

# **PHILIPPINE BIDDING DOCUMENTS**

Republic of the Philippines

# **PROCUREMENT OF GOODS**

**First Edition  
May 2025**

## Preface

This Philippine Bidding Documents (PBD) for the Government of the Philippines (GoP) for the procurement of Goods through [*Competitive Bidding, Limited Source Bidding, Competitive Dialogue,<sup>1</sup> or Unsolicited Offer with Bid Matching<sup>2</sup>*] have been prepared by the GoP for use by all branches, agencies, departments, bureaus, offices, or instrumentalities of the government, including government-owned and/or -controlled corporations (GOCC), government financial institutions (GFI), state universities and colleges (SUC), and local government units (LGU) and autonomous regional government use in projects that are financed in whole or in part by the GOP or any foreign government/foreign or international financing institution<sup>3</sup> in accordance with the provisions of the Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 12009.

The Bidding Documents shall clearly and adequately define, among others: (a) the objectives, scope, and expected outputs and/or results of the proposed contract; (b) the eligibility requirements of Bidders, such as track record to be determined by the Head of the Procuring Entity (HoPE); (c) the expected contract duration, the estimated quantity in the case of procurement of goods, delivery schedule and/or time frame; and (d) the obligations, duties, and/or functions of the winning Bidder.

In order to simplify the preparation of the Bidding Documents for each procurement, the PBD groups the provisions that are intended to be used unchanged in Section II. Instructions to Bidders (ITB) and in Section IV. General Conditions of Contract (GCC). Data and provisions specific to each procurement and contract should be included in Section III. Bid Data Sheet (BDS); Section V. Special Conditions of Contract (SCC); Section VI. Schedule of Requirements; and Section VII. Technical Specifications. The forms to be used are provided in Section VIII. Philippine Bidding Document Related Forms.

Prudence must be exercised to check the relevance of the provisions of the PBD against the requirements of the specific Goods to be procured. In addition, 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, except for the notes introducing Section VIII. Philippine Bidding Document Related Forms where the information is useful for the Bidder. 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 Project.
- b) Specific details, such as the “name of the Procuring Entity” and “address for bid submission,” should be furnished in the ITB, BDS, and SCC. 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, BDS, SCC, 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

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<sup>1</sup> For Second Stage of Competitive Dialogue under Section 29.4.2 of IRR of RA No. 12009.

<sup>2</sup> For Comparative or Competitive Bidding for Unsolicited Offer under Section 30.7 of IRR of RA No. 12009.

<sup>3</sup> Unless the Treaty or International or Executive Agreement expressly provides use of foreign government/foreign or international financing institution procurement guidelines.

follow. The Bidding Documents should not contain footnotes except Section VIII. Philippine Bidding Document Related Forms since these provide important guidance to Bidders.

- d) The cover page should be modified as required to identify the Bidding Documents and date of issue.
- e) The Project title page should be modified as required to identify the Project title and number, name and address of the Procuring Entity.
- f) If modifications must be made to the bidding requirements, they can be presented in the BDS. Modifications for specific Project or Contract details should be provided in the SCC as amendments to the Conditions of Contract. For easy reference and completion, clauses from the PBD and SCC shall appear in bold type face on Section II. Instructions to Bidders and Section IV. General Conditions of Contract, respectively.



**PROCUREMENT  
OF  
GOODS  
for  
E-LEARNING  
PLATFORM  
DEVELOPMENT WITH  
INTEGRATED DATA  
AND  
COMMUNICATIONS  
SYSTEM**

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## ***Glossary of Acronyms, Terms, and Abbreviations***

ABC – Approved Budget for the Contract.

BAC – Bids and Awards Committee.

BIR – Bureau of Internal Revenue.

BSP – Bangko Sentral ng Pilipinas.

CDA - Cooperative Development Authority.

CIF – Cost Insurance and Freight.

CIP – Carriage and Insurance Paid.

COS – Contract of Service.

CPI – Consumer Price Index.

DDP – Delivered Duty Paid.

DOLE – Department of Labor and Employment.

DTI – Department of Trade and Industry.

EXW – Ex works.

FCA – “Free Carrier” shipping point.

FOB – “Free on Board” shipping point.

GCC - General Conditions of Contract.

GFI – Government Financial Institution.

GOCC – Government-Owned and/or –Controlled Corporation.

GoP – Government of the Philippines.

GPPB – Government Procurement Policy Board.

HoPE – Head of Procuring Entity.

INCOTERMS – International Commercial Terms.

IRR – Implementing Rules and Regulations of Republic Act No. 12009.

ITB – Instructions to Bidders.

JO – Job Order.

LCB- Lowest Calculated Bid.

LCRB – Lowest Calculated Responsive Bid.

LGUs – Local Government Units.

LoC – Letter of Credit.

MAB – Most Advantageous Bid.

MARB – Most Advantageous Responsive Bid.

MEARB – Most Economically Advantageous Responsive Bid.

MYCA – Multi-Year Contracting Authority.

NFCC – Net Financial Contracting Capacity.

NGA – National Government Agency.

PhilGEPS - Philippine Government Electronic Procurement System.

PSA – Philippine Statistics Authority.

RA No. – Republic Act Number.

SARB – Single Advantageous and Responsive Bid.

SCC - Special Conditions of Contract.

SCRB – Single Calculated and Responsive Bid.

SEARB – Single Economically Advantageous Responsive Bid.

SEC – Securities and Exchange Commission.

SLCC – Single Largest Completed Contract.

UN – United Nations.

## ***Definition of Terms***

**Bid** – a signed offer, proposal, or quotation submitted by a supplier, manufacturer, distributor, contractor, consultant, or service provider in response to the requirements of the Procuring Entity as stated in the Bidding Documents. (IRR, Section 5[c]).

**Bidder** – a supplier, manufacturer, distributor, contractor, consultant, and service provider, whether public or private, who submits a Bid in response to the requirements of the Procuring Entity as stated in the Bidding Documents. (IRR, Section 5[d]).

**Bidding Documents** – the documents issued by the Procuring Entity as the basis for Bids, furnishing all information necessary to prospective Bidder to prepare a Bid for the Goods, Infrastructure Projects, and Consulting Services required by the Procuring Entity. (IRR, Section 5[e]).

**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.

**Contract Price** - the price payable to the Supplier under the Contract for the full and proper performance of its contractual obligations.

**Effective Date of the Contract** – the date indicated in the contract. However, the Supplier shall commence performance of its obligations only upon receipt of the Notice to Proceed.

**Foreign-funded Procurement or Foreign-Assisted Project** – refers to the acquisition of Goods, Consulting Services, and the contracting for Infrastructure Projects by the Government of the Philippines which are wholly or partly funded by foreign loans or grants pursuant to a Treaty or International or Executive Agreement.

**Framework Agreement** – is a procurement strategy which shall be in the nature of an option contract between the Procuring Entity and the Bidder that stipulates the terms and conditions to be applied in subsequent contracts for the procurement of Goods, Infrastructure Projects, and Consulting Services with a single or multiple contractor, manufacturer, supplier, distributor, consultant, and service provider to expand the pool of prospective Bidders, take advantage of economies of scale, minimize the administrative burden of conducting separate procurement activities, and generate time and money savings. (IRR, Section 16.2).

**Goods** – refer to (i) all items, supplies, and materials, whether in the nature of equipment, furniture, stationery, materials for construction, or personal property of any kind, needed in the transaction of public businesses or in the pursuit of any government undertaking, project or activity; or (ii) general support services which pertain to all types of services except Consulting Services and Infrastructure Projects, such as the repair and maintenance of equipment and furniture, as well as trucking, hauling, janitorial, security, and related or analogous services. Personnel Services or individual COS or JO engagements do not fall under this definition; (IRR, Section 5[n])

**MARB** – refers to the award criteria in the procurement of Goods where the considerations for the award of contract are the eligibility of the bidder, the responsiveness of its bid to the



technical requirements, and the most advantageous bid in reference to the highest rated offer based on the quality component of the bid.

MEARB – refers to the award criteria in the procurement of Goods where the considerations for the award of contract are the eligibility of the bidder, and the responsiveness of its bid to the technical requirements, and the determination of the most economically advantageous bid in reference to the quality-price ratio allocated to the technical and financial components of the bid.

Online submission – pertains to the submission of the bid for Goods and the bid envelopes containing the technical and financial components of the bid through electronic means or through the electronic bidding facility of the PhilGEPS.

Project – refers to a specific or identified procurement covering Goods, Infrastructure Projects 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.

Services - means those services ancillary to the supply of the Goods, such as transportation and insurance, and any other incidental services, such as installation, commissioning, provision of technical assistance, training, and other such obligations of the Supplier covered under the 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 its Bid. Supplier as used in these Bidding Documents may likewise refer to a manufacturer, distributor, contractor, or consultant, or service provider.

Verified Report - the report submitted by the Implementing Unit to the HoPE setting forth its findings as to the existence of grounds or causes for termination and explicitly stating its recommendation for the issuance of a Notice to Terminate.

## ***Section I. Invitation to Bid***

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

The Invitation to Bid provides information that enables potential Bidders to decide whether to participate in the procurement at hand. The Invitation to Bid shall be:

- a) In line with the principle of transparency and competitiveness and to ensure the widest possible dissemination thereof, all invitations to bid shall be published continuously by the Procuring Entity for seven (7) calendar days on the PhilGEPS website, in any conspicuous place reserved for this purpose in the premises of the Procuring Entity, and in the website or social media platforms of the Procuring Entity, if available, or such other channels as may be authorized by the GPPB, and the website prescribed by the foreign government/foreign or international financing institution, if applicable.
- b) For justifiable reasons, a Procuring Entity that cannot publish procurement opportunities on its website, social media platform, or such other channels authorized by the GPPB shall publish its Invitation to Bid, at least once, in a newspaper of general nationwide circulation;

Apart from the essential items listed in the Bidding Documents, the Invitation to Bid, should also indicate the following:

- a) The availability of the Bidding Documents, which shall commence on the date the Invitation to Bid is first published and continue until the deadline for 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 from the last day of publication of the Invitation to Bid;
- d) The procurement strategy/ies (e.g. Life Cycle Assessment and Life Cycle Cost Analysis, Subcontracting, Pooled Procurement); and
- e) The bid award criterion/criteria (e.g., the application of a margin of preference in bid evaluation).

The Invitation to Bid should be incorporated in the Bidding Documents. The information contained in the Invitation to Bid must conform to the Bidding Documents, particularly to the relevant information in the BDS.



Republic of the Philippines

Mountain Province State University

Bontoc, Mountain Province 2010



## INVITATION TO BID

The Mountain Province State University invites interested contractors/suppliers to bid for the following project:

Name of Project	Location	ABC	Duration	Fund Source	Bid Documents Fee
<b>E-LEARNING PLATFORM DEVELOPMENT WITH INTEGRATED DATA AND COMMUNICATIONS SYSTEM</b>	Bontoc Campus, Bontoc, Mountain Province	P900,000,000.00	360 CD	01	P75,000.00

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

Prospective bidders should possess a valid Business Permit applicable to the contract and have completed a similar contract with a value of at least 50% of the ABC, and have key personnel and equipment (listed in Eligibility forms) available for the delivery of the equipment, parts, and other peripherals. The BAC will use non-discretionary pass/fail criteria in the Eligibility Check/Screening as well as the Preliminary Examination of Bids. The BAC will conduct post qualification of the lowest calculated bid.

All particulars relative to Eligibility Statement and Screening, Bid Security, Performance Security, Pre-Bidding Conference, Evaluation of Bids, Post-Qualification and Award of Contract shall be governed by the pertinent provisions in the Implementing Rules and Regulations (IRR) of Republic Act 12009, otherwise known as the "New Government Procurement Act".

In the interest of the efficient and effective implementation of the project, all prospective bidders are encouraged to attend the scheduled Pre-bid Conference.

Interested bidders may obtain further information from the Procurement Services Office at the 5<sup>th</sup> Floor, Administration Building, Bontoc Campus and inspect the Bidding Documents from 8 o'clock a.m. to 5 o'clock p.m.

The schedules of activities are as follows:

BAC Activities	Schedule
1. Advertisement/Posting of Invitation to Bid	August 4 – August 12, 2025
2. Issuance and availability of Bidding Documents Eligibility Forms	August 4 - 26, 2025 (8:00 A.M to 5:00 P.M)
3. Pre-bid Conference Time: Place:	<b>August 12, 2025</b> 10:30 AM Office of the Vice President for Administration & Finance, 5 <sup>th</sup> Floor, Administration Bldg. Bontoc Campus, Bontoc, Mtn. Prov.
4. Request for clarification	August 13, 2025



5. Submission, receipt, and opening of Bids Closing Time: Place  Opening of Bids: Place:	<b>August 26, 2025</b> 9:30 A.M. Procurement Services Office, 5 <sup>th</sup> Floor, Administration Bldg. Bontoc Campus, Bontoc, Mtn. Prov.  10:00 A.M. Office of the Vice President for Administration & Finance, 5 <sup>th</sup> Floor, Administration Bldg. Bontoc Campus, Bontoc, Mtn. Prov.
6. Bid Evaluation	August 26, 2025 Start at 10:00 A.M. to 5:00 P.M.
7. Post – qualification	August 27 – September 2, 2025
8. Approval of Resolution	Upon approval by the MPSU BOR
9. Issuance of Notice of Award	Upon approval by the MPSU BOR
10. Contract preparation and signing	Upon receipt of Notice of Award by the winning bidder
11. Approval of Contract by higher authority	After the signing of the contract by both parties
12. Issuance of Notice to Proceed	Upon approval of the contract

The BAC will issue to prospective bidders the Bidding Documents at the Procurement Services Office, 5<sup>th</sup> Floor, Administration Building, Bontoc Campus, upon payment of a non-refundable amount indicated above at Cashier's Office. Prospective bidders shall submit the Bid Documents to the BAC at the same address stated above.

The Mountain Province State University assumes no responsibility whatsoever to compensate or indemnify bidders for any expenses incurred in the preparation of their bids.

Further, the Bids and Awards Committee (BAC) assumes no responsibility in case of non-awarding of the contract for reasons outside the control of the University.

Approved by:

  
**REYNALDO P. GAYO JR.**  
Chairperson

For further inquiries,  
Please contact:

**NORMA F. TACUT**  
Head, BAC Secretariat  
09213133387

## ***Section II. Instructions to Bidders***

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

This Section of the Bidding Documents 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.

