail indicated in the **IB**, at least ten (10) calendar days before the deadline set for the submission and receipt of Bids.

#### 10. Documents comprising the Bid: Eligibility and Technical Components

- 10.1. The first envelope shall contain the eligibility and technical documents of the Bid as specified in **Section VIII** (Checklist of Technical and Financial **Documents**).
- 10.2. The Bidder's SLCC as indicated in **ITB** Clause 5.3 should have been completed within **five** (5) **years** prior to the deadline for the submission and receipt of bids.

10.3. If the eligibility requirements or statements, the bids, and all other documents for submission to the BAC are in foreign language other than English, it must be accompanied by a translation in English, which shall be authenticated by the appropriate Philippine foreign service establishment, post, or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines. Similar to the required authentication above, for Contracting Parties to the Apostille Convention, only the translated documents shall be authenticated through an apostille pursuant to GPPB Resolution No. 13-2019 dated 23 May 2019. The English translation shall govern, for purposes of interpretation of the bid.

#### 11. Documents comprising the Bid: Financial Component

- 11.1. The second bid envelope shall contain the financial documents for the Bid as specified in **Section VIII** (Checklist of Technical and Financial Documents).
- 11.2. If the Bidder claims preference as a Domestic Bidder or Domestic Entity, a certification issued by DTI shall be provided by the Bidder in accordance with Section 43.1.3 of the 2016 revised IRR of RA No. 9184.
- 11.3. Any bid exceeding the ABC indicated in paragraph 1 of the **IB** shall not be accepted.
- 11.4. For Foreign-funded Procurement, a ceiling may be applied to bid prices provided the conditions are met under Section 31.2 of the 2016 revised IRR of RA No. 9184.

#### 12. Bid Prices

- 12.1. Prices indicated on the Price Schedule shall be entered separately in the following manner:
  - a. For Goods offered from within the Procuring Entity's country:
    - i. The price of the Goods quoted EXW (ex-works, ex-factory, ex-warehouse, ex-showroom, or off-the-shelf, as applicable);
    - ii. The cost of all customs duties and sales and other taxes already paid or payable;
    - iii. The cost of transportation, insurance, and other costs incidental to delivery of the Goods to their final destination; and
    - iv. The price of other (incidental) services, if any, listed in the **BDS**.
  - b. For Goods offered from abroad:
    - i. Unless otherwise stated in the **BDS**, the price of the Goods shall be quoted delivered duty paid (DDP) with the place of destination in the Philippines as specified in the **BDS**. In quoting the price, the Bidder shall be free to use transportation through carriers

registered in any eligible country. Similarly, the Bidder may obtain insurance services from any eligible source country.

ii. The price of other (incidental) services, if any, as listed in the **BDS**.

#### 13. Bid and Payment Currencies

- 13.1. For Goods that the Bidder will supply from outside the Philippines, the bid prices may be quoted in the local currency or tradeable currency accepted by the BSP at the discretion of the Bidder. However, for purposes of bid evaluation, Bids denominated in foreign currencies, shall be converted to Philippine currency based on the exchange rate as published in the BSP reference rate bulletin on the day of the bid opening.
- 13.2. Payment of the contract price shall be made in **Philippine Pesos.**

#### 14. Bid Security

- 14.1. The Bidder shall submit a Bid Securing Declaration<sup>2</sup> or any form of Bid Security in the amount indicated in the **BDS**, which shall be not less than the percentage of the ABC in accordance with the schedule in the **BDS**.
- 14.2. The Bid and bid security shall be valid until **December 20, 2024**. Any Bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

#### 15. Sealing and Marking of Bids

Each Bidder shall submit three (3) copies of the first and second components of its Bid. It will be marked as Original, Copy 1 and Copy 2.

The Procuring Entity may request additional hard copies and/or electronic copies of the Bid. However, failure of the Bidders to comply with the said request shall not be a ground for disqualification.

If the Procuring Entity allows the submission of bids through online submission or any other electronic means, the Bidder shall submit an electronic copy of its Bid, which must be digitally signed. An electronic copy that cannot be opened or is corrupted shall be considered non-responsive and, thus, automatically disqualified.

#### 16. Deadline for Submission of Bids

16.1. The Bidders shall submit on the specified date and time and either at its physical address or through online submission as indicated in paragraph 7 of the **IB**.

#### 17. Opening and Preliminary Examination of Bids

<sup>&</sup>lt;sup>2</sup> In the case of Framework Agreement, the undertaking shall refer to entering into contract with the Procuring Entity and furnishing of the performance security or the performance securing declaration within ten (10) calendar days from receipt of Notice to Execute Framework Agreement.

17.1. The BAC shall open the Bids in public at the time, on the date, and at the place specified in paragraph 9 of the **IB**. The Bidders' representatives who are present shall sign a register evidencing their attendance. In case videoconferencing, webcasting or other similar technologies will be used, attendance of participants shall likewise be recorded by the BAC Secretariat.

In case the Bids cannot be opened as scheduled due to justifiable reasons, the rescheduling requirements under Section 29 of the 2016 revised IRR of RA No. 9184 shall prevail.

17.2. The preliminary examination of bids shall be governed by Section 30 of the 2016 revised IRR of RA No. 9184.

#### 18. Domestic Preference

18.1. The Procuring Entity will grant a margin of preference for the purpose of comparison of Bids in accordance with Section 43.1.2 of the 2016 revised IRR of RA No. 9184.

#### 19. Detailed Evaluation and Comparison of Bids

- 19.1. The Procuring Entity's BAC shall immediately conduct a detailed evaluation of all Bids rated "passed," using non-discretionary pass/fail criteria. The BAC shall consider the conditions in the evaluation of Bids under Section 32.2 of the 2016 revised IRR of RA No. 9184.
- 19.2. If the Project allows partial bids, bidders may submit a proposal on any of the lots or items, and evaluation will be undertaken on a per lot or item basis, as the case maybe. In this case, the Bid Security as required by **ITB** Clause 14 shall be submitted for each lot or item separately.
- 19.3. The descriptions of the lots or items shall be indicated in **Section VII** (**Technical Specifications**), although the ABCs of these lots or items are indicated in the **BDS** for purposes of the NFCC computation pursuant to Section 23.4.2.6 of the 2016 revised IRR of RA No. 9184. The NFCC must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder.
- 19.4. The Project shall be awarded as **one Project having several items grouped** into several lots, which shall be awarded as separate contracts per lot.
- 19.5. Except for bidders submitting a committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation, all Bids must include the NFCC computation pursuant to Section 23.4.1.4 of the 2016 revised IRR of RA No. 9184, which must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder. For bidders submitting the committed Line of Credit, it must be at least equal to ten percent (10%) of the ABCs for all the lots or items participated in by the prospective Bidder.

#### 20. Post-Qualification

20.1. Within a non-extendible period of five (5) calendar days from receipt by the Bidder of the notice from the BAC that it submitted the Lowest Calculated Bid, the Bidder shall submit its latest income and business tax returns filed and paid through the BIR Electronic Filing and Payment System (eFPS) and other appropriate licenses and permits required by law and stated in the **BDS**.

#### 21. Signing of the Contract

21.1. The documents required in Section 37.2 of the 2016 revised IRR of RA No. 9184 shall form part of the Contract. Additional Contract documents are indicated in the **BDS**.

### Section III. Bid Data Sheet

#### **Notes on the Bid Data Sheet**

The Bid Data Sheet (BDS) consists of provisions that supplement, amend, or specify in detail, information, or requirements included in the ITB found in Section II, which are specific to each procurement.

This Section is intended to assist the Procuring Entity in providing the specific information in relation to corresponding clauses in the ITB and has to be prepared for each specific procurement.

The Procuring Entity should specify in the BDS information and requirements specific to the circumstances of the Procuring Entity, the processing of the procurement, and the bid evaluation criteria that will apply to the Bids. In preparing the BDS, the following aspects should be checked:

- a. Information that specifies and complements provisions of the ITB must be incorporated.
- b. Amendments and/or supplements, if any, to provisions of the ITB as necessitated by the circumstances of the specific procurement, must also be incorporated.