This Section contains provisions that shall not be changed or modified. Any amendment shall be reflected on Section III. Bid Data Sheet which consists of provisions that supplement, amend, or specify in detail, information or requirements included in this Section.

Matters governing performance of the Supplier, payments under the contract, or those affecting the risks, rights, and obligations of the parties under the contract are not normally included in this Section, but rather under Section IV. General Conditions of Contract (GCC), and/or Section V. Special Conditions of Contract (SCC). If duplication of a subject is inevitable in other sections of the document prepared by the Procuring Entity, prudence must be exercised to avoid contradictions between clauses dealing with the same matter.

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## **A. General**

### **1) Scope of Bid**

1.1 The Procuring Entity, named in the **BDS** invites bids for the Project with Identification Number which shall be specified in the **BDS**.

1.2 The Project is composed of number of lots or items as provided in the **BDS**, the details of which are described in Section VII. Technical Specifications.

### **2) Source of Funds**

The Procuring Entity has a budget or has received funds from the Funding Source named in the **BDS**, and in the amount indicated in the **BDS**. It intends to apply part of the funds received for this Project to cover eligible payments under the contract.

### **3) Corrupt, Fraudulent, Collusive, and Coercive Practices**

3.1 Unless otherwise specified in the **BDS**, 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. In pursuance of this policy, the Procuring Entity:

- a) defines, for purposes of this provision, the following terms under existing laws, rules, and regulations:
  - i) “corrupt practice” means an act by which officials in the public or private sectors improperly and unlawfully enrich themselves, others, or induce others to do so, by misusing the position in which they are placed, and includes the offering, giving, receiving, or soliciting of anything of value to influence the action of any such official in the procurement process or in contract execution; entering, on behalf of the government, into any contract or transaction manifestly and grossly disadvantageous to the same, whether or not the public



officer profited or will profit thereby, and similar acts as provided in RA No. 3019.

- ii) "Fraudulent practice" means a misrepresentation of facts for purposes of influencing a procurement process or the execution of a contract to the detriment of the Procuring Entity, which includes collusive practices among Bidders (prior to or after bid submission) designed to establish bid prices at artificial, non-competitive levels and to deprive the Procuring Entity of the benefits of free and open competition.
- iii) "Collusive practices" means a scheme or arrangement between two or more Bidders, with or without the knowledge of the Procuring Entity, designed to establish bid prices at artificial, non-competitive levels.
- iv) "Coercive practices" means harming or threatening to harm, directly or indirectly, persons, or their property to influence their participation in a procurement process, or affect the execution of a contract;
- v) "Obstructive practice" is
  - a) deliberately destroying, falsifying, altering or concealing of evidence material to an administrative proceedings or investigation or making false statements to investigators in order to materially impede an administrative proceedings or investigation of the Procuring Entity or any foreign government/foreign or international financing institution relative to allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent the latter from disclosing its knowledge of matters relevant to the administrative proceedings or investigation or from pursuing such proceedings or investigation; or
  - b) acts intended to materially impede the exercise of the inspection and audit rights of the Procuring Entity or any foreign government/foreign or international financing institution herein.
- b) Undertakes to reject a proposal for award upon *prima facie* determination that the Bidder recommended for award has engaged in any of the prohibited practices mentioned in this Clause for purposes of competing for the contract.

3.2 Further, the Procuring Entity will seek to impose the maximum civil, administrative, and/or criminal penalties available under applicable laws on individuals and organizations deemed to be involved in any of the practices mentioned in ITB Clause 3.1(a).

3.3 Furthermore, the Funding Source and the Procuring Entity reserve the right to inspect and audit records and accounts of a Bidder or Supplier in the bidding for and performance of a contract themselves or through independent auditors as reflected in the **GCC** Clause 3.

#### **4) Conflict of Interest**

4.1 All Bidders found to have conflicting interests shall be disqualified to participate in the procurement at hand, without prejudice to the imposition of appropriate administrative, civil, and criminal sanctions. A Bidder may be considered to have conflicting interests with another Bidder in any of the events described in paragraphs (a) through (c) below and a general conflict of interest in any of the circumstances set out in paragraphs (d) and (f) below:

- a) A Bidder has controlling shareholders or beneficial owners in common with another Bidder;
- b) A Bidder receives or has received any direct or indirect subsidy from any other Bidder;
- c) A Bidder has the same legally authorized representative as that of another Bidder for purposes of this bid;
- d) A Bidder has a relationship, directly or through third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder or influence the decisions of the Procuring Entity regarding this bidding process; This may include a firm or an organization that lends, or temporarily seconds, its personnel to firms or organizations that are engaged in consulting services for the preparation related to procurement for or implementation of the project, if the personnel would be involved in any capacity on the same project;
- e) A Bidder who participated as a consultant in the preparation of the design or technical specifications of the Goods and related services that are the subject of the bid.
- f) A Bidder who lends, or temporarily seconds, its personnel to firms or organizations which are engaged in consulting services for the preparation related to procurement for or implementation of the project, if the personnel would be involved in any capacity on the same project.

4.2 All Bidding Documents shall be accompanied by an omnibus sworn statement of the Bidder that it is not related, by consanguinity or affinity up to the third level, to the HoPE, Procurement Agent (if engaged), the head of the Project Management Office (PMO), the End-User or Implementing Unit or any members of the Bids and Awards Committee (BAC), Technical Working Group (TWG), and BAC Secretariat.

4.3 The Bidder shall also disclose the ultimate beneficial ownership of an entity. Failure to comply shall be a ground for the automatic disqualification of the bid in consonance with Section 59 of the IRR. For this reason, relation to the aforementioned persons within the third civil degree of consanguinity or affinity shall automatically disqualify the Bidder from participating in the procurement of contracts of the Procuring Entity notwithstanding the act of such persons inhibiting themselves from the procurement process. This Clause shall apply to the following persons and affiliates:

- a) In the case of individuals or sole proprietorships, to the Bidders and their spouses;
- b) In the case of partnerships, to the partnership itself and its partners;
- c) In the case of cooperatives, to the cooperative itself and members of the board of directors, general manager or chief executive officer;
- d) A partnership, joint venture or consortium which is blacklisted or which has blacklisted member/s or partner/s, as well as a person or entity who is a member of a blacklisted joint venture or consortium, are, likewise not allowed to participate in any government procurement during the period of suspension or blacklisting; and
- e) In the case of corporations, a single stockholder, together with their relatives up to the third civil degree of consanguinity or affinity, and their assignees, holding at least twenty percent (20%) of the shares therein, its chairperson and president, shall be blacklisted after they have been determined to hold the same controlling interest in a previously blacklisted corporation or in two corporations that have been blacklisted; the corporations of which they are part of shall also be blacklisted.

## 5) Eligible Bidders

5.1 Only Bids found to be legally, technically, and financially eligible will be evaluated. For procurement of Goods, the following persons shall be eligible to participate in this bidding:

- a) Duly-licensed Filipino citizens or sole proprietorships;
- b) Partnerships duly organized under the laws of the Philippines and of which at least sixty percent (60%) of the interest belongs to citizens of the Philippines;
- c) Corporations duly organized under the laws of the Philippines, and of which at least sixty percent (60%) of the outstanding capital stock belongs to citizens of the Philippines;
- d) Cooperatives duly organized under the laws of the Philippines; and
- e) Persons or entities forming themselves into a Joint Venture (JV), i.e., a group of two (2) or more persons or entities that intend to be jointly and severally responsible or liable for a particular contract: Provided, however, that Filipino ownership or interest of the JV concerned shall be at least sixty percent (60%). For this purpose, Filipino ownership or interest shall be based on the contributions of each of the members of the joint venture as specified in their Joint Venture Agreement (JVA); Provided, further, that the primary purpose of each member of the JV must be similar to or related with the requirements of the project to be bid out.

5.2 Foreign Bidders may be eligible to participate when any of the following circumstances exist, as specified in the **BDS**:

- a) When provided for under any treaty or international or executive agreement as provided in Section 4 of the IRR;
  - b) When the foreign supplier is a citizen, corporation, or association of a country, the laws or regulations of which grant reciprocal rights or privileges to citizens, corporations, or associations of the Philippines;
  - c) When the Goods sought to be procured are not available from local suppliers; or
  - d) When there is a need to prevent situations that defeat competition or restrain trade.
- 5.3 GOCCs may be eligible to participate only if they can establish that they (a) are legally and financially autonomous, (b) operate under commercial law, and (c) are not attached agencies of the Procuring Entity.
- 5.4 The Bidder must have completed, within a period of ten (10) years from the submission of the bid, unless a shorter period is indicated in the Invitation to Bid and **BDS**, a Single Largest Completed Contract (SLCC) that is similar to the procurement project to be bid, and whose value must be equivalent to at least fifty percent (50%) of the ABC, adjusted to current prices using the Philippine Statistics Authority (PSA) consumer price indices.
- 5.5 If the Procuring Entity determines that it is necessary to adopt a different SLCC requirement to ensure broader Bidder participation while establishing their technical capacity, it may allow Bidders to present a combination of contracts completed within the same period, provided their total value is at least fifty percent (50%) of the ABC, thus:
- a) The Bidder should have completed at least one (1) similar contract amounting to at least 25% of the ABC; and
  - b) The Bidder should have completed other contracts, whether similar or not, with an aggregate amount of at least 25% of the ABC.

For this purpose, the Procuring Entity may clarify in the Bidding Documents the definition or description of what it considers to be a similar project, which must be germane to the kind, class, or genus of goods or services to be procured, guided by the principle of proportionality and fit-for-purpose approach.

- 5.6 The Bidder must submit a computation of its Net Financial Contracting Capacity (NFCC), which must be at least equal to the ABC to be bid, calculated as follows:

NFCC = [(Current assets minus current liabilities) (15)] minus the value of all outstanding or uncompleted portions of the projects under ongoing contracts, including awarded contracts yet to be started coinciding with the contract to be bid.

The values of the domestic Bidder's current assets and current liabilities shall be based on the latest Audited Financial Statements (AFS) submitted to the BIR not earlier than two (2) years prior to date of bid submission.

For purposes of computing the foreign Bidders' NFCC, the value of the current assets and current liabilities shall be based on their latest AFS prepared in accordance with International Financial Reporting Standards.

If the Bidder opts to submit a committed Line of Credit, it must be at least equal to ten percent (10%) of the ABC to be bid. Provided that, if issued by a foreign bank, it shall be confirmed or authenticated by a local bank.

## **6) Bidder's Responsibilities**

6.1 The Bidder or its duly authorized representative shall submit an omnibus sworn statement, in the form prescribed in Section VIII. Philippine Bidding Document Related Forms, as required in ITB Clause 12.1(viii).

6.2 Before submitting their bids, the Bidder is deemed to be knowledgeable with all existing laws, decrees, ordinances, acts and regulations of the Philippines which may affect this Project in any way.

6.3 The Bidder was responsible for the following:

- a) Took steps to carefully examine and ensure full understanding and comprehension of the Bidding Documents, its requirements, clauses, and provisions;
- b) Acknowledged all conditions, local or otherwise, affecting the implementation of the contract;
- c) Made an estimate of the facilities available and needed for the contract to be bid, if any;
- d) Complied with the responsibility to inquire, or secured the Supplemental Bid Bulletin(s) as provided under ITB Clause 10.4;
- e) Ensured that it is not "blacklisted" or barred from bidding by the Government of the Philippines (GoP) or any of its agencies, offices, corporations, or LGUs, including foreign government, or foreign or international financing institutions whose blacklisting rules have been recognized by the GPPB; by itself or by reason of its relation, membership, association, affiliation, or controlling interest with another blacklisted person or entity;
- f) Ensured that each of the documents submitted in satisfaction with the bidding requirements is an authentic copy of the original, complete, and that all statements and information provided therein are true and correct;
- g) Authorized the HoPE or its duly authorized representative/s to verify all the documents submitted;

- h) Ensured that the signatory is the duly authorized representative of the Bidder, and granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, to sign, and execute the ensuing contract, accompanied by the duly-notarized Special Power of Attorney, Board or Partnership Resolution, or Secretary's Certificate, whichever is applicable;
- i) Complied with the disclosure provision under Section 81 and 82 of RA No. 12009 and its IRR, in relation to other provisions of RA 3019;
- j) Complied with existing labor laws and standards, in the case of procurement of services. Moreover, the Bidder undertakes to:

- i) Ensure the entitlement of workers to wages, hours of work, safety and health and other prevailing conditions of work as established by national laws, rules and regulations; or Collective Bargaining Agreement (CBA); or arbitration award, if and when applicable.

In case there is a finding by the Procuring Entity or the Department of Labor and Employment (DOLE) of underpayment or nonpayment of workers' wages and wage-related benefits, the Bidder agrees that the performance security or portion of the contract amount shall be withheld in favor of the complaining workers pursuant to appropriate provisions of RA No. 12009, without prejudice to the institution of appropriate actions under the Labor Code, as amended, and other social legislations.

- ii) Comply with Occupational Safety and Health Standards (OSHS) and correct deficiencies, if any.

In case of imminent danger, injury or death of the worker, the Bidder undertakes to suspend contract implementation pending clearance to resume from the DOLE Regional Office, in compliance with the Work Stoppage Order; and

- iii) Inform the workers of their conditions of work, labor clauses under the contract specifying wages, hours of work and other benefits under prevailing national laws, rules and regulations; or CBA; or arbitration award, if and when applicable, through posting in two (2) conspicuous places in the establishment's premises.

- k) Ensured that it 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.
- l) Examined all instructions, forms, terms, and specifications in the Bidding Documents.
- m) Determined and complied with all matters pertaining to the contract to be bid, including but not limited to: (i) the location and the nature of this Project; (ii) climatic conditions; (iii) transportation facilities; and (iv) other

factors that may affect the cost, duration, and execution or implementation of this Project.

- n) Ensured that all information in the Bidding Documents, including bid or supplemental bid bulletin/s issued, are correct and consistent. The Procuring Entity shall not assume any responsibility regarding erroneous interpretations or conclusions by the prospective or eligible Bidder out of the data furnished by the Procuring Entity.

Failure to observe any of the above responsibilities shall be at the risk of the Bidder concerned.

- 6.4 Further, the Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Procuring Entity shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

In case of failure of bidding, the Bidding Documents fee may be applied in the re-bidding for the same Project.

- 6.5 Furthermore, the Bidder should be aware that the Procuring Entity will accept bids only from those that have paid the applicable fee for the Bidding Documents at the office indicated in the Invitation to Bid.

## **7) Origin of Goods**

Unless otherwise indicated in the **BDS**, there is no restriction on the origin of Goods other than those prohibited by a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations.

## **8) Subcontracts**

- 8.1 Unless otherwise specified in the **BDS**, the Bidder may subcontract portions of the Goods to an extent as may be approved by the HoPE and as stated in the **BDS**. However, the subcontracted portion shall not exceed twenty percent (20%), or a different percentage of the ABC, on a per project basis, as approved by the GPPB.

- 8.2 Subcontracting of any portion of this Project shall not relieve the Bidder from any liability or obligation that may arise from the contract.

- 8.3 Subcontractors must meet the eligibility criteria and submit the same eligibility documents as the general contractor. Failure of a subcontractor to meet the eligibility criteria does not affect the eligibility of the general contractor for the Project. In such case, the portion intended to be subcontracted to the ineligible subcontractor shall be assumed by the general contractor.

- 8.4 Subcontracting arrangement, if allowed, including the time of submission of the eligibility documents of the subcontractor, shall be disclosed in the **BDS**.

## **B. Contents of Bidding Documents**

### **9) Pre-Bid Conference**

9.1 If so, specified in the **BDS**, a pre-bid conference shall be held either at the Procuring Entity's physical address and/or online through videoconferencing, webcasting, or similar technology, or a combination thereof, on the date indicated therein, to clarify and address the Bidders' questions on the technical and financial components of this Project.

9.2 The pre-bid conference shall be held at least twelve (12) calendar days before the deadline for the submission and receipt of bids, but not earlier than seven (7) calendar days from the posting of the invitation to bid and other bidding documents in the PhilGEPS.

9.3 Bidders are highly encouraged to attend the pre-bid conference to fully understand the Procuring Entity's requirements. While non-attendance of the Bidder will in no way prejudice its bid. The Bidder is deemed to know any changes and/or amendments to the Bidding Documents, as may be provided in the Supplemental Bid Bulletin.

The proceedings of the pre-bid conference shall be recorded, and the corresponding minutes shall be prepared not later than five (5) calendar days after the pre-bid conference. The minutes shall be made available to prospective Bidders not later than five (5) days upon written request.

9.4 Decisions of the BAC amending any provision of the Bidding Documents shall be issued in writing through a Supplemental Bid Bulletin at least seven (7) calendar days before the deadline for the submission and receipt of bids.

### **10) Clarification and Amendment of Bidding Documents**

10.1 Prospective Bidders may request for clarification on and/or interpretation of any part of the Bidding Documents. Such request must be in writing and submitted to the BAC of the Procuring Entity at the address or electronic mail indicated in the **BDS** or through the electronic bidding facility of PhilGEPS, as may be applicable, at least ten (10) calendar days before the deadline set for the submission and receipt of Bids.

10.2 The BAC shall respond to the said request by issuing a Supplemental Bid Bulletin duly signed by the BAC Chairperson. It shall be made available to all those who have properly secured the Bidding Documents, at least seven (7) calendar days before the deadline for the submission and receipt of Bids.

10.3 Supplemental Bid Bulletins may also be issued upon the Procuring Entity's initiative for purposes of clarifying or modifying any provision of the Bidding Documents not later than seven (7) calendar days before the deadline for submission and receipt of Bids. Any modification to the Bidding Documents shall be identified as an amendment.

10.4 Any Supplemental Bid Bulletin issued by the BAC shall also be posted in the PhilGEPS, in any conspicuous place in the premises of the Procuring Entity, and on the website or social media platforms of the Procuring Entity, if available,



or such other channels as may be authorized by the GPPB. It shall be the responsibility of all prospective Bidders, including those who have properly secured the Bidding Documents, to inquire and secure Supplemental Bid Bulletins that may be issued by the BAC. However, Bidders who have submitted bids before the issuance of the Supplemental Bid Bulletin must be accordingly informed by the BAC and be allowed to modify or withdraw their bids prior to the deadline for the submission and receipt of bids in accordance with ITB Clause 21.

## **C. Preparation of Bids**

### **11) Language of Bids**

The eligibility requirements or statements, the bids, and all other documents to be submitted to the BAC must be in English. If the eligibility requirements or statements, the bids, and all other documents submitted to the BAC are in foreign language other than English, it must be accompanied by a translation of the documents in English. The documents shall be translated by the relevant foreign government agency, the foreign government agency authorized to translate documents, or a registered translator in the foreign Bidder's country. The Bidder shall cause the authentication of the translated documents and shall be authenticated by the appropriate Philippine foreign service establishment or post or the equivalent office having jurisdiction over the foreign Bidder's affairs in the Philippines. The English translation shall govern, for purposes of interpretation of the bid.

However, for Contracting Parties to the Apostille Convention, the documents shall be authenticated through an apostille by the Competent Authority, as defined in Section 20.9.2 of [the] IRR, except for countries identified by the DFA that will still require legalization (red ribbon) by the relevant Embassy or Consulate.

### **12) Documents Comprising the Bid: Technical and Financial Components**

12.1 The first bid envelope shall contain the following technical documents, including the eligibility documents:

- i) PhilGEPS Certificate of Registration (Platinum Membership);
- ii) Statement of SLCC;
- iii) NFCC Computation or committed Line of Credit (LoC);
- iv) Statement 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;
- v) *[if applicable]* JVA) or in the absence of a JVA, duly notarized statements from all potential JV partners stating that they will enter into and abide by the provisions of the JVA in the event that the bid is successful;
- vi) Bid Security in the prescribed form and amount in accordance with ITB Clause 16, and validity period under ITB Clause 15;

- vii) Technical Specifications, which may include production or delivery schedule, manpower requirements, or after-sales service or parts, if applicable;
- viii) Omnibus Sworn Statement; and
- ix) For foreign Bidders claiming eligibility by reason of their country's extension of reciprocal rights to Filipinos, a certification from the relevant government office of their country stating that Filipinos are allowed to participate in their government procurement activities for the same item or product.

12.2 The second bid envelope shall contain the following financial documents:

- a) Bid Form which includes the Bid price;
- b) Price Schedules in accordance with ITB Clause 13.1; and
- c) *[if applicable]* Certificate of Domestic Preference, in accordance with ITB Clause 25.

12.3 Whenever necessary, modifications may be made to the foregoing components specifically for major and specialized procurement to suit the particular needs of the Procuring Entity, subject to the approval of the GPPB.

12.4 All bids that exceed the ABC shall not be accepted. Unless otherwise indicated in the **BDS**. For foreign-funded procurement, the ABC shall be applied as the ceiling to bid prices provided the following conditions are met:

- a) Bidding Documents are obtainable free of charge on a freely accessible website. If payment of Bidding Documents is required by the Procuring Entity, payment could be made upon the submission of bids.
- b) The Procuring Entity has procedures in place to ensure that the ABC is based on recent estimates made by the responsible unit of the Procuring Entity and that the estimates reflect the quality, supervision and risk, and inflationary factors, as well as prevailing market prices, associated with the types of works or goods to be procured.
- c) The Procuring Entity has trained cost estimators in estimating prices and analyzing bid variances.
- d) The Procuring Entity has established a system to monitor and report bid prices relative to ABC and engineer's/procuring entity's estimate.
- e) The Procuring Entity has established a monitoring and evaluation system for contract implementation to provide feedback on actual total costs of goods and works.

However, the GoP and the foreign government, or foreign or international financing institutions may agree to waive the foregoing conditions.

### 13) Bid Prices

13.1 The Bidder shall accomplish the Price Schedule Form as prescribed by the Procuring Entity, which may include the following details:

- a) For Goods offered from within the Philippines:
  - 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 Delivery 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, listed in the **BDS**.
- c) For Services, based on the form which may be prescribed by the Procuring Entity, in accordance with existing laws, rules and regulations.

13.2 The Bidder shall accomplish the appropriate Price Schedule included herein, stating the unit prices, total price per item, the total amount and the expected countries of origin of the Goods to be supplied under this Project. The Bidder shall fill in rates and prices for all items of the Goods described in the Price Schedule, which shall be presented and computed using up to two (2) decimal places, unless otherwise indicated in the **BDS**.

13.3 If the Instructions to Bidders specifically allow partial bids, bids not addressing or providing all of the required items in the Bidding Documents including, where applicable, the Price Schedule, shall be considered non-responsive and shall be automatically disqualified. However, when no price or a zero (0) or a dash (-) is indicated in a required item in the bid form, the same shall be construed that it is being offered for free to the Government, except those required by law or regulations to be provided for.

The terms Ex Works (EXW), Cost, Insurance and Freight (CIF), Cost and Insurance Paid to (CIP), (DDP), and other trade terms used to describe the obligations of the parties, shall be governed by the rules prescribed in the current edition of the International Commercial Terms (INCOTERMS) published by the International Chamber of Commerce, Paris.

- 13.4 Prices quoted by the Bidder shall be fixed during the Bidder's performance of the contract and not subject to variation or price escalation on any account. A bid submitted with an adjustable price quotation shall be treated as nonresponsive and shall be rejected.

#### 14) Bid Currencies

- 14.1 Prices shall be quoted in the following currencies:

- a) For Goods that the Bidder will supply from within the Philippines, the prices shall be quoted in Philippine Peso.
- b) For Goods that the Bidder will supply from outside the Philippines, the prices may be quoted in the local or tradeable currency/ies accepted by the *Bangko Sentral ng Pilipinas* (BSP), as stated in the **BDS**. However, for purposes of bid evaluation, bids denominated in foreign currencies shall be converted to Philippine currency based on the exchange rate published in the BSP Daily Reference Exchange Rate Bulletin on the day of the bid opening.<sup>4</sup>

- 14.2 If so, allowed in accordance with ITB Clause 14.1, the Procuring Entity, for purposes of bid evaluation and comparing the bid prices, will convert the amounts in various currencies in which the bid price is expressed to Philippine Peso at the foregoing exchange rates.

- 14.3 Unless otherwise specified in the **BDS**, payment of the contract price shall be made in Philippine Peso.

#### 15) Bid Validity

- 15.1 Bids shall remain valid for the period specified in the **BDS** which shall not exceed one hundred twenty (120) calendar days from the date of the opening of bids.

- 15.2 Should it become necessary to extend the validity of the bids and the bid securities beyond one hundred twenty (120) calendar days, the Procuring Entity concerned shall request in writing all those who submitted bids for such extension before the expiration date therefor. Bidders, however, shall have the right to refuse to grant such extension without forfeiting their Bid Security.

#### 16) Bid Security

- 16.1 The Bidder shall at its option, submit a Bid Security in the form and amount as stated in the **BDS**, which may include the following:

Form of Bid Security	Amount of Bid Security (Not less than the required percentage of the ABC)
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<sup>4</sup> RA No. 8183, Act to assure uniform value of Philippine coin and currency

a) Cash or cashier's or manager's check issued by a bank.  <i>For biddings conducted by LGUs, the Cashier's or Manager's check may be issued by other banks certified by the BSP as authorized to issue such financial instrument.</i>	Two Percent (2%)
b) Bank draft/guarantee or irrevocable LoC issued by a bank: Provided, however, that it shall be confirmed or authenticated by a local bank, if issued by a foreign bank.  <i>For biddings conducted by LGUs, Bank Draft/Guarantee, or Irrevocable Letter of Credit may be issued by other banks certified by the BSP as authorized to issue such financial instrument.</i>	Five Percent (5%)
c) Surety bond callable upon demand issued by a surety or insurance company duly certified by the Insurance Commission as authorized to issue such security.	Five Percent (5%)
d) Bid Securing Declaration	Not Applicable

The Bid Security shall be denominated in Philippine Peso and posted in favor of the Procuring Entity.

16.2 The Bid Security should be valid for the period specified in the **BDS**. Any bid not accompanied by an acceptable Bid Security shall be considered as nonresponsive and rejected by the Procuring Entity.

16.3 In no case shall the Bid Security be returned later than the expiration of the bid validity period indicated in the Bidding Documents, unless it has been extended. In case the Bidder is required to extend its bid validity, the Bidder may, at its discretion, substitute a Bid Securing Declaration for the extended period as a replacement of its Bid Security; Provided, that the option to substitute is indicated in the **BDS**.

16.4 Upon signing and execution of the contract pursuant to ITB Clause 30, and the posting of the performance security pursuant to ITB Clause 31, the Bid Security of the successful Bidder will be discharged, but in no case later than its validity period as indicated in the ITB Clause 16.2.

16.5 The Bid Security may be forfeited based on any of the following grounds, as provided under Rule VIII, X, XI, and XXI of the IRR.

- a) If a Bidder:
- i) Withdraws its bid during the period of bid validity specified in ITB Clause 15;
  - ii) Does not accept the correction of errors pursuant to ITB Clause 26.5(b) (arithmetical error);
  - iii) Has a finding against the veracity of any of the documents submitted as stated in ITB Clause 27.2;
  - iv) Submits eligibility requirements containing false information or falsified documents;
  - v) Submits bids that contain false information or falsified documents, or the concealment of such information in the bids to influence the outcome of eligibility screening or any other stage of the public bidding;
  - vi) Allows the use of one's name, or uses the name of another for purposes of public bidding;
  - vii) Refuses to accept an award or enter into contract with the Government without justifiable cause, after the Bidder had been adjudged as having submitted the LCRB, Most Economically Advantageous Responsive Bid (MEARB), or Most Advantageous Responsive Bid (MARB);
  - viii) Refuses or fails to post the required performance security within the prescribed time;
  - ix) Refuses to clarify or validate in writing its bid during post qualification within a period of seven (7) calendar days from receipt of the request for clarification;
  - x) Has any documented attempt by a Bidder to unduly influence the outcome of the bidding in its favor; or
  - xi) Commits other acts that tend to defeat the purpose of the competitive bidding, Competitive Dialogue, Unsolicited Offer with Bid Matching and Limited Source Bidding, such as but not limited to habitually withdrawing from bidding, submitting late Bids or patently insufficient bid, for at least three (3) times within a year, except for valid reasons.
- b) If a winning Bidder:
- i) Fails to sign the contract in accordance with ITB Clause 30;
  - ii) Fails to furnish performance security in accordance with ITB Clause 31; or

- iii) Fails to enter into joint venture after the bid is declared successful, in the case of potential JV partners.

## **17) Format and Signing of Bids**

17.1 Bidders shall submit their bids through their duly authorized representative using the appropriate forms provided in Section VIII. Philippine Bidding Document Related Forms on or before the deadline specified in ITB Clause 19 in two (2) separate sealed bid envelopes which shall be submitted simultaneously, whether through manual or online submission. The first shall contain the technical component of the bid, including the eligibility requirements under ITB Clause 12, and the second shall contain the financial component of the bid. This shall also be observed for each lot in the case of lot procurement.