## **Bid Data Sheet**

ITB Clause					
	For this purpose, contracts similar to the Project shall be:				
5.3	a. A project is similar in nature it involves goods or services of the same nature and complexity ad the subject matter of the procurement. For SLCC with multiple scopes only those scope of works similar in nature will be considered for purposes of the 50% limit.				
		ompleted with		(5) years prior to the deadling	ne for the submission
7.1	Subcontr	acting is not a	llowed.		
12	Trinidad	Campus o	or the	be quoted DDP <i>Benguet S</i> applicable International et.	•
14.1	<ul> <li>(INCOTERMS) for this Project.</li> <li>The bid security shall be in the form of a Bid Securing Declaration, or any of the following forms and amounts: <ul> <li>a. The amount of not less than <i>Php. 29,196.00</i> if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit; or</li> <li>b. The amount of not less than <i>Php.72,990.00</i>, if bid security is in Surety</li> </ul> </li> </ul>				
15	Bond.  The Procuring Entity may request additional hard copies and/or electronic copies of the Bid. Hence, each bidder shall submit 1 copy of original and 2 copies of the first and second components of its bids marked as original, copy 1 and copy 2, respectively.				
	** in the original copy of the bid: All the photocopied documents must be certified as true copy indicating the Name and Position of the signatory.				
	ITEM NO.	QUANTITY	UNIT	DESCRIPTION	Approved Budget for the Contract (ABC) (PhP)
19.3	1.	1	lot	Procurement of Supplies, Equipment and Materials with Installation Services for the Network Infrastructure and last Mile Fiber Optic Cabling	1,459,800.00  Php 1,459,800.00
20				l ax returns filed and paid th onic Filing System (eFPS).	rough the Bureau of

20.2	For all items must be brand new and indicate make/brand must have existed in the market with good records in the past 7 years.
21.2	None

## Section IV. General Conditions of Contract

#### **Notes on the General Conditions of Contract**

The General Conditions of Contract (GCC) in this Section, read in conjunction with the Special Conditions of Contract in Section V and other documents listed therein, should be a complete document expressing all the rights and obligations of the parties.

Matters governing performance of the Supplier, payments under the contract, or matters affecting the risks, rights, and obligations of the parties under the contract are included in the GCC and Special Conditions of Contract.

Any complementary information, which may be needed, shall be introduced only through the Special Conditions of Contract.

#### 1. Scope of Contract

This Contract shall include all such items, although not specifically mentioned, that can be reasonably inferred as being required for its completion as if such items were expressly mentioned herein. All the provisions of RA No. 9184 and its 2016 revised IRR, including the Generic Procurement Manual, and associated issuances, constitute the primary source for the terms and conditions of the Contract, and thus, applicable in contract implementation. Herein clauses shall serve as the secondary source for the terms and conditions of the Contract.

This is without prejudice to Sections 74.1 and 74.2 of the 2016 revised IRR of RA No. 9184 allowing the GPPB to amend the IRR, which shall be applied to all procurement activities, the advertisement, posting, or invitation of which were issued after the effectivity of the said amendment.

Additional requirements for the completion of this Contract shall be provided in the **Special Conditions of Contract (SCC).** 

#### 2. Advance Payment and Terms of Payment

- 2.1. Advance payment of the contract amount is provided under Annex "D" of the revised 2016 IRR of RA No. 9184.
- 2.2. The Procuring Entity is allowed to determine the terms of payment on the partial or staggered delivery of the Goods procured, provided such partial payment shall correspond to the value of the goods delivered and accepted in accordance with prevailing accounting and auditing rules and regulations. The terms of payment are indicated in the **SCC**.

#### 3. Performance Security

Within ten (10) calendar days from receipt of the Notice of Award by the Bidder from the Procuring Entity but in no case later than the signing of the Contract by both parties, the successful Bidder shall furnish the performance security in any of the forms prescribed in Section 39 of the 2016 revised IRR of RA No. 9184.

#### 4. Inspection and Tests

The Procuring Entity or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Project specifications at no extra cost to the Procuring Entity in accordance with the Generic Procurement Manual. In addition to tests in the SCC, Section VII (Technical Specifications) shall specify what inspections and/or tests the Procuring Entity requires, and where they are to be conducted. The Procuring Entity shall notify the Supplier in writing, in a timely manner, of the identity of any representatives retained for these purposes.

All reasonable facilities and assistance for the inspection and testing of Goods, including access to drawings and production data, shall be provided by the Supplier to the authorized inspectors at no charge to the Procuring Entity.

#### 5. Warranty

- In order to assure that manufacturing defects shall be corrected by the Supplier, a warranty shall be required from the Supplier as provided under Section 62.1 of the 2016 revised IRR of RA No. 9184.
- 5.2 The Procuring Entity shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall, repair or replace the defective Goods or parts thereof without cost to the Procuring Entity, pursuant to the Generic Procurement Manual.

#### 6. Liability of the Supplier

The Supplier's liability under this Contract shall be as provided by the laws of the Republic of the Philippines.

If the Supplier is a joint venture, all partners to the joint venture shall be jointly and severally liable to the Procuring Entity.

## Section V. Special Conditions of Contract

#### **Notes on the Special Conditions of Contract**

Similar to the BDS, the clauses in this Section are intended to assist the Procuring Entity in providing contract-specific information in relation to corresponding clauses in the GCC found in Section IV.

The Special Conditions of Contract (SCC) complement the GCC, specifying contractual requirements linked to the special circumstances of the Procuring Entity, the Procuring Entity's country, the sector, and the Goods purchased. In preparing this Section, the following aspects should be checked:

- a. Information that complements provisions of the GCC must be incorporated.
- b. Amendments and/or supplements to provisions of the GCC as necessitated by the circumstances of the specific purchase, must also be incorporated.

However, no special condition which defeats or negates the general intent and purpose of the provisions of the GCC should be incorporated herein.

**Special Conditions of Contract** 

	Special Conditions of Contract		
GCC Clause			
1	Delivery and Documents –		
	"The delivery terms applicable to this Contract are delivered to <i>Benguet State University, Km.5, La Trinidad, Benguet</i> . Risk and title will pass from the Supplier to the Procuring Entity upon receipt and final acceptance of the Goods at their final destination."  Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in Section VI (Schedule of Requirements).  For purposes of this Clause the Procuring Entity's Representative at the Project		
	Site is Mr. Bryan C. Bangnan, Supervising Administrative Officer (SAO), Supply and Property Management Office (SPMO), Administration Building, Benguet State University, La Trinidad, Benguet, Province.		
	Incidental Services –		
	The Supplier is required to provide all of the following services, including additional services, if any, specified in Section VI. Schedule of Requirements:		
	<ul><li>a. performance or supervision of on-site assembly and/or start-up of the supplied Goods;</li><li>b. furnishing of tools required for assembly and/or maintenance of the</li></ul>		
	supplied Goods; c. furnishing of a detailed operations and maintenance manual for each		
	appropriate unit of the supplied Goods; d. performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and		
	e. training of the Procuring Entity's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied Goods.		
	The Contract price for the Goods shall include the prices charged by the Supplier for incidental services and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.		
	Spare Parts –		
	The Supplier is required to provide all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:		

- 1. such spare parts as the Procuring Entity may elect to purchase from the Supplier, provided that this election shall not relieve the Supplier of any warranty obligations under this Contract; and
- 2. in the event of termination of production of the spare parts:
  - i. advance notification to the Procuring Entity of the pending termination, in sufficient time to permit the Procuring Entity to procure needed requirements; and
  - ii. following such termination, furnishing at no cost to the Procuring Entity, the blueprints, drawings, and specifications of the spare parts, if requested.

The spare parts and other components required are listed in **Section VI** (**Schedule of Requirements**) and the costs thereof are included in the contract price.

The Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spare parts or components for the Goods for a period of **five** (5) **years.** 

Spare parts or components shall be supplied as promptly as possible, but in any case, within fifteen (15) days of placing the order.

#### Packaging -

The Supplier shall provide such packaging of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in this Contract. The packaging shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packaging case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.

The packaging, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified below, and in any subsequent instructions ordered by the Procuring Entity.

The outer packaging must be clearly marked on at least four (4) sides as follows:

Name of the Procuring Entity Name of the Supplier Contract Description Final Destination Gross weight Any special lifting instructions Any special handling instructions Any relevant HAZCHEM classifications

A packaging list identifying the contents and quantities of the package is to be placed on an accessible point of the outer packaging if practical. If not practical the packaging list is to be placed inside the outer packaging but outside the secondary packaging.

#### Transportation -

Where the Supplier is required under Contract to deliver the Goods CIF, CIP, or DDP, transport of the Goods to the port of destination or such other named place of destination in the Philippines, as shall be specified in this Contract, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price.

Where the Supplier is required under this Contract to transport the Goods to a specified place of destination within the Philippines, defined as the Project Site, transport to such place of destination in the Philippines, including insurance and storage, as shall be specified in this Contract, shall be arranged by the Supplier, and related costs shall be included in the contract price.

Where the Supplier is required under Contract to deliver the Goods CIF, CIP or DDP, Goods are to be transported on carriers of Philippine registry. In the event that no carrier of Philippine registry is available, Goods may be shipped by a carrier which is not of Philippine registry provided that the Supplier obtains and presents to the Procuring Entity certification to this effect from the nearest Philippine consulate to the port of dispatch. In the event that carriers of Philippine registry are available but their schedule delays the Supplier in its performance of this Contract the period from when the Goods were first ready for shipment and the actual date of shipment the period of delay will be considered force majeure.