17.2 Forms as mentioned in ITB Clause 17.1 must be completed without any alterations to their format. No substitute form shall be accepted.

17.3 Each and every page of the Bid Form, including the Price Schedule, under Section VIII hereof, shall be signed by the duly authorized representative/s of the Bidder. Failure to do so shall be a ground for the rejection of the bid.

17.4 Any insertions, erasures, or overwriting shall be valid only if they are signed or initialed by the duly authorized representative/s of the Bidder.

## **18) Sealing and Marking of Bids**

18.1 Bidders shall enclose their technical documents described in ITB Clause 12 in one sealed envelope marked "TECHNICAL COMPONENT", and the financial component in another sealed envelope marked "FINANCIAL COMPONENT", sealing them all in an outer envelope marked "BID".

18.2 The Bid as indicated in the Bidding Documents shall be typed or written in ink and shall be signed by the Bidder or its duly authorized representative/s.

18.3 All envelopes shall:

- a) contain the name of the contract to be bid in capital letters;
- b) bear the name and address of the Bidder in capital letters;
- c) be addressed to the Procuring Entity's BAC in accordance with ITB Clause 1.1;
- d) bear the specific identification of this bidding process indicated in the ITB Clause 1.1; and
- e) bear a warning "DO NOT OPEN BEFORE..." the date and time for the opening of bids, in accordance with ITB Clause 19.

18.4 For manually submitted bid envelopes that are not properly sealed and marked, as required in the Bidding Documents, the same shall be accepted; Provided,

That the Bidder or its duly authorized representative shall acknowledge such condition of the bid as submitted. On the other hand, unsealed or unmarked bid envelopes, or bids that cannot be opened or corrupted in case of online submission, shall be rejected.

The BAC shall assume no responsibility for misplaced or lost contents of the improperly sealed or marked bid, or for its premature opening.

*Each Bidder shall submit one copy of the original component and 3 copies of the second components of its Bid.*

## **D. Submission and Opening of Bids**

### **19) Deadline for Submission of Bids**

Bids must be received by the Procuring Entity's BAC at the address indicated in the Invitation to bid, or through the e-bidding facility of the PhilGEPS on or before the date and time indicated in the **BDS**.

### **20) Late Bids**

Bids, including the eligibility requirements, submitted after the deadline shall be rejected by the BAC. The BAC shall record in the Minutes of the Meeting the submission and opening of bids, the Bidder's name, its representative, and the time the late bid was submitted.

### **21) Modification and Withdrawal of Bids**

21.1 Bidders may modify their bids before the deadline for the submission and receipt of bids.

- a) For manual submission and receipt of bids, the Bidders shall not be allowed to retrieve their original bid but shall only be allowed to submit the bid modification by sending another bid, equally sealed, properly identified, linked to their original bid, marked as a "modification," thereof, and stamped "received" by the BAC. Bid modifications received after the applicable deadline shall not be considered and shall be returned to the Bidder unopened.
- b) For online submission of bids, the Bidders shall not be allowed to retrieve their original Bid, but shall only be allowed to submit the bid modification, send another Bid equally secured, properly identified labelled as a "modification" of the one previously submitted. The time indicated in the latest bid receipt page generated shall be the official time of submission. Bids modification submitted after the applicable deadline shall not be accepted.

21.2 Bidders may withdraw their bids in writing before the deadline for submission and receipt of bids. Withdrawal of bids after the applicable deadline shall be subject to appropriate sanctions as prescribed in the IRR.



Bidders may also express their intention not to participate in the bidding in writing, which should be received by the BAC before the deadline for submission and receipt of bids. Bidders that withdraw their bids shall no longer be allowed to submit another bid for the same contract, directly or indirectly.

- 21.3 No bid may be modified after the deadline for submission and receipt of bids. Further, no bid may be withdrawn in the interval between the deadline for submission and receipt of bids, and the expiration of bid validity specified by the Bidder in the Financial Bid Form. Withdrawal of bid during this interval shall result in the forfeiture of the Bidder's Bid Security pursuant to ITB Clause 16.5, and the imposition of administrative sanctions as prescribed by RA No. 12009, and without prejudice to the imposition of civil and criminal sanctions as provided under applicable laws.
- 21.4 Alternative Bids shall be rejected. For this purpose, Alternative Bid shall pertain to an offer made by a Bidder in addition or as a substitute to its original bid, which may be included as part of its original bid or submitted separately. A bid with options shall likewise be considered an Alternative Bid regardless of whether said bid proposal is contained in a single envelope or submitted in two (2) or more separate bid envelopes.
- 21.5 Each Bidder shall submit only one Bid, either individually or as a partner in a JV. Bidder who submits or participates in more than one bid (other than as a subcontractor if a subcontractor is permitted to participate in more than one bid) will cause all the proposals with the Bidder's participation to be disqualified. This shall be without prejudice to any applicable criminal, civil and administrative penalties that may be imposed upon the persons and entities concerned.

## **22) Opening and Preliminary Examination of Bids**

- 22.1 The BAC shall open the bids in public, immediately after the deadline for submission and receipt of bids, as specified in the **BDS**. In case the Bids cannot be opened as scheduled due to justifiable reasons, the BAC shall take custody of the submitted Bids and reschedule the opening of Bids on the next working day or at the soonest possible time, through the issuance of a notice of postponement to be posted on the PhilGEPS website and the website of the Procuring Entity concerned.
- 22.2 The manner of opening of the bids for Goods shall depend on the award criterion to be adopted as follows:
  - a) For LCRB and MEARB, the BAC shall open the technical and financial proposals on the same day; and
  - b) For MARB, only the technical proposals shall be opened on the same day while the financial proposals shall remain unopened and shall be kept securely by the BAC until the specified time of their opening as indicated in the **BDS**. Only the financial proposals of the Bidders who have met the highest technical score for MAB shall be opened.

- 22.3 The Procuring Entity shall prepare the minutes of the proceedings of the bid opening that shall include, as a minimum: (a) names of Bidders, their bid price (per lot, if applicable, and/or including discount, if any), bid security, findings of preliminary examination, and whether there is a withdrawal or modification; and (b) attendance sheet. The BAC members shall sign the abstract of bids as read.
- 22.4 The Bidders or their duly authorized representatives may attend the opening of bids. The BAC shall ensure the integrity, security, and confidentiality of all submitted bids. The Abstract of Bids, as read, and the minutes of the bid opening shall be made available to the public, upon written request and payment of a specified fee to recover the cost of materials.
- 22.5 To ensure transparency and accurate representation of the bid submission, the BAC Secretariat, shall notify in writing all Bidders whose bids it has received through its PhilGEPS-registered physical address or official e-mail address. The said notice shall be issued within seven (7) calendar days from the date of the bid opening.

## **E. Evaluation and Comparison of Bids**

### **23) Process to be Confidential**

- 23.1 Members of the BAC, its staff and personnel, Secretariat, and TWG, as well as Observers, are prohibited from making or accepting any communication with any Bidder regarding the evaluation of their bids until the issuance of the Notice of Award, unless otherwise allowed in ITB Clause 24.
- 23.2 Any effort by a Bidder to influence the Procuring Entity in its decision in respect of bid evaluation, bid comparison or contract award will result in the rejection of the bid.

### **24) Clarification of Bids**

To assist in the evaluation, comparison, and post-qualification of the bids, the Procuring Entity may ask in writing any Bidder for a clarification of its bid. All responses to requests for clarification shall be in writing. Any clarification submitted by a Bidder in respect to its bid that is not in response to the request of the Procuring Entity shall not be considered.

### **25) Domestic Preference**

- 25.1 The Procuring Entity shall give priority and preference to Philippine products and services. The preference and priority for Philippine products shall be guaranteed at all levels of the procurement process, including raw materials, ingredients, supplies, or fixtures.
- 25.2 For a period of ten (10) years from the effectivity of RA No. 11981 or the "*Tatak Pinoy* (Proudly Filipino) Act," and for Philippine products and services in sectors and economic activities covered by the prevailing *Tatak Pinoy* Strategy, the Procuring Entity is mandated to award the contract to the domestic Bidder for Philippine products and services in sectors and economic activities covered by the prevailing *Tatak Pinoy* Strategy (TPS).

Domestic Bidder, for purposes of this provision, refers to any person or entity offering unmanufactured articles, materials, or supplies grown or produced in the Philippines, or manufactured articles, materials, or supplies manufactured or to be manufactured in the Philippines substantially from articles, materials, or supplies that are or will be produced or manufactured in the Philippines, as the case may be.

25.3 After the said ten-year period, the domestic preference shall be subject to a margin of preference to be determined by the *Tatak Pinoy* Council which shall not be lower than fifteen percent (15%).

25.4 For products and services governed by the TPS, the domestic preference in procurement shall be in accordance with the IRR or guidelines issued for the *Tatak Pinoy Act*.

25.5 The Procuring Entity shall award the Project to the domestic Bidder if the bid is not more than twenty-five percent (25%) in excess of the lowest foreign bid. The margin of preference provided herein shall be subject to periodic review and adjustment by the GPPB, as may be necessary.

25.6 A Domestic Bidder can only claim preference if it secures from the appropriate agency a certification that the articles forming part of its bid are substantially composed of articles, materials, or supplies grown, produced, or manufactured in the Philippines.

25.7 The preference herein established may be waived should any of the following conditions be present as provided in the **BDS**:

- a) Where domestic production is insufficient or unavailable in the required commercial quantities;
- b) Where the specific or desired quality is not met;
- c) Where domestic preference will result in inconsistencies with the Philippines' obligations under treaty or international or executive agreements; or
- d) Other analogous circumstances.

## **26) Detailed Evaluation and Comparison of Bids**

26.1 The Procuring Entity's evaluation of bids shall be based on the bid price quoted in the Bid Form, which includes the Price Schedule.

26.2 The Procuring Entity will undertake the detailed evaluation and comparison of the bids which have passed the opening and preliminary examination of bids, pursuant to ITB Clause 22, to determine the Lowest Calculated Bid (LCB), Most Economically Advantageous Bid (MEAB), and Most Advantageous Bid (MAB).

26.3 The award criterion shall be determined as follows:

- a) For LCB
  - i) The detailed evaluation of the financial component of the bids, to establish the correct calculated prices of the bids; and
  - ii) The ranking of the total bid prices as so calculated from the lowest to the highest, where the bid with the lowest price shall be identified as the Lowest Calculated Bid.
- b) For MEAB, the BAC shall evaluate the quality and price proposals to determine the Most Economically Advantageous Bid (MEAB) using the following steps:
  - i) The quality proposal together with the price proposal shall be considered in the evaluation of bids. The quality proposals shall be evaluated first using the criteria in the **BDS**. The price proposals of the bids that meet the minimum quality score shall then be opened.
  - ii) The price and quality proposals shall be given corresponding weights with the price proposal given a minimum weight of fifteen percent (15%) up to a maximum of forty percent (40%). The weight of the quality criteria shall be adjusted accordingly such that their total weight in percent together with the weight given to the price proposal shall be equal to one hundred percent (100%).
  - iii) To further promote green public procurement, the sustainability of products, or materials with green specifications shall be given greater weight in the evaluation of bids. As approved by the BAC, the exact weights shall be indicated in the **BDS**. The BAC shall rank the Bidders in descending order based on the combined numerical ratings of their quality and price proposals. The Bidder with the best overall score using the quality-price ratio shall be referred to as the MEAB.
  - iv) The HoPE shall approve or disapprove the recommendations of the BAC within two (2) calendar days after receipt of the results of the evaluation from the BAC.
- c) For MAB
  - i) BAC shall evaluate the quality proposals to determine the MAB using the quality components. The quality components shall be assessed on the basis of the criteria with corresponding numerical weights indicated in the **BDS** to determine the Bidder with the highest technical rating.
  - ii) The second bid envelope of the Bidder obtaining the highest technical rating shall be opened. If the financial proposal is equal to or lower than the ABC, the bid shall be accepted and determined as the MAB; otherwise, the same shall be rejected and the Bidder will be disqualified.

- 26.4 In order to eliminate bias in evaluating the quality proposals, it is recommended that the highest and lowest scores for each Bidder for each criterion shall not be considered in determining the average scores of the Bidders, except when the evaluation is conducted in a collegial manner.
- 26.5 The BAC shall immediately conduct a detailed evaluation of all bids using nondiscretionary criteria in considering the following:
- a) Completeness of the bid. Unless the **BDS** allows partial bids, bids not addressing or providing all of the required items in the **BDS**, shall be considered non-responsive and, thus, automatically disqualified.
- However, when no price or a zero (0) or a dash (-) is indicated in a required item in the bid form, the same shall be construed that it is being offered for free to the Government, except those required by law or regulations to be provided for; and
- b) Arithmetical corrections. The BAC shall apply arithmetical corrections on computational errors and omissions to enable proper comparison of all eligible bids. Bid corrections may also be considered if expressly allowed in the **BDS**. Any adjustment shall be calculated in monetary terms to determine the calculated prices.
- 26.6 Based on the detailed evaluation of bids, those that comply with the abovementioned requirements shall be ranked in the ascending order of their total calculated bid prices, as evaluated and corrected for computational errors, discounts and other modifications, to identify the LCB, MEAB, or MAB. Total calculated bid prices, as evaluated and corrected for computational errors, discounts and other modifications, which exceed the ABC shall not be considered, unless otherwise indicated in the **BDS**.
- 26.7 The BAC shall evaluate all bids on an equal footing to ensure fair and competitive bid comparison. For this purpose, all Bidders shall be required to include in their bids the cost of all taxes, such as, but not limited to, value added tax (VAT), income tax, local taxes, and other fiscal levies and duties, whichever is applicable, as itemized in the bid form and reflected in the detailed estimates. Such bids, including said taxes, shall be the basis for bid evaluation and comparison.
- 26.8 If so indicated pursuant to ITB Clause 1.2, bids may be submitted for individual lots or for any combination thereof, provided that all bids and combinations of bids shall be received by the same deadline and opened and evaluated simultaneously so as to determine the Bid or combination of Bids offering the lowest calculated cost to the Procuring Entity. Bid prices quoted shall correspond to all items specified for each lot and to all quantities specified for each item of a lot. Bid Security as required by ITB Clause 16 shall be submitted for each contract (lot) separately. The basis for evaluation of lots is specified in **BDS** Clause 26.5.
- 26.9 In order to eliminate bias in evaluating the quality proposals, it is recommended that the highest and lowest scores for each Bidder for each criterion shall not

be considered in determining the average scores of the Bidders, except when the evaluation is conducted in a collegial manner.

**27) Post-Qualification**

- 27.1 The BAC shall determine to its satisfaction whether the Bidder that is evaluated as having submitted the LCB, MEAB, or MAB as the case may be, complies with and is responsive to all the requirements and conditions specified in ITB Clauses 5, 12.1, and 12.2. The Bidder, within five (5) calendar days from receipt of notice from the BAC that it submitted the LCB, MEAB, or MAB shall submit all the eligibility documents supporting its PhilGEPS Certificate of Registration (Platinum Membership), its latest income and business tax returns filed for the preceding quarter which should not be earlier than two (2) quarters from the date of submission and receipt of bid, and other appropriate licenses and permits required by law and stated in the **BDS**.
- 27.2 Failure to submit any of the post-qualification requirements on time, or a finding against the veracity thereof, shall disqualify the Bidder for award; Provided, That in the event that a finding against the veracity of any of the documents submitted is made, it shall cause the forfeiture of the Bid Security.
- 27.3 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted pursuant to ITB Clauses 12.1 and 12.2, as well as other information as the Procuring Entity deems necessary and appropriate, using a non-discretionary "pass/fail" criterion, which shall be completed within a period of twelve (12) calendar days.
- 27.4 If the BAC determines that the Bidder with the LCB, MEAB, or MAB fails to meet the post-qualification criteria, it shall immediately notify the said Bidder in writing of its post-disqualification and the grounds for such determination.
- 27.5 Immediately after the BAC has notified the first Bidder of its post- disqualification, and notwithstanding any pending request for reconsideration thereof, the BAC shall initiate and complete the same post-qualification process on the Bidder with the second LCB, MEAB, or MAB. If the second Bidder passes the post-qualification and the request for reconsideration of the first Bidder has been denied, the second Bidder shall be post-qualified as the Bidder with the LCB, MEAB, or MAB.
- 27.6 If the second Bidder, however, fails the post-qualification, the procedure for post-qualification shall be repeated for the Bidder with the next LCB, MEAB, or MAB and so on, until the LCRB, MEARB, MARB, as the case may be, is determined for award, subject to the procedure of Notice and Execution of Award.
- 27.7 If the BAC determines that the Bidder with the LCB, MEAB, or MAB passes all the criteria for post-qualification, it shall declare the said bid as the LCRB, MEARB, MARB, SCRB, SEARB, or SARB.
- 27.8 Within a period not exceeding ten (10) calendar days from the determination and declaration through a resolution by the BAC of the LCRB, MEARB, MARB, SCRB, SEARB, or SARB, as the case may be, and the recommendation of the

award, the HoPE or its duly authorized representative shall approve or disapprove the said recommendation.

27.9 In case of approval, the HoPE or its duly authorized representative shall immediately issue the Notice of Award to the Bidder with the LCRB, MEARB, MARB, SCRB, SEARB, or SARB, as the case may be.

In the event that the approving authority shall disapprove the resolution on the award of the contract, such disapproval shall be based only on valid, reasonable, and justifiable grounds to be expressed in writing. A copy of the decision disapproving the resolution shall be furnished to the BAC and the Bidder.

## **28) Reservation Clause**

28.1 Notwithstanding the eligibility or post-qualification of a Bidder and without incurring any liability, the HoPE or its duly authorized representative at any stage of the procurement, reserves the right to review its qualifications, reject any and all bids, declare a failure of bidding or not award the contract in the following situations:

- a) If it has reasonable grounds to believe that a misrepresentation has been made by the said Bidder, or that there has been a change in the Bidder's capability to undertake the project from the time it submitted its eligibility requirements.
- b) Should such review uncover any misrepresentation made in the eligibility and bidding requirements, statements or documents, or any changes in the situation of the Bidder which will adversely affect its capability to undertake the Project so that it no longer meets the prescribed eligibility or bid evaluation criteria, the Procuring Entity shall consider the said Bidder as ineligible and disqualify it from participating further in the bidding process or being awarded the contract.

28.2 Based on the following grounds, the Procuring Entity reserves the right to reject any and all bids, declare a Failure of Bidding at any time prior to the contract award, or not to award the contract, without thereby incurring any liability, and make no assurance that a contract shall be entered into as a result of the bidding:

- a) If there is *prima facie* evidence of collusion between appropriate public officers or employees of the Procuring Entity, or between the BAC and any of the Bidders, or if the collusion is between or among the Bidders themselves, or between a Bidder and a third party, including any act which restricts, suppresses or nullifies, or tends to restrict, suppress or nullify competition or influences or tends to influence the bidding process;
- b) If the BAC is found to have failed in complying with the applicable law or in following the prescribed bidding procedures; or
- c) If there are any justifiable and reasonable ground where the award of the contract will not redound to the benefit of the government, in instances

where (i) the physical and economic conditions have significantly changed so as to render the Project no longer economically, financially, or technically feasible as determined by the HoPE; (ii) the Project is no longer necessary as determined by the HoPE; and (iii) the source of funds for the Project has been withheld or reduced through no fault of the Procuring Entity.

## **F. Award of Contract**

### **29) Contract Award**

29.1 Subject to ITB Clause 27, the HoPE or its duly authorized representative shall award the contract to the Bidder whose bid has been determined to be the LCRB, MEARB, MARB, SCRB, SEARB, or SARB, as the case may be.

29.2 Prior to the expiration of the period of bid validity, the Procuring Entity shall notify the successful Bidder in writing that its bid has been accepted, through a Notice of Award duly received by the Bidder or its representative personally or sent by registered mail or electronically, receipt of which must be confirmed in writing within two (2) days by the Bidder with the LCRB, MEARB, MARB, SCRB, SEARB, or SARB, as applicable and submitted personally or sent by registered mail or electronically to the Procuring Entity.

29.3 Within ten (10) calendar days from receipt by the winning Bidder of the Notice of Award, the following conditions should be complied with before the contract may be awarded:

- a) Submission of the following documents:
  - i) Valid JVA, if applicable; or
  - ii) The SEC Certificate of Registration of the foreign corporation, if applicable.
- b) Posting of the performance security in accordance with ITB Clause 31; and
- c) Signing of the contract as provided in ITB Clause 30.

29.4 At the time of contract award, the Procuring Entity shall not increase or decrease the quantity of goods originally specified in Section VI. Schedule of Requirements.

### **30) Signing of the Contract**

30.1 Within ten (10) calendar days from receipt of the Notice of Award, the winning Bidder shall (i) post the required performance security, sign and date the contract, and return it to the Procuring Entity.

30.2 The Procuring Entity shall enter into a contract with the successful Bidder within the same ten (10) calendar day period, provided that all the documentary requirements are complied with.



30.3 The following documents shall form part of the contract:

- a) Contract Agreement;
- b) Bidding Documents;
- c) Winning Bidder's bid, including the technical and financial proposals, and all other documents/statements submitted (e.g., Bidder's response to request for clarifications on the bid), including corrections to the bid, if any, resulting from the Procuring Entity's bid evaluation;
- d) Performance Security;
- e) Notice of Award of Contract; and
- f) Other contract documents that may be required by existing laws and/or specified in the **BDS**.

**31) Performance Security**

31.1 To guarantee the faithful performance of its obligations under the contract, the winning Bidder shall post a performance security prior to the signing of the contract. Furthermore, the successful Bidder shall be required to update the performance security posted before the issuance of an amendment to order if any.

31.2 Sectors enumerated under Section 76.1<sup>9</sup> of the IRR may be allowed to post a Performance Securing Declaration (PSD) as specified in the **BDS**.

31.3 The performance security shall be in any form selected by the Procuring Entity in the amount indicated in the **BDS**, which shall not be less than the percentage of the ABC in accordance with the following price schedule:

Form of Performance Security	Amount of Performance Security (Not less than the Percentage of the Total Contract Price)
a) Cash or Cashier's or Manager's check issued by a bank.  <i>For biddings conducted by LGUs, the Cashier's or Manager's check may be issued by other banks certified by the BSP as authorized to issue such financial instrument.</i>	Five percent (5%)

b) Bank draft or guarantee or irrevocable Letter of Credit issued by a local bank. If issued by a foreign bank, it shall be confirmed or authenticated by a local bank.	
c) Surety bond callable upon demand issued by a surety or insurance company duly certified by the IC as authorized to issue such security.	Thirty Percent (30%)

31.4 The performance security shall be denominated in Philippine Peso and posted in favor of the Procuring Entity, which shall be forfeited in the event it is established that the winning Bidder is in default in any of its obligations under the contract.

<sup>9</sup> Section 76.1 The GPPB, once data is available from relevant agencies, shall maintain a registry of entities belonging to the following sectors:

- a) Farmers, as certified by the Department of Agriculture (DA);
- b) Fisherfolk as certified by the Bureau of Fisheries and Aquatic Resources (BFAR);
- c) Persons with disabilities as certified by the National Council for Disability Affairs (NCDA) pursuant to RA No. 7277, otherwise known as the Magna Carta for Disabled Persons, as amended;
- d) Solo parents as certified by the Department of Social Welfare and Development (DSWD);
- e) Microenterprises and social enterprises as certified by the MSMED Council;
- f) Startups, Spin-offs, and other forms of entity involved in Science, Technology, and Innovation (DOST), as may be applicable;
- g) Cooperatives duly registered with the CDA pursuant to RA No. 6938, otherwise known as the Cooperative Code of the Philippines, as amended; and
- h) Other relevant sectors as may be determined by the GPPB to ensure inclusivity and diversity in the procurement process.

### **32) Notice to Proceed**

The Procuring Entity shall issue the Notice to Proceed to the winning Bidder not later than three (3) calendar days from the date of approval of the contract by the appropriate signatories. All notices called for by the terms of the contract shall be effective only at the time of receipt thereof by the successful Bidder.

### **33) Protest Mechanism**

Decisions of the BAC in all stages of procurement may be protested to the HoPE in accordance with Section 83 of the IRR.

### ***Section III. Bid Data Sheet***

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

Section III is intended to assist the Procuring Entity in providing specific information relative to corresponding clauses in the ITB included in Section II, and has to be prepared for each specific procurement.

The Procuring Entity should specify in the BDS the information and requirements relevant to the circumstances of the Procuring Entity; including the procurement processing details; the applicable rules regarding bid price and currency; and the bid evaluation criteria that will apply to the bids. In preparing Section III, the following aspects should be checked:

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

## Bid Data Sheet

ITB Clause	
1.1	<p>The Procuring Entity is <b><i>MOUNTAIN PROVINCE STATE UNIVERSITY</i></b></p> <p>The Project title is <b><i>E-LEARNING PLATFORM DEVELOPMENT WITH INTEGRATED DATA AND COMMUNICATIONS SYSTEM</i></b></p>
1.2	The number of lot(s) per item: refer to Schedule of Requirements
2	<p>The Funding Source is:</p> <p>2.1 The GoP through the source of funding as indicated below for <b><i>CY 2025</i></b> in the amount of <b><i>Php 900,000,000.00.</i></b></p> <p>2.2 The source of funding is: a) NGA, the General Appropriations Act or Special Appropriations.</p>
3.1	No further instructions.
5.2	Foreign Bidders, except those falling under ITB Clause 5.2(b), may not participate in this Project.
5.4	The Bidder's SLCC similar to the contract to be bid should have been completed within <i>10 years (refer to 5.4)</i> prior to the deadline for the submission and receipt of bids.
7	No further instructions.
8.1	"Subcontracting is not allowed."
8.4	"Not Applicable".
9.1	The Procuring Entity will hold a pre-bid conference for this Project on <b><i>August 12, 2025</i></b> at the <b><i>Office of the Vice President for Administration and Finance, 5<sup>th</sup> Floor, Administrative Building, Bontoc, Mountain Province</i></b> and through video-conferencing/webcasting (coordinate with BAC Secretariat)

10.1	<p>The Procuring Entity's address is:</p> <p><b>MOUNTAIN PROVINCE STATE UNIVERSITY</b>  <b>BONTOC, MOUNTAIN PROVINCE</b></p> <p><b>THRU: REYNALDO P. GAYO JR.</b>  <b>CHAIRPERSON</b>  <b>BIDS AND AWARDS COMMITTEE</b>  <b>PROCUREMENT SERVICES OFFICE</b>  <b>5<sup>TH</sup> FLOOR, ADMIN BUILDING</b>  <b>MOUNTAIN PROVINCE STATE UNIVERSITY</b></p>
12.4	The ABC is <b><i>Nine Hundred Million Pesos (P900,000,000.00)</i></b> . Any bid with a financial component exceeding the amount shall not be accepted.
13.1(a)(iv)	"No incidental services are required."
13.1(b)(i)	"Not applicable",
13.1(b)(ii)	"No incidental services are required."
13.2	No further instructions.
14.1(b)	The Bid prices for Goods supplied from outside of the Philippines shall be quoted in Philippine Peso.
14.3	"Not applicable"
15.1	Bids will be valid for <b>120 days</b> from bid opening.