The Procuring Entity accepts no liability for the damage of Goods during transit other than those prescribed by INCOTERMS for DDP deliveries. In the case of Goods supplied from within the Philippines or supplied by domestic Suppliers risk and title will not be deemed to have passed to the Procuring Entity until their receipt and final acceptance at the final destination.

#### **Intellectual Property Rights –**

The Supplier shall indemnify the Procuring Entity against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods or any part thereof.

## Section VI. Schedule of Requirements

The delivery schedule expressed as weeks/months stipulates hereafter a delivery date which is the date of delivery to the project site.

Item Number	Description	Quantity	Total	Delivered, Weeks/Months
1.	Procurement of Supplies, Equipment and Materials with Installation Services for the Network Infrastructure and last Mile Fiber Optic Cabling	1 lot	1,459,800.00	30 Calendar Days upon receipt of PO/NTP
	***nothing follows***			

## Section VII. Technical Specifications

#### **Notes for Preparing the Technical Specifications**

A set of precise and clear specifications is a prerequisite for Bidders to respond realistically and competitively to the requirements of the Procuring Entity without qualifying their Bids. In the context of Competitive Bidding, the specifications (*e.g.* production/delivery schedule, manpower requirements, and after-sales service/parts, descriptions of the lots or items) must be prepared to permit the widest possible competition and, at the same time, present a clear statement of the required standards of workmanship, materials, and performance of the goods and services to be procured. Only if this is done will the objectives of transparency, equity, efficiency, fairness, and economy in procurement be realized, responsiveness of bids be ensured, and the subsequent task of bid evaluation and post-qualification facilitated. The specifications should require that all items, materials and accessories to be included or incorporated in the goods be new, unused, and of the most recent or current models, and that they include or incorporate all recent improvements in design and materials unless otherwise provided in the Contract.

Samples of specifications from previous similar procurements are useful in this respect. The use of metric units is encouraged. Depending on the complexity of the goods and the repetitiveness of the type of procurement, it may be advantageous to standardize the General Technical Specifications and incorporate them in a separate subsection. The General Technical Specifications should cover all classes of workmanship, materials, and equipment commonly involved in manufacturing similar goods. Deletions or addenda should then adapt the General Technical Specifications to the particular procurement.

Care must be taken in drafting specifications to ensure that they are not restrictive. In the specification of standards for equipment, materials, and workmanship, recognized Philippine and international standards should be used as much as possible. Where other particular standards are used, whether national standards or other standards, the specifications should state that equipment, materials, and workmanship that meet other authoritative standards, and which ensure at least a substantially equal quality than the standards mentioned, will also be acceptable. The following clause may be inserted in the Special Conditions of Contract or the Technical Specifications.

#### Sample Clause: Equivalency of Standards and Codes

Wherever reference is made in the Technical Specifications to specific standards and codes to be met by the goods and materials to be furnished or tested, the provisions of the latest edition or revision of the relevant standards and codes shall apply, unless otherwise expressly stated in the Contract. Where such standards and codes are national or relate to a particular country or region, other authoritative standards that ensure substantial equivalence to the standards and codes specified will be acceptable.

Reference to brand name and catalogue number should be avoided as far as possible; where unavoidable they should always be followed by the words "or at least equivalent." References to brand names cannot be used when the funding source is the GOP.

Where appropriate, drawings, including site plans as required, may be furnished by the Procuring Entity with the Bidding Documents. Similarly, the Supplier may be requested to provide drawings or samples either with its Bid or for prior review by the Procuring Entity during contract execution.

Bidders are also required, as part of the technical specifications, to complete their statement of compliance demonstrating how the items comply with the specification.

In case of Renewal of Regular and Recurring Services, the Procuring Entity must indicate here the technical requirements for the service provider, which must include the set criteria in the conduct of its performance evaluation.

## **Technical Specifications**

Item	Specification	Statement of Compliance
Lot		[Bidders must state here either "Comply" or "Not Comply" against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of "Comply" or "Not Comply" must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer's un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidder's statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the applicable laws and issuances.]
1.	Procurement of Supplies, Equipment and Materials with Installation Services for the Network Infrastructure	
	and last Mile Fiber Optic	
	Cabling	
	1. Indoor Network Cabling (page 11-12 of TOR)	
	2. Network Equipment (page 12-15 of TOR)	
	3. Outdoor Network Cabling (page 16 of TOR)	

4. Scope of Work as Service	
Provider (page 16 of TOR)	
5. Qualification Requirements (page 16 of TOR)	
6. Technical Requirements (page 16- 17 of the TOR)	
7.After Sales Service (page 17 of the TOR)	
8. Deliverables (page 17of the TOR)	
XXXX for accuracy and Clarifications refer to list as part of the bid document or the BAC Secretariat	

# Section VIII. Checklist of Technical and Financial Documents

#### **Notes on the Checklist of Technical and Financial Documents**

The prescribed documents in the checklist are mandatory to be submitted in the Bid, but shall be subject to the following:

- a. GPPB Resolution No. 09-2020 on the efficient procurement measures during a State of Calamity or other similar issuances that shall allow the use of alternate documents in lieu of the mandated requirements; or
- b. The mandatory provisions of Required Forms shall be considered as per GPPB Circular No. 4-2020
- c. Any subsequent GPPB issuances adjusting the documentary requirements after the effectivity of the adoption of the PBDs.

The BAC shall be checking the submitted documents of each Bidder against this checklist to ascertain if they are all present, using a non-discretionary "pass/fail" criterion pursuant to Section 30 of the 2016 revised IRR of RA No. 9184.

## **Checklist of Technical and Financial Documents**

#### I. TECHNICAL COMPONENT ENVELOPE

7	1 D	Class "A" Documents
<u>Leg</u>	<u>(al Do</u> (a)	<ul> <li><u>cuments</u></li> <li>Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages)</li> <li>in accordance with Section 8.5.2 of the IRR;</li> </ul>
<u>Tec</u>	chnica	l Documents
	(b)	Statement of the prospective bidder of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid; <b>and</b>
	(c)	Statement of the bidder's Single Largest Completed Contract (SLCC) similar to the contract to be bid, except under conditions provided for in Sections 23.4.1.3 and 23.4.2.4 of the 2016 revised IRR of RA No. 9184, within the relevant period as provided in the Bidding Documents; and
	(d)	Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission or Original copy of Notarized Bid Securing Declaration; and
	(e)	Conformity with the Technical Specifications, which may include production/delivery schedule, manpower requirements, and/or aftersales/parts, if applicable; and
	(f)	Original duly signed Omnibus Sworn Statement (OSS) <u>and</u> if applicable Original Notarized Secretary's Certificate in case of a corporation partnership, or cooperative; or Original Special Power of Attorney of all members of the joint venture giving full power and authority to its officer to sign the OSS and do acts to represent the Bidder.
in	ancia	l Documents
	(g)	The prospective bidder's computation of Net Financial Contracting Capacity (NFCC) <b>or A</b> committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation.
		Class "B" Documents
	(h)	If applicable, a duly signed joint venture agreement (JVA) in case the joint venture is already in existence <u>or</u> duly notarized statements from all the potential joint venture partners stating that they will enter into and abide by the provisions of the JVA in the instance that the bid is successful.
FIN	ANC	IAL COMPONENT ENVELOPE
`	(i)	Original of duly signed and accomplished Financial Bid Form; and
	(j)	Original of duly signed and accomplished Price Schedule(s).

#### Notes:

The prescribed documents in the checklist are mandatory to be submitted in the Bid, but shall be subject to the following:

- a. This checklist is only a guide to the prospective bidder/s. Each prospective bidder shall take responsibility to ensure the completeness of its submission after taking the steps to carefully examine all of the Bidding Documents and its amendments.
- b. All photocopied documents shall be marked "certified true copy of the original document" with corresponding signature over printed name of the bidder or its duly authorized representative and indicating the position in the company.
- c. Bidder should follow the sequence of items in the checklist of documents for submission and to use tabs to facilitate the inspection process.
- d. Incomplete required documents and expired licenses/ permit shall be a ground for disqualification.
- e. The documents that will be submitted by the bidder shall be used for procurement purposes only.
- f. For items offered, kindly attach brochures, if applicable.

# Section IX. Bidding Forms

- 1. Bid Form
- 2. Price Schedule for Goods Offered from Abroad
- 3. Price Schedule for Goods Offered from Within the Philippines
- 4. Bid Securing Declaration Form
- 5. Omnibus Sworn Statement (Revised)
- 6. Net Financial Contracting Capacity (NFCC) Form
- 7. Statement of Single Largest Completed Contract (SLCC) Form
- 8. Statement of All Ongoing Government & Private Contracts Form

# **Bid Form for the Procurement of Goods**

[shall be submitted with the Bid]

BID FORM									
Date :  Project Identification No. :									
To: [name and address of Procuring Entity]									
Having examined the Philippine Bidding Documents (PBDs) including the Supplemental or Bid Bulletin Numbers [insert numbers], the receipt of which is hereby duly acknowledged, we, the undersigned, offer to [supply/deliver/perform] [description of the Goods] in conformity with the said PBDs for the sum of [total Bid amount in words and figures] or the total calculated bid price, as evaluated and corrected for computational errors, and other bid modifications in accordance with the Price Schedules attached herewith and made part of this Bid. The total bid price includes the cost of all taxes, such as, but not limited to: [specify the applicable taxes, e.g. (i) value added tax (VAT), (ii) income tax, (iii) local taxes, and (iv) other fiscal levies and duties], which are itemized herein or in the Price Schedules,									
If our Bid is accepted, we undertake:									
<ul> <li>to deliver the goods in accordance with the delivery schedule specified in the Schedule of Requirements of the Philippine Bidding Documents (PBDs);</li> </ul>									
b. to provide a performance security in the form, amounts, and within the times prescribed in the PBDs;									
c. to abide by the Bid Validity Period specified in the PBDs and it shall remain binding upon us at any time before the expiration of that period.									
[Insert this paragraph if Foreign-Assisted Project with the Development Partner: Commissions or gratuities, if any, paid or to be paid by us to agents relating to this Bid, and to contract execution if we are awarded the contract, are listed below:									
Name and address Amount and Purpose of of agentCurrencyCommission or gratuity									

Until a formal Contract is prepared and executed, this Bid, together with your written acceptance thereof and your Notice of Award, shall be binding upon us.

(if none, state "None") ]

We understand that you are not bound to accept the Lowest Calculated Bid or any Bid you may receive.

We certify/confirm that we comply with the eligibility requirements pursuant to the PBDs.

The undersigned is authorized to submit the bid on behalf of [name of the bidder] as evidenced by the attached [state the written authority].

We acknowledge that failure to sign each and every page of this Bid Form, including the attached Schedule of Prices, shall be a ground for the rejection of our bid.

Name:
Legal capacity:
Signature:
Duly authorized to sign the Bid for and behalf of:
Date:

# Price Schedule for Goods Offered from Abroad

[shall be submitted with the Bid if bidder is offering goods from Abroad]

ame	of Bidder		Project ID No Page								
1	2	3	4	5	6	7	8	9			
Item	Description	Country of origin	Quantity	Unit price CIF port of entry (specify port) or CIP named place (specify border point or place of destination)	Total CIF or CIP price per item (col. 4 x 5)	Unit Price Delivered Duty Unpaid (DDU)	Unit price Delivered Duty Paid (DDP)	Total Price delivered DDP (col 4 x 8)			
egal (											

# Price Schedule for Goods Offered from Within the Philippines [shall be submitted with the Bid if bidder is offering goods from within the Philippines]

# For Goods Offered from Within the Philippines

Name of Bidder				Projec	ct ID No		Page	_of
1 2	3	4	5	6	7	8	9	10
Item Description	Country of origin	Quantity	Unit price EXW per item	Transportation and all other costs incidental to delivery, per item	Sales and other taxes payable if Contract is awarded, per item	Cost of Incidental Services, if applicable, per item	Total Price, per unit  (col 5+6+7+8 )	Total Price delivered Final Destination (col 9) x (col 4)
Name: Legal Capacity: Signature:								

Duly authorized to sign the Bid for and behalf of:

# **Omnibus Sworn Statement (Revised)**

[shall be submitted with the Bid]

REPUBLIC OF THE PHILIPPINES	)	
CITY/MUNICIPALITY OF	) :	S.S

#### **AFFIDAVIT**

- I, [Name of Affiant], of legal age, [Civil Status], [Nationality], and residing at [Address of Affiant], after having been duly sworn in accordance with law, do hereby depose and state that:
- 1. [Select one, delete the other:]

[If a sole proprietorship:] I am the sole proprietor or authorized representative of [Name of Bidder] with office address at [address of Bidder];

[If a partnership, corporation, cooperative, or joint venture:] I am the duly authorized and designated representative of [Name of Bidder] with office address at [address of Bidder];

2. [Select one, delete the other:]

[If a sole proprietorship:] As the owner and sole proprietor, or authorized representative of [Name of Bidder], I have full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for [Name of the Project] of the [Name of the Procuring Entity], as shown in the attached duly notarized Special Power of Attorney;

[If a partnership, corporation, cooperative, or joint venture:] I am granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for [Name of the Project] of the [Name of the Procuring Entity], as shown in the attached [state title of attached document showing proof of authorization (e.g., duly notarized Secretary's Certificate, Board/Partnership Resolution, or Special Power of Attorney, whichever is applicable;)];

- 3. [Name of Bidder] is not "blacklisted" or barred from bidding by the Government of the Philippines or any of its agencies, offices, corporations, or Local Government Units, foreign government/foreign or international financing institution whose blacklisting rules have been recognized by the Government Procurement Policy Board, by itself or by relation, membership, association, affiliation, or controlling interest with another blacklisted person or entity as defined and provided for in the Uniform Guidelines on Blacklisting;
- 4. Each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the original, complete, and all statements and information provided therein are true and correct;
- 5. [Name of Bidder] is authorizing the Head of the Procuring Entity or its duly authorized representative(s) to verify all the documents submitted;
- 6. [Select one, delete the rest:]

[If a sole proprietorship:] The owner or sole proprietor is not related to the Head of the Procuring Entity, Procurement Agent if engaged, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

[If a partnership or cooperative:] None of the officers and members of [Name of Bidder] is related to the Head of the Procuring Entity, Procurement Agent if engaged, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

[If a corporation or joint venture:] None of the officers, directors, and controlling stockholders of [Name of Bidder] is related to the Head of the Procuring Entity, Procurement Agent if engaged, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

- 7. [Name of Bidder] complies with existing labor laws and standards; and
- 8. [Name of Bidder] is aware of and has undertaken the responsibilities as a Bidder in compliance with the Philippine Bidding Documents, which includes:
  - a. Carefully examining all of the Bidding Documents;
  - b. Acknowledging all conditions, local or otherwise, affecting the implementation of the Contract:
  - c. Making an estimate of the facilities available and needed for the contract to be bid, if any; and
  - d. Inquiring or securing Supplemental/Bid Bulletin(s) issued for the [Name of the Project].
- 9. [Name of Bidder] did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.
- 10. In case advance payment was made or given, failure to perform or deliver any of the obligations and undertakings in the contract shall be sufficient grounds to constitute criminal liability for Swindling (Estafa) or the commission of fraud with unfaithfulness or abuse of confidence through misappropriating or converting any payment received by a person or entity under an obligation involving the duty to deliver certain goods or services, to the prejudice of the public and the government of the Philippines pursuant to Article 315 of Act No. 3815 s. 1930, as amended, or the Revised Penal Code.

IN	WITNESS	WHEREOF,	I	have	hereunto	set	my	hand	this	 day	of	,	20	at
	,	Philippines.												

# [Insert NAME OF BIDDER OR ITS AUTHORIZED REPRESENTATIVE]

[Insert signatory's legal capacity]
Affiant

# [Jurat]

[Format shall be based on the latest Rules on Notarial Practice]

# **Bid Securing Declaration Form**

[shall be submitted with the Bid if bidder opts to provide this form of bid security]

REPUBLIC OF THE PHILIPPINES)	
•	\ C C
CITY OF	) S.S.

# **BID SECURING DECLARATION Project Identification No.:** [Insert number]

To: [Insert name and address of the Procuring Entity]

I/We, the undersigned, declare that:

- 1. I/We understand that, according to your conditions, bids must be supported by a Bid Security, which may be in the form of a Bid Securing Declaration.
- 2. I/We accept that: (a) I/we will be automatically disqualified from bidding for any procurement contract with any procuring entity for a period of two (2) years upon receipt of your Blacklisting Order; and, (b) I/we will pay the applicable fine provided under Section 6 of the Guidelines on the Use of Bid Securing Declaration, within fifteen (15) days from receipt of the written demand by the procuring entity for the commission of acts resulting to the enforcement of the bid securing declaration under Sections 23.1(b), 34.2, 40.1 and 69.1, except 69.1(f), of the IRR of RA No. 9184; without prejudice to other legal action the government may undertake.
- 3. I/We shall enter into contract with the PE and furnish the required performance security within ten (10) calendar days, from receipt of the Notice of Award.
- 4. I/We understand that this Bid Securing Declaration shall cease to be valid on the following circumstances:
  - a. Upon expiration of the bid validity period, or any extension thereof pursuant to your request:
  - b. I am/we are declared ineligible or post-disqualified upon receipt of your notice to such effect, and (i) I/we failed to timely file a request for reconsideration or (ii) I/we filed a waiver to avail of said right; and
  - c. I am/we are declared the bidder with the Lowest Calculated Responsive Bid, and I/we have furnished the performance security and signed the Contract.

IN WITNESS WHEREOF, I/We have hereunto set my/our hand/s this \_\_\_\_ day of [month] [year] at [place of execution].