16.1	<p>The Bid Security shall be in the form of a Bid Securing Declaration, and any of the following:</p> <ol style="list-style-type: none"> <li>1) The amount of not less than <b><u>Php 18,000,000.00</u></b> [2% of ABC], if bid security is in cash.</li> <li>2) The amount of not less than <b><u>Php 18,000,000.00</u></b> [2% of ABC], if bid security is in cashier's check.</li> <li>3) The amount of not less than <b><u>Php 18,000,000.00</u></b> [2% of ABC], if bid security is in manager's check.</li> <li>4) The amount of not less than <b><u>Php 45,000,000.00</u></b> [5% of ABC] if bid security is in bank draft.</li> <li>5) The amount of not less than <b><u>Php 45,000,000.00</u></b> [5% of ABC] if bid security is in guarantee.</li> <li>6) The amount of not less than <b><u>Php 45,000,000.00</u></b> [5% of ABC] if bid security is irrevocable LoC. or</li> <li>7) The amount of not less than <b><u>Php 45,000,000.00</u></b> [5% of ABC] if bid security is Surety Bond.</li> </ol>
16.2	The Bid Security shall be valid for <b>120 days</b> .
16.3	<p>In case of extension of bid validity and bid security validity period, Substitution of the bid security form is allowed. Bid Securing Declaration and the following forms may be used:</p> <ol style="list-style-type: none"> <li>a) Cash or Cashier's or Manager's Check issued by a Bank.</li> <li>b) Bank draft/guarantee or irrevocable Letter of Credit issued by a Bank: Provided, however, that it shall be confirmed or authenticated by a local Bank, if issued by a foreign bank.</li> <li>c) Surety bond callable upon demand issued by a surety or insurance company duly certified by the Insurance Commission as authorized to issue such security." </li></ol>
19	<p>The address for the submission of Bids is at the <b><i>Procurement Services Office, 5<sup>th</sup> Floor, Administration Building, MPSU, Bontoc, Mountain Province</i></b>. The deadline for the submission of Bids is on or before <b>August 26, 2025 at 9:30 in the morning</b></p>
22.1	<p>The place of the bid opening is at the <b><i>Office of the Vice President for Administration and Finance, 5<sup>th</sup> Floor, Administrative Building, Bontoc, Mountain Province</i></b></p> <p>The date and time of bid opening is on <b>August 26, 2025 at 10 in the morning</b></p>
22.2(b)	<p>For MARB as award criterion, the date and time of bid opening of the financial proposals is <b>August 26, 2025 at 10 in the morning</b>.</p>

25.7	No further instructions.
26.3(b)(i)	<p>The quality component shall be assessed on the basis of criteria with corresponding numerical weights, which may include qualitative, environmental, or social aspects linked to the subject matter of the contract. These may include any or a combination of the following:</p> <ul style="list-style-type: none"> <li>a) Quality and technical merit, including technical competence and a credible track record;</li> <li>b) Aesthetic and functional design and characteristics;</li> <li>c) Approach and methodology;</li> <li>d) Accessibility;</li> <li>e) Tools and equipment;</li> <li>f) Social, environmental, economic, and innovative characteristics;</li> <li>g) Organization, qualification, and experience of employees or staff assigned to perform the contract;</li> <li>h) Ongoing contracts and work commitments;</li> <li>i) After-sales service and technical assistance;</li> <li>j) Delivery conditions, such as delivery period and delivery process;</li> <li>k) Disposal measures; or</li> <li>l) Other relevant criteria in relation to the subject Goods or Infrastructure Projects to be procured.</li> </ul>
26.3(b)(iii)	"Not applicable."
26.3(c)(i)	"Not applicable."
26.5(a)	<p>"Partial bid is not allowed. The goods are grouped in a single lot and the lot shall not be divided into sub-lots for the purpose of bidding, evaluation, and contract award."</p> <p>In all cases, the NFCC computation, if applicable, must be sufficient for all the lots or contracts to be awarded to the Bidder."</p>

	<p><b>Grouping and Evaluation of Lots –</b></p> <p><i>Lots should be formed of similar items that are likely to attract the maximum competition. A lot is the quantity and number of items that will be included in a single contract. For example:</i></p> <p><i>Option 1 – Each item to be evaluated and compared with other Bids separately and recommended for contract award separately.</i></p> <p><i>Option 2 - All items to be grouped together to form one complete Lot that will be awarded to one Bidder to form one complete contract.</i></p> <p><i>Option 3 - Similar items, to be grouped together to form several lots that shall be evaluated and awarded as separate contracts.</i></p>
26.5(b)	"Arithmetical correction is allowed."

26.6	No further instructions.
27.1	List licenses and permits relevant to the Project and the corresponding law requiring it,
30.3(f)	List additional contract documents relevant to the Project that may be required by existing laws and/or the Procuring Entity,
31.2	<i>State, "Not applicable"</i>
31.3	<p>The Performance Security shall be in the form: <i>[choose one from any of the following:]</i></p> <ol style="list-style-type: none"> <li>1) The amount of not less than <b><u>Php 45,000,000.00</u></b> [5% of ABC], if performance security is in cash.</li> <li>2) The amount of not less than <b><u>Php 45,000,000.00</u></b> [5% of ABC], if performance security is in cashier's check.</li> <li>3) The amount of not less than <b><u>Php 45,000,000.00</u></b> [5% of ABC], if performance security is in manager's check.</li> <li>4) The amount of not less than <b><u>Php 45,000,000.00</u></b> [5% of ABC] if performance security is in bank draft.</li> <li>5) The amount of not less than <b><u>Php 45,000,000.00</u></b> [5% of ABC] if performance security is in guarantee.</li> <li>6) The amount of not less than <b><u>Php 45,000,000.00</u></b> [5% of ABC] if performance security is irrevocable LoC. Or</li> <li>7) The amount of not less than <b><u>Php 270,000,000.00</u></b> [30% of ABC] if performance security is Surety Bond.</li> </ol>



## ***Section IV. General Conditions of Contract***

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

The GCC in Section IV, read in conjunction with the SCC in Section V and other documents listed therein, should be a complete document expressing all the rights and obligations of the parties.

The GCC herein shall not be altered. Any changes and complementary information which may be needed shall be introduced only through the SCC in Section V.

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**1) General Terms**

In this Contract, the following terms shall be interpreted as indicated:

- a) "The Procuring Entity" means the organization purchasing the Goods, as named in the **SCC**.
- b) "The Supplier" means the individual contractor, manufacturer distributor, or firm supplying/manufacturing the Goods and Services under this Contract and named in the **SCC**.
- c) The "Funding Source" means the organization named in the **SCC**.
- d) "The Project Site," where applicable, means the place or places named in the **SCC**.

**2) Corrupt, Fraudulent, Collusive, and Coercive Practices**

Unless otherwise provided in the **SCC**, the Procuring Entity as well as the Bidders, Contractors, or Suppliers shall observe the highest standard of ethics during the procurement and execution of this Contract. Further the Funding Source, as appropriate, will seek to impose the maximum civil, administrative and/or criminal penalties available under the applicable law on individuals and organizations deemed to be involved with any of the practices mentioned in ITB Clause 3.1(a).

**3) Inspection and Audit by the Funding Source**

The Supplier shall allow the Funding Source to inspect its accounts and records related to the performance of its obligations. If the Funding Source requires a separate audit, it shall appoint its auditor and bear the cost thereof.

**4) Governing Law and Language**

4.1 This Contract shall be interpreted in accordance with the laws of the Republic of the Philippines.

4.2 This Contract has been executed in the English language, which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Contract. All correspondence and other documents pertaining to this Contract exchanged by the parties shall be written in English.

**5) Notices**

5.1 Any notice, request, or consent required or permitted to be given or made pursuant to this Contract shall be in writing. Any such notice, request, or consent shall be deemed to have been given or made when received by the concerned party, either in person or through an authorized representative of the Party to whom the communication is addressed, or when sent by registered mail or electronic mail, to such Party at the address specified in the **SCC**, which shall be effective when delivered and duly received, as may be applicable.

5.2 A Party may change its address upon notice pursuant to the provisions listed in the SCC.

## **6) Scope of Contract**

6.1 The Goods to be provided shall be as specified in Section VI. Schedule of Requirements.

6.2 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. Any additional requirements for the completion of this Contract shall be provided in the SCC.

## **7) Subcontracting**

7.1 For subcontracting arrangements, the following rules shall apply for both locally funded projects and projects financed through Official Development Assistance, except those covered by treaty, or international, or executive agreements.

- a) The subcontracted portion of the contract shall be subject to the approval of the HoPE and the following conditions:
  - i) The subcontracted portion shall not exceed twenty percent (20%) for Goods, or a different percentage on a per project basis, as approved by the GPPB. The threshold percentages fixed herein shall be subject to the periodic review and adjustments as may be deemed appropriate by the GPPB; and
  - ii) The subcontracted portion shall be limited to components that are not deemed "significant or material" to the Project, as determined by the Procuring Entity.
- b) Subcontracting arrangement, if allowed, including the time of submission of the eligibility documents of the subcontractor, shall be disclosed in the Bidding Documents;
- c) Subcontractors must meet the eligibility criteria and submit the same eligibility documents as the general contractor.

Failure of a subcontractor to meet the eligibility criteria does not affect the eligibility of the general contractor for the procurement project. In such case, the portion intended to be subcontracted to the ineligible subcontractor shall be assumed by the general contractor;

- d) The general contractor shall remain liable for the subcontractor's actions, defaults, delays, and negligence;
- e) The general contractor and the subcontractor are obliged to comply with the provisions of the contract and shall share liability, jointly and severally, in cases of violation of safety standards or other labor standards insofar as the subcontracted portion is concerned; and

- f) For purposes of post-qualification in accordance with its objective and process under the IRR, the value of the entire completed and accepted Project, including the subcontracted portion, shall be credited as experience of the general contractor. In the case of the subcontractor, the following rules shall apply:
  - i) The subcontractor shall get credit for one hundred percent (100%) of the value of the subcontracted portion of the project performed; and
  - ii) Subcontractors shall be eligible to concessional windows of GFIs that treat receivables from the government as loan security; the receivables of subcontractors due from their general contractor shall similarly be accepted as loan security by GFIs.

## 8) **Procuring Entity's Responsibilities**

8.1 Whenever the performance of the obligations in this Contract requires that the Supplier obtain permits, approvals, import, and other licenses from local public authorities, the Procuring Entity may assist the Supplier in complying with such requirements in a timely and expeditious manner.

8.2 The Procuring Entity shall pay all costs involved in the performance of its responsibilities in accordance with the Scope of Contract.

## 9) **Prices**

9.1 For goods and services covered under this Contract, as awarded, all bid prices shall be deemed fixed and not subject to price escalation during contract implementation, except as otherwise provided in the succeeding provisions.

9.2 Prices charged by the Supplier for Goods delivered and/or services performed under this Contract shall not vary from the prices quoted by the Supplier in its bid, unless there is a change in price resulting from Amendment to Order issued in accordance with **GCC** Clause 28.

## 10) **Advance Payment**

10.1 For Goods sourced from within the Philippines, advance payments may be made as follows:

- a) A single advance payment not to exceed fifty percent (50%) of the contract amount shall be allowed for contracts entered into by a procuring entity for the following services where the requirement of down payment is a standard industry practice: 1) hotel and restaurant services; 2) use of conference/seminar and exhibit areas; and 3) lease of office space;

- b) Advance payment not to exceed fifteen percent (15%) of the contract amount, unless otherwise directed by the President, shall also be allowed for procurement of goods required to address contingencies arising from natural or man-made calamities in areas where a "State of Calamity" has been declared by appropriate authorities; and
- c) Upon submission of an irrevocable Letter of Credit (LoC) or bank guarantee issued by local bank, advance payment not exceeding fifteen percent (15%) of the contract amount shall be allowed and paid to the Supplier within sixty (60) calendar days from the signing of the contract. The irrevocable LoC or bank guarantee, which must be for an equivalent amount, shall remain valid until the goods are delivered, and accompanied by a claim for advance payment.

10.2 For Goods supplied from abroad, unless otherwise indicated in the **SCC**, the terms of payment shall be as follows:

- a) Upon Contract Signing: Fifteen Percent (15%) of the Contract Price shall be paid within sixty (60) days from signing of the Contract and upon submission of a claim and a bank guarantee for the equivalent amount valid until the Goods are delivered and in the form provided in Section VIII. PBD Related Forms.
- b) Upon Delivery: Sixty-five percent (65%) of the Contract Price shall be paid to the Supplier within sixty (60) days after the date of receipt of the Goods and upon submission of the documents (i) through (vi) specified in the SCC provision on Delivery and Documents.
- c) Upon Acceptance: The remaining twenty percent (20%) of the Contract Price shall be paid to the Supplier within sixty (60) days after the date of submission of the acceptance and inspection certificate for the respective delivery issued by the Procuring Entity's authorized representative. In the event that no inspection or acceptance certificate is issued by the Procuring Entity's authorized representative within forty five (45) days of the date shown on the delivery receipt, the Supplier shall have the right to claim payment of the remaining twenty percent (20%) subject to the Procuring Entity's own verification of the reason(s) for the failure to issue documents (vii) and (viii) as described in the SCC provision on Delivery and Documents.

10.3 All progress payments for Goods shall first be charged against the advance payment until the latter has been fully exhausted.

## **11) Payment**

11.1 Payments shall be made only upon a certification by the HoPE that the Goods have been delivered in accordance with the terms of this Contract and have been duly inspected and accepted. Except with the prior approval of the President, no payment shall be made for services not yet rendered or for supplies and materials not yet delivered under the Contract.

11.2 The Supplier's request(s) for payment shall be made to the Procuring Entity in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and/or Services rendered, and by documents submitted pursuant to the

SCC provision for **GCC** Clause 6.2, and upon fulfillment of other obligations stipulated in this Contract;

11.3 Pursuant to **GCC** Clause 11.2, payments shall be made promptly by the Procuring Entity after submission of an invoice or claim by the Supplier. Payments shall be in accordance with the applicable accounting and auditing laws, rules and regulations.

11.4 Unless otherwise provided in the **SCC**, all payments to the Supplier under this Contract shall be in Philippine Peso;

11.5 Unless otherwise provided in the **SCC**, payments using LoC is allowed. For this purpose, the amount of provisional sum shall be indicated in the **SCC**. All charges for the opening of the LoC and/or incidental expenses thereto shall be for the account of the Supplier.

## **12) Taxes and Duties**

The Supplier, whether local or foreign, shall be entirely responsible for all the necessary taxes, stamp duties, license and permit fees, and other such levies imposed for the completion of this Contract.

## **13) Performance Security**

13.1 Within ten (10) calendar days from receipt of the Notice of Award 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 the forms prescribed in the ITB Clauses 31.2 and 31.3.

13.2 The performance security posted in favor of the Procuring Entity shall be forfeited in the event it is established that the winning Bidder is in default in any of its obligations under the contract.

13.3 The performance security shall remain valid until issuance by the Procuring Entity of the Certificate of Final Acceptance.

13.4 The performance security may be released by the Procuring Entity and returned to the Supplier after the issuance of the Certificate of Final Acceptance, subject to the following conditions:

- a) There are no pending claims against the Supplier or the Surety Company filed by the Procuring Entity;
- b) The Supplier has no pending claims for labor and materials filed against it; and
- c) Other terms specified in the **SCC**.

13.5 The Procuring Entity shall allow a proportional reduction in the original performance security in case of a reduction in contract value, provided that any such reduction is more than ten percent (10%) and that the aggregate of such reductions is not more than fifty percent (50%) of the original performance security.

#### **14) Use of Contract Documents and Information**

14.1 The Supplier shall not, without the Procuring Entity's prior written consent, disclose this Contract or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the Procuring Entity, except for purposes of performing the obligations therein. Any such disclosure shall be made in confidence and shall extend only as far as may be necessary for purposes of such performance.