[Insert NAME OF BIDDER OR ITS AUTHORIZED REPRESENTATIVE]
[Insert signatory's legal capacity]
Affiant

#### [Jurat]

[Format shall be based on the latest Rules on Notarial Practice]

Project Identification No								
Project Title: ABC of the Project/Lot/Item to be Bid:								
CERTIFICATE OF NET FINANCIAL CONTRACTING CAPACITY (NFCC) (Please show computation)								
This is to certify that our Net Financial Cor Pesos(P) is at goods/services/works we are bidding. The amount is	least equal to the total ceiling price of the							
NFCC = (CA-CL) (15) - C								
Where:								
CA = Current Assets CL = Current Liabilities C = value of all outstanding or uncompleted portice contracts, including awarded contracts yet to be started.								
Issued this day of, 20_	<u></u> .							
N	Company Authorized Representative) NAME: ESIGNATION:							
Note: Kindly attach supporting documents.								

Procuring Entity: Bengue Name of Project: Location of the Project:		iversity					
	Statemen	nt of Single Larges	t Completed	l Contract (S	LCC) which	is Similar in Na	ture
Business Name: Business Address:							
Name of Contract	Date of Contract	a. Owner's Name b. Address c. Telephone Nos. d. Contact Person e. Email Address	Contract Amount	Contract Duration	Date of Delivery	Date of Acceptance (Sales Invoice/OR)	Description/s of the similar project/s
GOVERNMENT							
PRIVATE							
Note: Kindly attach docum	ments to su	pport the above state	ement.				
Submitted by :	nt Name and S	Signature					
Date :							

Procuring Entity: Beng Name of Project: Location of the Project		Iniversity						
Statement	t of All Or	ngoing Go	vernment & Priva	te Contracts Includin	ng Contracts Av	varded but l	Not Yet Starte	ed
Business Name: Business Address:								
			a. Owner's Name b. Address			Partia	l Delivery	Value of Outstanding
Name of Contract	Date of Contract	Contract Duration	c. Telephone Nos. d. Contact Person e. Email Address	Kinds of Goods	Contract Amount	Date	Amount	Contract/Undelivered Portion
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I) (F-H)
GOVERNMENT								
<u>PRIVATE</u>								
Note: Kindly attach doc	uments to	support the	e above statements.					
Submitted by :	int Name and	l Signature						

Date



# BENGUET STATE UNIVERSITY RESEARCH AND EXTENSION BUILDING NETWORK INFRASTRUCTURE

#### Mission Statement

Our mission is to provide a robust, readily available, stable, and high-speed campus computer network capable of handling the increasing data demand required by personnel of CORCARRD BSU.

#### **Abstract**

This project's purpose is to design the computer network of CORCARRD BSU based on their current needs and services.

# Statement of Need

Creating a network focused on equipment capable of tackling increasing data needs will enable the CORCARRD BSU to equip itself in this new data-driven age.

# **Project Rationale**

The ICT Office aims to provide CORCARRD BSU with a faster, more reliable, robust, and secure computer network. This project requires upgrading the existing lines and equipment located therein.

# **Network Needs Analysis**

**Data Types.** Reports, graphs, research papers, research data, bulletins, announcements, personnel profiles, computer-aided drawings, audio, and video calls, and files will be served by the network.

**Data Sources.** Data will be created, edited, and used at all end stations/devices on the network. The data will be produced using popular Windows-based desktop applications. Others will be made using online applications specifically, Facebook Live, Youtube Live, Zoom, Google Meet, and the rest of the G Suite for Education collection of applications.

**Expected Internet Traffic Load.** Below is a table of the locations within the campus and the number of expected internet traffic loads therein at any given time. Desktop and laptop computers (hereinafter referred to as PC or PCs), as well as smartphones, phablets, and tablets (hereinafter referred to as mobiles), are the devices that will be used on the network.

OFFICE	# of Users	EXPECTED LOAD			
CARNATION HALL	Varied (30 max)	4 PCs, 30 mobiles			
CORCARRD	20	20 PCs, 20 mobiles, 4 printers			
EVERLASTING HALL	Varied (120 max)	60 PCs, 120 mobiles			
TOTALS	20 users +170 users when Function Halls are maxed out.	20 PCs, 20 mobiles, 4 printers +64 PCs, and 150 Mobiles when the Function Halls are maxed out.			

Table 1. Network loads per office.

**Existing Internet Bandwidth.** The current bandwidth used at the location is a single, non-guaranteed internet connection that bursts up to 200Mbps.

**Calculations for Required Internet Bandwidth.** By the rule of thumb, it is assumed that each user has 1.2 active devices on the network. Thus, we can state that **24 active devices** are on the network at any given time. Whenever the Function halls require the internet, however, this increases to **228 active devices** on the network.

The table below shows the needed bandwidth and required throughput for most web applications.

Web Application	BW Required
Chatting / Messaging (e.g. messenger, Viber)	200 Kbits/s
Email	300 Kbits/s
Social Media	500 Kbits/s
VoIP Calls (purely audio, e.g. Skype)	300 Kbits/s
Video Call (e.g. Skype, FB Video Call, Facetime)	1.5 Mbits/s
High-Quality Group Video Call @ 480p (e.g. Zoom, Google Meet)	3 Mbits/s
HD Quality Group Video Call @ 720p (e.g. Zoom, Google Meet)	5 Mbits/s
Web Browsing	500 Kbits/s
File Sharing (e.g. Google Drive, Dropbox)	2 Mbits/s
High-Quality Video Streaming @ 480p (e.g. FB Live, YouTube Live)	3 Mbits/s
HD Quality Video Streaming @ 720p (e.g. FB Live, YouTube Live)	5 Mbits/s

Table 2. Web Application bandwidth requirements.

**Minimum Required Internet Bandwidth.** Assuming that the office would be using High-Quality Group Video Calls, requiring **5 Mbps of bandwidth**, and adding all active devices that would either be on social media or browsing the web would require **24 Mbps of bandwidth**, the minimum required bandwidth would then be **29 Mbps**.

\*\*NOTE. Required Bandwidth indicated herein refers to the minimum dedicated/guaranteed bandwidth provided by the Internet Service Provider and not the maximum burstable bandwidth.

*Latency.* The latency for such a connection should not exceed

- a. 32 ms within the Philippines
- b. 100 ms within Asia
- c. 200 ms for the rest of the world

**Security Requirements.** This cabling system's installation, cable specifications, and peripherals must comply with ISO standards. All offices will be equipped with data cabinets with locks and keys.

Compatibility Requirements. Maintaining consistency by purchasing Mikrotik brand (Items B.1, B.2, B.3, B.4, B.11, B.12) of equipment for our network infrastructure ensures seamless integration with the BSU Research and Extension's existing setup, leveraging our team's familiarity with Mikrotik's systems to enhance operational efficiency and reduce training costs. This approach offers cost savings through discounts, simplified support, and unified warranty management, while proven reliability and optimized performance maintain network stability. Additionally, Mikrotik's scalable solutions and future-proof technology align with our growth needs, and consistent security policies enhance our overall network security. Therefore, continuing with Mikrotik is a strategic, efficient, and cost-effective decision for the university.

**Reliability Requirements.** To fulfill user expectations and industry standards, the building network is expected to operate at 99.9% uptime. Redundancy will be implemented between fiber-optic switches. Data cabinets will be provided with electrical protection and a UPS. Below are the details for each link. The network will be monitored locally using a

**Storage Requirement.** The network will provide a secure, robust, and reliable storage facility that will promote collaboration within offices as well as within the Research & Extension sector.

**Fiber-optic Cabling Requirements.** All fiber-optic cabling will adhere to the following standards and minimum requirements:

#### **Indoor Fiber-optic Cables:**

- a. 4-core, 850nm wavelength, multi-mode, indoor LSZH jacket armored fiber-optic cable.
- b. ANSI/TIA 568-B.3, EIA/TIA 492, RoHS Compliant
- c. Cables will be installed with cable raceways.
- d. Fiber-optic patch panels will be provided and installed in every main floor switch cabinet.
- e. Fiber-optic junction boxes will be provided and installed at every office endpoint.
- f. Fiber-optic patch cords will be provided for each office endpoint.
- g. Fiber-optics cable installations will follow ISO/IEC and EIA/TIA standards.
- h. Indoor cable installations must comply with the Philippine Electronics code.
- i. LC/UPC or SC/UPC terminated fiber-optic patch panels will be used.
- j. 1 meter-long compatible fiber-optic patch cords will be provided for every available fiber-optic pair.
- k. Warranty is 5 years minimum on materials, workmanship is 1 year.

### **Outdoor Fiber-optic Cables:**

- a. 8-core, single-mode, outdoor fiber-optic cable.
- b. Specifications for both fiber optic cables:
  - 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 nm
  - vi. Structure: Central Tube Type structure
  - vii. Loose Tube Material: PBT
  - viii. Loose Tube Diameter: 3.0±0.1mm
  - ix. Steel Wire Diameter: 1.6\*1mm
  - x. Messenger Wire Material: Phosphating Steel Wire
  - xi. Messenger Wire Thickness: 1.0±0.1mm
  - xii. Messenger Wire Diameter: 3.6±0.2mm
  - xiii. Outer Jacket: MDPE material, black
  - xiv. Outer Jacket Thickness: 1.0±0.1mm
  - xv. Cable Diameter/Height: 5.0±0.5/10.0±0.8mm
  - xvi. Minimum Static Bending Radius: 10 times cable diameter
  - xvii. Minimum Dynamic Bending Radius: 20 times cable diameter
  - xviii. Tensile Performance: 1000N
  - xix. Crush Performance: 1000N/100mm
  - xx. Operation Temperature: IEC 60794-1-2 F1,  $-40^{\circ}$ C  $\sim +70^{\circ}$ C
  - xxi. Other parameters meet standard ITU-T G.652.
- c. Support messenger wire must be grounded at both ends. Use proper grounding materials.
- d. Aerial cable installations must comply with the Philippine Electronics code.

- e. Fiber-optic patch panels will be provided and installed in every main floor switch cabinet.
- f. Fiber-optic junction boxes will be provided and installed at every office endpoint.
- g. Fiber-optic patch cords will be provided for each office endpoint.LC/UPC or SC/UPC terminated fiber-optic patch panels will be used.
- h. 1 meter-long compatible fiber-optic patch cords will be provided for every available fiber-optic pair.
- i. Warranty is 5 years minimum on materials, workmanship is 1 year.

SOURCE	DESTINATION	# OF LINKS	LENGTH (m)	REMARKS
ROUTER	2F FX Switch	2	1	XS+DA0001, direct attach FX cable
2F Data Cabinet	1F Data Cabinet	2	40	4-core FX cable, S+85DLC03D interface
2F Data Cabinet	3F Data Cabinet	2	40	4-core FX cable, S+85DLC03D interface
	TOTAL (4-CORE)	4	80	Estimated length

Table 3. Required Indoor fiber optic cable lengths.

SOURCE	DESTINATION	# OF	LENGTH	REMARKS		
OOOROL		LINKS	(m)	KLWAKKO		
R&E building	NPRCRTC	4	160	8-core FX cable, XS+31DLC10D interface		
R&E building	ICT-NOC	4	580	8-core FX cable, XS+31DLC10D interface		
R&E building	CHK building	2	250	8-core FX cable, XS+31DLC10D interface		
CHK building	ICT-NOC	2	450	8-core FX cable, XS+31DLC10D interface		
	TOTAL (8-CORE)	12	1280	Estimated length		

Table 4. Required Outdoor fiber optic cable lengths.

**Structured Cabling Requirements.** All structured cabling will adhere to the following standards and minimum requirements:

# **Copper Cabling:**

- 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 flexible PVC, 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.
- CAT6 patch cords will be provided for all patch panel ports
- CAT6 patch cords will be provided for all endpoints.

#### **Data Cabinets:**

- 42U data cabinet (similar to the image below) will be installed on the 2nd Floor and will contain or have the features listed as follows:
  - o Removable side panels.
  - Up to 600kgs weight capacity
  - o 2 standard fixed-shelf

- 2 pieces full height Vertical cable managers (left and right)
- 4 pieces 1U horizontal cable managers (24-port cabling)
- 4 exhaust fans
- 2 horizontal power distribution units (PDU) with 6 universal outlets each
- Screws. nuts & bolts
- IP20/IP30/IP40/IP50 rated
- 2 pieces, fully loaded CAT6 24-port punch-down copper patch panels complying with ANSI/TIA-568.2-D, ISO/IEC 11801-1, and EN 50173-1 Class E specifications.
- Front Perforated Arc Door for Maximum ventilation.
- Full 75% Honeycomb double-section perforation
   Rear Door for maximized ventilation.
- Castors & adjust feed
- 15U/16U wall-mounted data cabinets (similar to the image below) will each be installed on the 1st and 3rd Floors and will contain or have the features listed as follows:
  - o Removable side panels.
  - 100kgs weight capacity
  - 1 piece 1U horizontal cable managers (24-port cabling)
  - o 2 exhaust fans
  - 1 horizontal power distribution unit (PDU) with 6 universal outlets
  - o Mounting screws, nuts & bolts
  - o IP20/IP30/IP40/IP50 rated
  - 1 piece fully loaded CAT6 24-port punch-down copper patch panels complying with ANSI/TIA-568.2-D, ISO/IEC 11801-1, and EN 50173-1 Class E specifications.
- All Patch panels will be properly labeled and printed trace map stickers will be pasted behind the corresponding data cabinet's front door.
- Connect ALL data cabinets to each respective location's electrical circuit complete with an appropriately rated circuit breaker.
- All Data cabinet locks can be opened by a single master key. Multiple copies of this
  master key will be provided to the university.
- The data cabinet lock & key type shown or similar to the image below are REJECTED.







# **High-Level Network Design**



Figure 0. Outdoor Fiber-optic Network Layout

# Geolocations

ICT NOC - 16.455218477131943, 120.59023556193532

CHK - 16.45804943079982, 120.58918462216201

RnE - 16.45873648835904, 120.58801088293865

RootCrops/NPRCTC - 16.45966642240299, 120.58794708889016

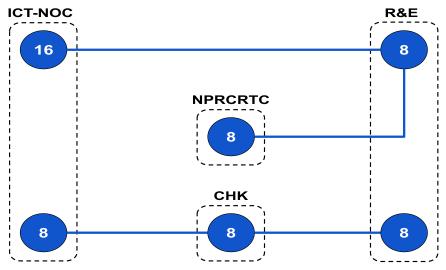


Figure 1. Outdoor Fiber-optic Network

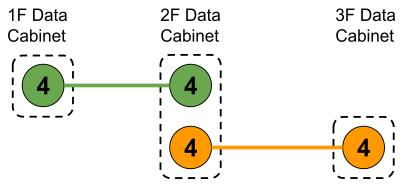


Figure 2. Indoor Fiber-optic Network

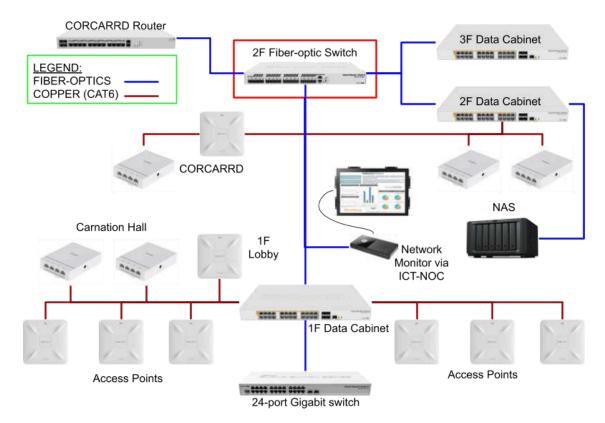


Figure 3. Indoor Copper Network

# **Detailed Design Documentation**

# **Hardware Technical Specifications:**

# Router

- Router, ARM 64 bit Architecture, 16-core 2000MHz CPU, 98DX3255 Switch Chip, RouterOS L6, 16GB RAM, 128MB NAND storage, Approximately 200,000 hours at 25C MTBF, -20°C to 60°C tested ambient temperature, IPsec hardware acceleration, 2x 100-240VAC inputs, 47-63Hz, 4x cooling fans, 83W Maximum power consumption, 13x 10/100/1000 Ethernet ports, 4x SFP+ ports, 1x RJ45 Serial port, 1x M.2 slot, CPU temperature monitor, PCB temperature monitor, Voltage monitor, CE|EAC|ROHS Certification, includes 2x IEC cords, rackmount kit.
- 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.

# Layer 3 Smart SFP+ Switch

- Layer 3 Smart Switch, 1x Gigabit Ethernet port, 16x SFP+ cages, ARM 32 bit Architecture, Dual Core 800MHz CPU, 1GB RAM, 16MB FLASH storage, CLI with TELNET, SSH, Local and Serial Console, GUI via IP address and MAC address management, RouterOS L6, 100-240VAC Dual PSU @ 44W Maximum power consumption, RJ45 Serial port, -20°C to 60°C tested ambient temperature, hardware-based STP and LACP.
- 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-site maintenance is done mainly by ICT the network
  administrator. On-call/next-business-day support must be provided by the local
  supplier/dealer.

# Layer 3 Smart PoE Switch

- Layer 3 Smart Switch, 24x Gigabit Ethernet ports, 4x SFP+ cages, ARM 32 bit Architecture, 800MHz CPU, 512MB RAM, 16MB FLASH storage, CLI with TELNET, SSH, Local and Serial Console, GUI via IP address and MAC address management, RouterOS L5, 100-240V AC Input Voltage, 494W Maximum power consumption, 2 Fans, 802.3af/at PoE Out on Ether1-Ether24, 1000mA Max out per port output (input < 30V), 450mA Max out per port output (input >30V), 30A Max Total Out, RJ45 Serial port, 1U rackmount case, -20°C to 60°C tested ambient temperature.
- 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.