14.2 Other than this Contract, any document enumerated in **GCC** Clause 14.1 shall remain the property of the Procuring Entity. All copies shall be returned to the Procuring Entity upon completion of the Supplier's performance under this Contract, if so required by the Procuring Entity.

#### **15) Standards**

The Goods provided under this Contract shall conform to the standards mentioned in the Section VII. Technical Specifications. When no applicable standard is mentioned, the Goods shall comply with the latest authoritative standards appropriate to its country of origin.

#### **16) Inspection and Tests**

16.1 The Procuring Entity or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Contract specifications at no extra cost to the Procuring Entity, other than that specified under Item 16.3 below. The **SCC** and 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.

16.2 If applicable, the inspections and tests may be conducted on the premises of the Supplier or its subcontractor(s), at point of delivery, and/or at the goods' final destination. If conducted on the premises of the Supplier or its subcontractor(s), all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no cost to the Procuring Entity. The Supplier shall provide the Procuring Entity with the results of such inspections and tests.

16.3 The Procuring Entity or its designated representative shall be allowed to attend the tests and/or inspections referred to in this Clause provided that the Procuring Entity shall bear all of its own costs and expenses incurred in connection with such attendance including, but not limited to, all traveling and board and lodging expenses.

16.4 The Procuring Entity shall reject the Goods or any part thereof that fail to pass any test and/or inspection or do not conform to the specifications. The Supplier shall either rectify or replace such rejected Goods or parts thereof or make alterations necessary to meet the specifications at no cost to the Procuring Entity. Upon giving due notice to the Supplier pursuant to **GCC** Clause 5, the test and/or inspection may be repeated by the Procuring Entity, at no additional cost.

16.5 The Supplier agrees that neither the execution of a test and/or inspection of the Goods or any part thereof, nor the attendance by the Procuring Entity or its



representative to the said test and/or inspection, shall release the Supplier from any warranties or other obligations under this Contract.

## **17) Warranty**

17.1 The Supplier warrants that the Goods supplied under the Contract are new, unused, of the most recent or current models, and with all recent improvements in design and materials, except when the technical specifications required by the Procuring Entity provides otherwise.

17.2 The Supplier further warrants that all Goods supplied under this Contract shall have no defect, arising from design, materials, or workmanship or from any act or omission of the Supplier that may develop under normal use of the supplied Goods in the conditions prevailing in the country of final destination.

17.3 To ensure correction of manufacturing defects, the Supplier shall be required to provide a warranty for a minimum period specified in the **SCC**. At the option of the Procuring Entity, the obligation for the warranty shall be covered by:

- a) Retention money in an amount equivalent to at least one percent (1%) but not to exceed five (5%) of every progress payment; or
- b) Special bank guarantee equivalent to at least one percent (1%) but not to exceed five (5%) of the total Contract Price; or
- c) Other such amount, if so specified in the **SCC**.

17.4 The said amounts shall only be released by the Procuring Entity after the lapse of the warranty period as specified in the **SCC**, or in case of Expendable Supplies, after the consumption thereof; Provided, however, that the Supplies delivered are free from patent and latent defects and all the conditions imposed under this Contract have been fully met.

17.5 The Procuring Entity shall promptly notify the Supplier in writing of any claims arising under the warranty. Upon receipt of such notice, the Supplier shall, within the period specified in the **SCC**, repair or replace the defective Goods or parts thereof, at the soonest possible time, without cost to the Procuring Entity.

17.6 If the Supplier, after having been notified on the warranty claim, fails to remedy the defect(s) within the period specified in **GCC** Clause 17.5, the Procuring Entity may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense, and without prejudice to any other rights which the Procuring Entity may have against the Supplier under the Contract and other applicable laws.

## **18) Delays in the Supplier's Performance**

18.1 Delivery of the Goods and/or performance of Services shall be made by the Supplier in accordance with the time schedule prescribed by the Procuring Entity in Section VI. Schedule of Requirements.

18.2 If at any time during the performance of this Contract, the Supplier encounters conditions that may impede the timely delivery of the Goods and/or performance of Services, the Supplier shall promptly notify the Procuring Entity in writing of the

fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Supplier's notice, and upon causes provided for under **GCC** Clause 23, the Procuring Entity shall evaluate the situation and, if warranted, extend the Supplier's time for performance, in which case the extension shall be ratified by the parties by amendment of Contract.

- 18.3 Except as provided under **GCC** Clause 23, any delay by the Supplier in the performance of its obligations shall render it liable to the imposition of liquidated damages pursuant to **GCC** Clause 19, unless an extension of time is agreed upon pursuant to **GCC** Clause 28.

## **19) Liquidated Damages**

- 19.1 When the Supplier fails to satisfactorily deliver the Goods under the contract within the specified delivery schedule, inclusive of duly granted time extensions, if any, the Supplier, manufacturer, or distributor shall be liable for liquidated damages in an amount equal to one-tenth (1/10) of one percent (1%) of the cost of the delayed goods scheduled for delivery for every day of delay until such goods are finally delivered and accepted by the Procuring Entity.
- 19.2 The Procuring Entity need not prove that it has incurred actual damages to be entitled to liquidated damages. Such amount shall be deducted from any money due, or which may become due the supplier, manufacturer, or distributor, or collected from any securities or warranties posted by the supplier, manufacturer, or distributor, whichever is convenient to the Procuring Entity. In case the total sum of liquidated damages reaches ten percent (10%) of the total contract price, the Procuring Entity may rescind the contract and impose appropriate sanctions over and above the liquidated damages to be paid.
- 19.3 If delays are likely to be incurred beyond its control, the supplier, manufacturer, or distributor shall promptly notify the Procuring Entity in writing, providing details of the causes and duration of the expected delay. The Procuring Entity may, at its discretion, grant a time extension based on meritorious grounds, with or without the imposition of liquidated damages.

## **20) Settlement of Disputes**

- 20.1 Any dispute arising from the implementation of a contract covered by the Act and the IRR shall primarily be resolved and settled amicably by mutual consultation or agreement.
- 20.2 In case of failure to settle dispute amicably, the parties may mutually agree in writing to resort to other modes of alternative dispute resolution (ADR) to promote efficiency in the procurement process. Accordingly, they are encouraged to select the most expeditious mode of ADR available.

If arbitration is chosen as the ADR method, this shall be incorporated as a provision in the contract and referred to the Arbitrator specified in the **SCC**.

- 20.3 In case of disagreement or after exhausting the remedies provided in the preceding Section, the dispute may be submitted to arbitration or other forms of alternative dispute resolution which includes mediation, conciliation, early neutral evaluation,

mini-trial, or any combination thereof in accordance with the provisions of RA No. 9285, otherwise known as the "Alternative Dispute Resolution Act of 2004."

20.4 Should the Parties fail to resolve their dispute or difference by such mutual consultation or agreement after thirty (30) days, either the Procuring Entity or the Supplier may signify its intention to commence arbitration by giving notice to the Other Party, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given.

20.5 Any dispute or difference in respect of which a notice of intention to commence arbitration has been given in accordance with this Clause shall be settled by arbitration. Arbitration may be commenced prior to or after delivery of the Goods under this Contract.

20.6 Notwithstanding any reference to arbitration herein, the Parties shall continue to perform their respective obligations under the Contract unless otherwise agreed upon in writing.

## **21) Liability of the Supplier**

21.1 The Supplier's liability under this Contract shall be as provided by the laws of the Republic of the Philippines, subject to additional provisions, if any, set forth in the **SCC**.

21.2 Except in cases of criminal negligence or willful misconduct, and in the case of infringement of patent rights, if applicable, the aggregate liability of the Supplier to the Procuring Entity shall not exceed the total Contract Price, provided that this limitation shall not apply to the cost of repair or replacement of the defective Goods.

## **22) Termination for Breach of Contract**

The Procuring Entity may terminate for breach of contract when the Supplier fails to deliver or perform any or all of the Goods within the period(s) specified in the contract, or within any extension thereof granted by the Procuring Entity, pursuant to a request made by the Supplier prior to the delay, and such failure amounts to at least ten percent (10%) of the contract price, consistent with the provision of this IRR on liquidated damages. The Procuring Entity may likewise impose appropriate sanctions therein.

## **23) Termination Due to Force Majeure**

23.1 For purposes of this Contract, the terms "*force majeure*" and "fortuitous event" may be used interchangeably. In this regard, a fortuitous event or *force majeure* shall be interpreted to mean as an event which the Supplier could not have been foreseen, or though foreseen, was inevitable. It shall not include ordinary unfavorable weather conditions, and any other causes the effect/s of which could have been avoided with the exercise of reasonable diligence by the Supplier. Such events may include, but not limited to, acts of the Procuring Entity in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.

23.2 The Procuring Entity may terminate the contract and impose liquidated damages when, as a result of force majeure, the Supplier is unable to deliver or perform any or all of the Goods, amounting to at least ten percent (10%) of the contract price, for a period of not less than sixty (60) calendar days, or earlier, as deemed necessary by the Procuring Entity, after receipt of the written notice from the Procuring Entity stating that the circumstance of force majeure is deemed to have ceased.

23.3 The Supplier shall not be subject to forfeiture of its performance security, payment of liquidated damages, or contract termination due to *force majeure*, provided that the Supplier's delay in performance or other failure to perform its obligations under the contract is the result of a *force majeure*.

23.4 If a *force majeure* situation arises, the Supplier shall promptly notify the Procuring Entity in writing of such condition and the cause thereof. Unless otherwise directed by the Procuring Entity, the Supplier shall continue to perform its obligations under the Contract as far as may be practicable, when not prevented by the *force majeure*, and shall seek all reasonable alternative means in the performance of its obligation.

## **24) Termination for Convenience**

24.1 The Procuring Entity, through a written notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time, if it has determined the existence of any of the following conditions that make contract implementation economically, financially, or technically impractical or unnecessary:

- a) When physical and economic conditions have significantly changed so as to render the project no longer economically, financially, or technically feasible, as determined by the HoPE;
- b) When the HoPE has determined the existence of conditions that make project implementation impractical or unnecessary, such as, but not limited to, fortuitous event/s, changes in laws and government policies;
- c) When funding for the Project has been withheld or reduced by higher authorities through no fault of the Procuring Entity; or
- d) Any circumstance analogous to the foregoing.

24.2 The Goods that have been performed or are ready to be delivered or performed within thirty (30) calendar days after the Supplier's receipt of Notice to Terminate shall be accepted by the Procuring Entity at the contract terms and prices thereof. For Goods not yet delivered, performed and/or ready to be delivered or performed, the Procuring Entity may elect:

- a) To have any portion delivered and/or performed and paid at the contract terms and prices thereof; or

- b) To cancel the remainder and pay to the Supplier an agreed amount for partially completed and/or performed goods and for materials and parts previously procured by the Supplier.

## 25) Termination for Unlawful Acts

25.1 The Procuring Entity may terminate this Contract in case it is determined *prima facie* that the Supplier, including any joint venture partner therein, has engaged, before or during the implementation of this Contract, in unlawful deeds and behaviors relative to contract acquisition and implementation. Unlawful acts include, but are not limited to, the following:

- a) Corrupt, fraudulent, collusive, and coercive practices as defined in ITB Clause 3.1;
- b) Drawing up or using forged documents;
- c) Using adulterated materials, means or methods, or engaging in production contrary to rules of science or the trade; and
- d) Any other act analogous to the foregoing.

## 26) Procedures for Termination of Contracts

26.1 The following provisions shall govern the procedures for termination of this Contract:

- a) **Verification** - Upon receipt of a written report of acts or causes which may constitute grounds for termination as aforementioned, or upon its own initiative, the End-User or Implementing Unit shall, within a period of seven (7) calendar days, verify the existence of such grounds and cause the execution of a Verified Report, with all relevant evidence attached.
- b) **Notice to Terminate** - Upon recommendation by the End-User or Implementing Unit, the HoPE shall terminate contracts only by written notice to the supplier conveying the termination of the contract. The notice shall state:
  - i) That the contract is being terminated for any of the grounds aforementioned, and a statement of the acts that constitute the grounds constituting the same;
  - ii) The extent of termination, whether in whole or in part;
  - iii) An instruction to the Supplier, to show cause as to why the contract should not be terminated; and
  - iv) Special instructions of the Procuring Entity, if any.

The Notice to Terminate shall be accompanied by a copy of the Verified Report.

- c) **Show Cause** - Within a period of seven (7) calendar days from receipt of the Notice of Termination, the Supplier shall submit to the HoPE a verified position paper stating why the contract should not be terminated. If the Supplier, fails to show cause after the lapse of the seven (7) day period, either by inaction or by default, the HoPE shall issue an order terminating the contract.
- d) **Rescission of Notice of Termination** - The Procuring Entity may, at any time before receipt of the Supplier's verified position paper, withdraw the Notice to Terminate if it is determined that certain items or works subject of the notice had been completed, delivered, or performed before the Supplier's receipt of the notice.
- e) **Decision** - Within a non-extendible period of ten (10) calendar days from receipt of the verified position paper, the HoPE shall decide whether or not to terminate the contract. It shall serve a written notice to the Supplier of its decision and, unless otherwise provided, the contract is deemed terminated from receipt of the Supplier of the notice of the decision. The termination shall only be based on the grounds stated in the Notice to Terminate.
- f) **Contract Termination Review Committee (CTRC)** - The HoPE may create a committee to assist in the discharge of its functions under the IRR. All decisions recommended by the CTRC shall be subject to the approval of the HoPE.
- g) **Take-over of Contracts** - If a Procuring Entity terminates the contract due to default, insolvency, or for a cause, it may enter into a Negotiated Procurement (Take-over of Contracts) pursuant to Section 35(c) of the IRR.
- h) **Procuring Entity's Options in Termination for Convenience in Contracts for Goods** - The Goods that have been performed or are ready for delivery within thirty (30) calendar days after the supplier's receipt of Notice to Terminate shall be accepted by the Procuring Entity at the contract terms and prices. For Goods not yet performed or ready for delivery, the Procuring Entity may elect:
  - i) To have any portion delivered or performed and paid at the contract terms and prices; or
  - ii) To cancel the remainder and pay to the supplier an agreed amount for partially completed or performed goods and for materials and parts previously procured by the supplier.

## 27) Assignment of Rights

The Supplier shall not assign its rights or obligations under this Contract, in whole or in part, except upon prior written consent of the Procuring Entity.

**28) Amendment to Order**

No variation in or modification of the terms of this Contract shall be made except by written amendment signed by the parties in accordance with the provisions on Amendment to Order, subject to applicable laws, rules and regulations.