#### Layer 3 Smart Gigabit Switch

- Layer 3 Smart Switch, 24x Gigabit Ethernet ports, 2x SFP+ cages, ARM 32 bit Architecture, 800MHz CPU, 512MB RAM, 16MB FLASH storage, CLI with TELNET, SSH, Local and Serial Console, GUI via IP address and MAC address management, RouterOS L5, Passive PoE In, 10-30V DC Input Voltage, 24W Maximum power consumption, RJ45 Serial port, Metal desktop case, -40°C to 60°C tested ambient temperature.
- 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.

#### Indoor Wall Plate Access Point

• Indoor Wall Plate Access Point, Wi-Fi 6, 802.11a/b/g/n/ac/ax, Dual-radio: 2.4 GHz (2x2), 5 GHz (2x2), +21 dBm max transmit power on both radios, up to 4 spatial streams, Combined peak data rate: 2.4 GHz + 5 GHz, 2.976 Gbps, Built-in omnidirectional antennas, Uplink: 1 x 10/100/1000Base-T Ethernet port, Downlink: 4 x

- 10/100/1000Base-T Ethernet ports, Bluetooth 5.0, 2GB RAM, 8MB SPI, 128MB NAND, 200,000 hours at 25°C MTBF, with mounting kit, PSK, WPA, WPA2, WAP, 802.1XAuthentication, Web Authentication, QR Code-based Visitor Authentication, SM-based Authentication, AMC Authentication Bypass, Wireless Intrusion Detection, MAC address filtering, Rogue AP Detection, User isolation, Static/Dynamic Blocklist and Allowlist, Unified Cloud Management, Intelligent Tuning, 24 hour Network Optimization, Real-Time Warning, Fault Locating.
- 36-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.

## High-Performance Multi-G Ceiling Access Point

- High-Performance Multi-G Ceiling Access Point, Wi-Fi 6 AX3000, 802.11ax, 3202 Mbps Wireless throughput, Built-in Omni-directional antenna, 4x4 @2.4 GHz, 4x4 @5 GHz MU-MIMO, 512/120 Recommended Clients, 1 x 10/100/1000M/2.5G Base-T network port, 1 x 10/100.1000 Base-T network port, 0°C to 70°C Operating Temperature, <25.4W Power Consumption, Free Cloud Management, Self-organizing Network (SON), Centralized Network Management, Scenario-based Configuration, Cloud Portal Authentication, Remote Monitoring and Maintenance, 802.3at PoE, 12V/1.5A DC Adapter, CE|ROHS Certifications, with mounting kit.</p>
- 36-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.

#### Line Interactive UPS

- Line Interactive UPS, 1000VA/600W, Input Voltage:220/230/240 VAC, 50/60Hz, Output Voltage: 220/230/240 VAC, Voltage Regulation: +/-10% (Battery mode), Frequency Range: 50/60Hz, Frequency Regulation: +/-1Hz (Battery mode), 6x IEC320-10A outlets, USB port, RJ45 Surge Protection port, Discharge, Overcharge and Overload protection. 4x IEC to C14 power cables included.
- 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.

### Automatic Voltage Regulator

Automatic Voltage Regulator AVR Power Supply Surge Protection 1000VA/500W (min),
Provide over temperature protection through built-in thermal switch, Provide stable
output voltage through boost and buck stabilizer, Provide overload and short circuit
protection, Provide 175 joules surge protection, User Friendly LED status indicator, Input
Voltage: 220VAC, Voltage Range: 220VAC: 184-276 VAC, Frequency: 50/60Hz, Output
Voltage: 203-253 VAC, Regulation: Boost+Buck, Output Receptacles: 4 pcs AVR PLUS
SURGE PROTECTED, Protection: Overload/Short circuit

 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.

#### **42U STANDING DATA CABINET**

• 42U. Black. Depth: up to 1000mm. Width: up to 600mm. Removable side panels, at least 600 kg static load-bearing, 2 standard fixed shelves, 2 pieces full height Vertical cable managers (left and right), 3 pieces 1U horizontal cable managers (24-port cabling), 4 exhaust fans, 2 horizontal power distribution units (PDU) with 6 universal outlets each, Screws, nuts & bolts, IP20/IP30/IP40/IP50 rated, 2 pieces, fully loaded CAT6 24-port punch down copper patch panels complying with ANSI/TIA-568.2-D, ISO/IEC 11801-1 and EN 50173-1 Class E specifications, Front Perforated Arc Door for Maximum ventilation. Full 75% Honevcomb double-section perforation Rear Door for maximized ventilation, Castors & adjust feet.



#### 15U/16U WALL MOUNT DATA CABINET

15U/16U. Black. At least 100 kg static load-bearing. 1 piece 1U horizontal cable managers (24-port cabling), 2 exhaust fans, 1 horizontal power distribution unit (PDU) with 6 universal outlets, mounting screws, nuts & bolts, IP20/IP30/IP40/IP50 rated, 1 piece fully loaded CAT6 24-port punch down copper patch panels complying with ANSI/TIA-568.2-D, ISO/IEC 11801-1 and EN 50173-1 Class E specifications.



#### Multi-Mode Fiber-Optic Transceiver Module

- Fiber-optic Transceiver Module, Dual LC UPC Connector, 1G/10G Data rate, 300m distance, SFP+ format, Multi-Mode, 850nm wavelength.
- 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.

# Single-Mode Fiber-Optic Transceiver Module

- Fiber-optic Transceiver Module, Dual LC UPC Connector, 1G/10G/25G Data rate, 10km distance, SFP+ format, Single Mode, 1310nm wavelength.
- 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.

# **Network Monitoring Workstation**





 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; Windows 11 Pro; 16GB DDR4 RAM, 500GB NVME SSD, 802.11ac WiFi, at least 24-inch LED/IPS widescreen monitor, keyboard & mouse combo.

WORK AND FINANCIAL PLAN			
Line Item, Budget, Particulars, and Specifications	# of Units	Unit Cost	Total Cost
A. 1 lot Network Cabling			
A.1. Indoor Fiber Optic Cabling. ANSI/TIA 568-B.3, EIA/TIA 492, RoHS Compliant. 4-core, 850nm wavelength, multi-mode, indoor fiber-optic cable for all data cabinet links. 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 per fiber-optic pair. Warranty is 5 years minimum on materials, workmanship is 1 year.	1 lot	100,000.00	₱100,000.00
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 either flexible PVC, cable ladder (stainless/galvanized steel), or	1 lot	360,000.00	360,000.00

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. CAT6 patch cords will be provided per port.			
	1	TOTAL	₱460,000.00
B. 1 lot Network Equipment (routers, switches, access	points	, data cabin	ets, others)
B.1. Router, ARM 64 bit Architecture, 16-core 2000MHz CPU, 98DX3255 Switch Chip, RouterOS L6, 16GB RAM, 128MB NAND storage, Approximately 200,000 hours at 25C MTBF, -20°C to 60°C tested ambient temperature, IPsec hardware acceleration, 2x 100-240VAC inputs, 47-63Hz, 4x cooling fans, 83W Maximum power consumption, 13x 10/100/1000 Ethernet ports, 4x SFP+ ports, 1x RJ45 Serial port, 1x M.2 slot, CPU temperature monitor, PCB temperature monitor, Voltage monitor, CE EAC ROHS Certification, includes 2x IEC cords, rackmount kit. 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	72,000.00	₱72,000.00
B.2. Layer 3 Smart SFP+ Switch, 1x Gigabit Ethernet port, 16x SFP+ cages, ARM 32 bit Architecture, Dual Core 800MHz CPU, 1GB RAM, 16MB FLASH storage, CLI with TELNET, SSH, Local and Serial Console, GUI via IP address and MAC address management, RouterOS L6, 100-240VAC Dual PSU @ 44W Maximum power consumption, RJ45 Serial port, -20°C to 60°C tested ambient temperature, hardware-based STP and LACP. 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-site maintenance is done mainly by ICT the network administrator. On-call/next- business-day support must be provided by the local supplier/dealer.	1	35,000.00	35,000.00

B.3. Layer 3 Smart PoE Switch, 24x Gigabit Ethernet ports, 4x SFP+ cages, ARM 32 bit Architecture, 800MHz CPU, 512MB RAM, 16MB FLASH storage, CLI with TELNET, SSH, Local and Serial Console, GUI via IP address and MAC address management, RouterOS L5, 100-240V AC Input Voltage, 494W Maximum power consumption, 2 Fans, 802.3af/at PoE Out on Ether1-Ether24, 1000mA Max out per port output (input < 30V), 450mA Max out per port output (input >30V), 30A Max Total Out, RJ45 Serial port, 1U rackmount case, -20°C to 60°C tested ambient temperature. 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.	3	40,000.00	120,000.00
B.4. Layer 3 Smart Gigabit Switch, 24x Gigabit Ethernet ports, 2x SFP+ cages, ARM 32 bit Architecture, 800MHz CPU, 512MB RAM, 16MB FLASH storage, CLI with TELNET, SSH, Local and Serial Console, GUI via IP address and MAC address management, RouterOS L5, Passive PoE In, 10-30V DC Input Voltage, 24W Maximum power consumption, RJ45 Serial port, Metal desktop case, -40°C to 60°C tested ambient temperature. 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	19,000.00	19,000.00
B.5. Indoor Wall Plate Access Point, Wi-Fi 6, 802.11a/b/g/n/ac/ax, Dual-radio: 2.4 GHz (2x2), 5 GHz (2x2), +21 dBm max transmit power on both radios, up to 4 spatial streams, Combined peak data rate: 2.4 GHz + 5 GHz, 2.976 Gbps, Built-in omnidirectional antennas, Uplink: 1 x 10/100/1000Base-T Ethernet port, Downlink: 4 x 10/100/1000Base-T Ethernet ports, Bluetooth 5.0, 2GB RAM, 8MB SPI, 128MB NAND, 200,000 hours at 25°C MTBF, with mounting kit. 36-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.	6	11,000.00	66,000.00

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B.6. High-Performance Multi-G Ceiling Access Point, Wi-Fi 6 AX3000, 802.11ax, 3202 Mbps Wireless throughput, Built-in Omni-directional antenna, 4x4 @2.4 GHz, 4x4 @5 GHz MU-MIMO, 512/120 Recommended Clients, 1 x 10/100/1000M/2.5G Base-T network port, 1 x 10/100.1000 Base-T network port, 0°C to 70°C Operating Temperature, <25.4W Power Consumption, Free Cloud Management, Self-organizing Network (SON), Centralized Network Management, Scenario- based Configuration, Cloud Portal Authentication, Remote Monitoring and Maintenance, 802.3at PoE, 12V/1.5A DC Adapter, CE ROHS Certifications, with mounting kit. 36-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.	10	13,000.00	₱130,000.00
B.7. Line Interactive UPS, 1000VA/600W (min), Input Voltage: 220/230/240 VAC, 50/60Hz, Output Voltage: 220/230/240 VAC, Voltage Regulation: +/-10% (Battery mode), Frequency Range: 50/60Hz, Frequency Regulation: +/-1Hz (Battery mode), 6x IEC320-10A outlets, USB port, RJ45 Surge Protection port, Discharge, Overcharge and Overload protection. 4x IEC to C14 power cables included. 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.	3	12,000.00	₱36,000.00
B.8. at least 500W Automatic Voltage Regulator, 220V IN, 3x 220V Out, 1x 110V Out, 50VA Max, 5A fuse. 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.	7	1,200.00	₱9,600.00
B.9. 42U Standing Data Cabinet. Black. Depth: up to 1000mm. Width: up to 600mm. Removable side panels, at least 600 kg static load-bearing, 2 standard fixed shelves, 2 pieces full height Vertical cable managers (left and right), 3 pieces 1U horizontal cable managers (24-port cabling), 4 exhaust fans, 2 horizontal power distribution units (PDU) with 6 universal outlets each,	1	55,000.00	₱55,000.00

Screws, nuts & bolts, IP20/IP30/IP40/IP50 rated, 2 pieces, fully loaded CAT6 24-port punch down copper patch panels complying with ANSI/TIA-568.2-D, ISO/IEC 11801-1 and EN 50173-1 Class E specifications, Front Perforated Arc Door for Maximum ventilation, Full 75% Honeycomb double-section perforation Rear Door for maximized ventilation. Castors & adjust feet.			
<i>B.10.</i> 15U/16U Wall Mount Data Cabinet. Black. At least 100 kg static load-bearing. 1 piece 1U horizontal cable managers (24-port cabling), 2 exhaust fans, 1 horizontal power distribution units (PDU) with 6 universal outlets, mounting screws, nuts & bolts, IP20/IP30/IP40/IP50 rated, 1 piece fully loaded CAT6 24-port punch down copper patch panels complying with ANSI/TIA-568.2-D, ISO/IEC 11801-1 and EN 50173-1 Class E specifications.	2	20,000.00	₱40,000.00
B.11. Multi-Mode Fiber-optic Transceiver Module, Dual LC UPC Connector, 1G/10G Data rate, 300m distance, SFP+ format, 850nm wavelength. 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.	4	11,000.00	₱44,000.00
B.12. Single-Mode Fiber-optic Transceiver Module, Dual LC UPC Connector, 1G/10G/25G Data rate, 10km distance, SFP+ format, 1310nm wavelength. 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.	12	12,000.00	₱144,000.00
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; Latest stable OS professional; 16GB 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

			TOTAL	₱816,600.00
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. 8-core, 1310nm wavelength, single mode, 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. Warranty is 5 years minimum on materials, Warranty is 1 year on workmanship.	1 lot	183	3,000.00	₱183,000.00
	GRA	ND	TOTAL	₱1,459,600.00

#### **SCOPE OF WORK**

The service provider shall:

- a. Provide and supply all necessary materials, labor, and services
- Conduct and provide a comprehensive report for each test and technical support service
- c. Provide maintenance within the warranty period
- d. Provide a single point of contact personnel

# The University shall:

- a. provide installation plans identifying areas or locations for the cabling installations
- b. allow access of the service provider in the university premises during the installation of the cabling
- c. monitor the project's progress

# **QUALIFICATION REQUIREMENTS:**

The service provider:

- a. must have at least five (5) years of experience in supply, delivery, installation, and testing and commissioning of network equipment and structured cabling system
- b. must have the capacity and ability to provide local maintenance services and technical support.
- c. have implemented at least 3 similar projects in the deployment of a structured copper cabling
- d. PhilGEPS registered

# **TECHNICAL REQUIREMENTS:**

- a. Comply with the installation design and plan as indicated above.
- b. The service provider is reachable through phone or email for technical support. Response time should be at least within the next business day
- c. Complete the delivery of the functional network in 45 calendar days

- d. Upon installation, the network shall be tested for continuity and speed in consideration of conditions and parameters identified
- e. Update the university of weekly progress
- f. The service provider shall be responsible and accountable for the removal and proper disposal of debris, material, and waste generated in the project
- g. The fiber-optic cable must be ANSI/TIA568-B.3, EIA/TIA 492, RoHS Compliant.
- h. Cabling Standards to Comply to:
  - ISO/IEC 11801:2002: International Standard for generic cabling for customer premises
  - 2. EIA/TIA 568B: Commercial Building Telecommunications Cabling Standard (2002)
  - 3. EIA/TIA 568B.2-1: Commercial Building Telecommunication Cabling Standard (2002).
  - 4. IEEE 802.3af/at
- i. 42U Standing Data Cabinet has to be:
  - j. IP20 rated
  - k. 4 Exhaust fans or more
  - I. Removable panels and door
  - m. Sturdy door locks
  - n. 15A horizontal power distribution units
  - o. Load capacity: at least 600kgs
- p. 15U/16U Wall-mount Data Cabinets have/be:
  - 1. IP20 rated
  - 2. 2 Exhaust fans or more
  - 3. Removable panels and door
  - 4. Sturdy door locks
  - 5. 15A horizontal power distribution units
  - 6. Load capacity: at least 100 kgs

# **AFTER SALES SERVICE**

- a. Provide local technical support and maintenance service within the same business day.
- b. Technical support should be provided by the same company, and not outsourced.
- c. Technical Support Team should be employed by the same company, and not outsourced or provided by a company partner.

### **DELIVERABLES:**

- a. The Service provider shall submit a detailed scope of work for the proposed solution in coordination with the ICT Office. This shall include all wiring diagrams, a description of materials to be used to produce the structured cabling infrastructure, and a timeline for major tasks of the Work
- b. Supply and install CAT6 UTP cable (full copper) that will be used for horizontal cabling from each wiring closet to each endpoint
- c. Supply and install electrical cables which will be terminated from UPS in each wiring closet installed complete with circuit breaker
- d. LC UPC fiber-optic patch panels were installed in each data cabinet.
- e. Centralize CAT6 outlets in a patch panel located on their respective floor.
- f. CAT6 outlets at each endpoint.
- g. Supply and install patch panels in data cabinets
- h. Supply and install separation partitions, raceways, drilling and chiseling of walls for pulling cables, plastering, and paintings of the wall as necessary
- i. Properly identify and label both ends of data cables/runs
- j. Test and verify that each and every network point is working
- k. Test and verify that each and every PoE network point is working

l.	Submit detailed documentation of the installation, termination, and labels of data cabling
	Nothing Follows