**29) Application**

These General Conditions shall apply to the extent that they are not suspended by the provisions from other parts of this Contract.

## ***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.

The provisions of this Section 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 Section IV must be incorporated.
- b) Amendments and/or supplements to provisions of Section IV, 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 Section IV should be incorporated herein.



## Special Conditions of Contract

GCC Clause	
1(a)	The Procuring Entity is <i>Mountain Province State University</i> .
1(b)	The Supplier is <i>[to be inserted at the time of contract award]</i> .
1(c)	<p>The Funding Source is:</p> <p>2.1 The GoP through the source of funding as indicated below for <b>CY 2025</b> in the amount of <b>Php 900,000,000.00</b></p> <p>2.2 The source of funding is:</p> <p style="padding-left: 40px;">a) NGA, the General Appropriations Act or Special Appropriations.</p>
1(d)	The Project Site is <b>MOUNTAIN PROVINCE STATE UNIVERSITY, BONTOC. MOUNTAIN PROVINCE</b>
2	No further instructions.
5.1	<p>The Procuring Entity's address for Notices is:</p> <p><b>MOUNTAIN PROVINCE STATE UNIVERSITY BONTOC, MOUNTAIN PROVINCE</b></p> <p style="text-align: center;"><b>THRU: REYNALDO P. GAYO JR. CHAIRPERSON BIDS AND AWARDS COMMITTEE PROCUREMENT SERVICES OFFICE 5<sup>TH</sup> FLOOR, ADMIN BUILDING MOUNTAIN PROVINCE STATE UNIVERSITY</b></p> <p>The Supplier's address for Notices is: <i>[Insert address including, name of contact, fax and telephone number]</i>.</p>
5.2	No further instructions.
6.2	<p><i>List here any additional requirements for the completion of this Contract. The following requirements and the corresponding provisions may be deleted, amended, or retained depending on its applicability to this Contract:</i></p> <p><b>Delivery and Documents</b></p> <p>For purposes of the Contract, "EXW," "FOB," "FCA," "CIF," "CIP," "DDP" and other trade terms used to describe the obligations of the parties shall have the meanings assigned to them by the current edition of INCOTERMS published by the International Chamber of</p>

	<p>Commerce, Paris. The Delivery terms of this Contract shall be as follows:</p> <p><i>For Goods Supplied from Abroad, state “The delivery terms applicable to the Contract are DDP delivered [insert place of destination]. In accordance with INCOTERMS.” (DAP)</i></p> <p><i>For Goods Supplied from Within the Philippines, state “The delivery terms applicable to this Contract are delivered [insert place of destination]. Risk and title will pass from the Supplier to the Procuring Entity upon receipt and final acceptance of the Goods at their final destination.”</i></p> <p>Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in Section VI. Schedule of Requirements. The details of shipping and/or other documents to be furnished by the Supplier are as follows:</p> <p><i>For Goods supplied from within the Philippines:</i></p> <p>Upon delivery of the Goods to the Project Site, the Supplier shall notify the Procuring Entity and present the following original documents to the Procuring Entity:</p> <ul style="list-style-type: none"> <li>i) Supplier’s invoice showing Goods’ description, quantity, unit price, and total amount;</li> <li>ii) Delivery receipt/note, railway receipt, or truck receipt; iii) Supplier’s factory inspection report; iv) Manufacturer’s and/or Supplier’s warranty certificate; v) Certificate of origin (for imported Goods); vi) Delivery receipt detailing number and description of items received signed by the authorized receiving personnel; vii) Certificate of Acceptance/Inspection Report signed by the Procuring Entity’s representative at the Project Site; and</li> <li>viii) Four copies of the Invoice Receipt for Property signed by the Procuring Entity’s representative at the Project Site.</li> </ul> <p><i>For Goods supplied from abroad:</i></p> <p>Upon shipment, the Supplier shall immediately communicate and notify the Procuring Entity and the insurance company the full details of the shipment, including Contract Number, description of the Goods, quantity, vessel, bill of lading number and date, port of loading, date of shipment, port of discharge etc. Upon delivery to the Project Site, the Supplier shall notify the Procuring Entity and present the following original documents as applicable with the documentary requirements of any letter of credit issued taking precedence:</p> <ul style="list-style-type: none"> <li>i) Supplier’s invoice showing Goods’ description, quantity,</li> </ul>
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	unit price, and total amount;
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	<p>ii) Negotiable, clean shipped on board bill of lading marked “freight prepaid”, as well as a copy of the non-negotiable bill of lading;</p> <p>iii) Supplier’s factory inspection report; iv) Manufacturer’s and/or Supplier’s warranty certificate; v) Certificate of origin (for imported Goods); vi) Delivery receipt detailing number and description of items received signed by the Procuring Entity’s representative at the Project Site; vii) Certificate of Acceptance/Inspection Report signed by the Procuring Entity’s representative at the Project Site; and viii) Invoice Receipt for Property signed by the Procuring Entity’s representative at the Project Site.</p> <p>For purposes of this Clause the Procuring Entity’s Representative at the Project Site is <i>[insert name(s)]</i>.</p> <p><b>Incidental Services</b></p> <p>The Supplier is required to provide all of the following services, including additional services, if any, specified in Section VI. Schedule of Requirements:</p> <p>a) performance or supervision of onsite assembly and/or startup of the supplied Goods;</p> <p>b) furnishing of tools required for assembly and/or maintenance of the supplied Goods;</p> <p>c) furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied Goods;</p> <p>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</p> <p>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.</p> <p>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.</p>
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### **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:

- a) 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
- b) 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 required are listed in Section VI. Schedule of Requirements and the cost thereof are included in the Contract Price

The Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spares for the Goods for a period of *[insert here the time period specified. If not used insert time period of three times the warranty period]*.

Other spare parts and components shall be supplied as promptly as possible, but in any case, within *[insert appropriate time period]* months of placing the order.

### **Packaging**

The Supplier shall meet packaging standards for Goods in accordance with existing laws and regulations, and as indicated in this Contract to prevent damage or deterioration during transit to their final destination.

The packaging shall be durable enough to withstand rough handling, exposure to extreme temperatures, salt, precipitation, open storage, and other extreme conditions during transit. Packaging case sizes and weights shall consider the remoteness of the Goods' final destination and the potential absence of heavy handling facilities at all transit points.

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



	<p>The outer packaging must be clearly marked on at least four (4) sides as follows:</p> <p>Name of the Procuring Entity</p> <p>Name of the Supplier</p> <p>Contract Description</p> <p>Final Destination</p> <p>Gross weight</p> <p>Any special lifting instructions</p> <p>Any special handling instructions</p> <p>Any relevant Hazardous Chemical classifications</p> <p>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. Otherwise, the packaging list is to be placed outside the secondary packaging.</p> <p><b>Insurance</b></p> <p>The Supplier shall fully insure the Goods supplied under this Contract in a currency, local or tradeable and accepted by the <i>Bangko Sentral ng Pilipinas</i> against loss or damage incidental to manufacture, acquisition, transportation, storage, and delivery. The risk and ownership of the Goods remain with the Supplier until their final acceptance by the Procuring Entity, unless otherwise specified in this Contract.</p> <p><b>Transportation</b></p> <p>The Supplier shall arrange and pay for the delivery of the Goods, with the cost included in the Contract Price. When required under this Contract to deliver the Goods CIF, CIP, or DDP, the Supplier shall ensure the transport of the Goods to the port of destination or any other specified place of destination in the Philippines, as indicated in this Contract.</p> <p>The Supplier shall arrange for transport, insurance, and storage to the specified destination with the related costs included in the Contract Price. When required under this Contract to transport the Goods to a specified place of destination within the Philippines, defined as the Project Site.</p> <p>The Goods must be transported using carriers registered in the Philippines when the Supplier is required under this Contract to deliver the Goods CIF (Cost, Insurance, and Freight), CIP (Carriage and Insurance Paid To), or DDP (Delivered Duty Paid). If no Philippine registered carrier is available, the Goods may be shipped using a no Philippine carrier, provided the Supplier obtains and presents certification from the nearest Philippine consulate at the port of dispatch. If Philippine-registered carriers are available but their</p>
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	<p>schedules would impede timely delivery or cause delays in the Supplier's performance of this Contract, the period of delay from when the Goods were first ready for shipment to the actual date of shipment will be considered <i>force majeure</i> in accordance with <b>GCC</b> Clause 23.</p> <p>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 ownership will not be deemed transferred to the Procuring Entity until their receipt and final acceptance at the final destination.</p> <p><b>Patent Rights</b></p> <p>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.</p>
10.3	"Maintain the GCC Clause."
11.4	<i>Maintain the GCC Clause</i>
11.5	State, "Payment using LoC is not allowed."
13.4(c)	"No further instructions".
16.1	The inspections and tests that will be conducted are: refer to section VII
17.3	<p><i>If the Goods pertain to Expendable Supplies:</i> Three (3) months after acceptance by the Procuring Entity of the delivered Goods or after the Goods are consumed, whichever is earlier.</p> <p><i>If the Goods pertain to Non-expendable Supplies:</i> One (1) year after acceptance by the Procuring Entity of the delivered Goods.</p> <p>The period for correction of defects in the warranty period is <i>10 days upon notification of the procuring entity</i></p>
17.3(c)	"Not applicable."
17.4	No further instructions.
17.5	No further instructions.
20.2	<i>Through Mediation</i>
21.1	No further instructions.

## Section VI. Schedule of Requirements

The delivery schedule for the *E-LEARNING PLATFORM DEVELOPMENT WITH INTEGRATED DATA AND COMMUNICATIONS SYSTEM*.

Item	Description	Qty	Delivered Weeks/Months
4.1.1.1	Wall, ceiling, and floor finish	1 lot	Within 330 Calendar Days
4.1.1.2	Lighting works	1 lot	Within 330 Calendar Days
4.1.1.3	Electrical works	1 lot	Within 330 Calendar Days
4.1.1.4	2.5 HP Air Conditioner Split Type	2 units	Within 330 Calendar Days
4.1.1.5	Provision of network nodes	1 lot	Within 330 Calendar Days
4.1.1.6	Dome Camera	2 units	Within 100 Calendar Days
4.1.1.7	Door Access System	1 lot	Within 330 Calendar Days
4.1.1.8	Provision of furnishings and other fixtures necessary for a Command Center	1 lot	Within 330 Calendar Days
4.1.1.9	Provision of 6 x 55" Display Monitor (Video Wall 3 x 2 Setup)	1 lot	Within 100 Calendar Days
4.1.1.11	Table	1 lot	Within 100 Calendar Days
4.2.1.11	Chair	1 lot	Within 100 Calendar Days
4.2.1	Desktop Computer	1 lot	Within 100 Calendar Days
4.2.1.4	34" Curved Monitor	1 lot	Within 100 Calendar Days
4.2.1.7	UPS 650 VA	1 lot	Within 100 Calendar Days
4.2.1.8	Windows Operating System (Version 11 or better)	1 lot	Within 100 Calendar Days
4.2.1.9	Office Productivity Software (Word Processor, Spreadsheet, Slide Presentation)	1 lot	Within 100 Calendar Days
4.3.1	TCP/IP Based CCTV Cameras	1 lot	Within 330 Calendar Days
4.4	All In One Rack	1 lot	Within 330 Calendar Days
5.1	Leaf Switch	2 units	Within 330 Calendar Days
5.1	Spine Switch	2 units	Within 330 Calendar Days
5.1	SR Transceivers	56 units	Within 330 Calendar Days
5.2	50TB Enterprise NAS	1 lot	Within 330 Calendar Days
5.3	Server Compute Nodes	1 lot	Within 330 Calendar Days
6.1	Next Generation Firewall	3 units	Within 330 Calendar Days
6.1.3	Short Range 10G Transceivers	12 units	Within 330 Calendar Days
6.2	Next Generation Firewall	2 units	Within 330 Calendar Days
6.2.7	Short Range 10G Transceivers	12 units	Within 330 Calendar Days
6.3	Core Switch	2 units	Within 330 Calendar Days
6.3	Short Range 10G Transceivers	26 units	Within 330 Calendar Days
6.4	Distribution Switch	2 units	Within 330 Calendar Days
6.4.11	Short Range 10G Transceivers	22 units	Within 330 Calendar Days
6.5	32 Ports Aggregation Switch	5 units	Within 330 Calendar Days
6.6	48 Ports PoE Access Switch	20 units	Within 330 Calendar Days
6.7	Indoor Access Points	170 units	Within 330 Calendar Days
6.8	Network Controller	1 lot	Within 330 Calendar Days
6.9.1	SR transceiver	50 units	Within 330 Calendar Days
6.9.2	SR transceiver	40 units	Within 330 Calendar Days
6.9.3	SR transceiver	2 units	Within 330 Calendar Days
6.10	Out-Of-Band Switch	1 unit	Within 330 Calendar Days
6.11	1 Gbps University Internet	1 lot	Within 330 Calendar Days
7.1.1	Integrated Student Information System	1 lot	Within 330 Calendar Days

7.1.2	Human Resource Management System	1 lot	Within 330 Calendar Days
7.1.3	Financial System	1 lot	Within 330 Calendar Days
7.1.4	Records Management System	1 lot	Within 330 Calendar Days
7.1.5	Campus-wide Online Portal (Web App and Mobile App)	1 lot	Within 330 Calendar Days
7.1.6	Asset and Fleet Management System	1 lot	Within 330 Calendar Days
7.1.7	Executive Management System	1 lot	Within 330 Calendar Days
7.2.1	Library Management System	1 lot	Within 330 Calendar Days
7.2.2	Learning Management System	1 lot	Within 330 Calendar Days
8	Auditorium	1 lot	Within 330 Calendar Days
9	Multimedia Conference Room	1 lot	Within 330 Calendar Days
10	E-Classrooms	1 lot	Within 330 Calendar Days
11	Computer Laboratory	1 lot	Within 330 Calendar Days
12	Computer e-Laboratory	1 lot	Within 330 Calendar Days
13	IP PBX Solution	1 lot	Within 100 Calendar Days
14.1	Interactive Display	1 unit	Within 100 Calendar Days
14.2	All-in-One (AiO) PC	100 units	Within 100 Calendar Days
14.2.5	Windows Operating System	1 lot	Within 100 Calendar Days
14.2.6	Office Productivity Software	1 lot	Within 100 Calendar Days
14.3	General-Purpose laptop	100 units	Within 100 Calendar Days
14.3.6	Windows Operating System	1 lot	Within 100 Calendar Days
14.3.7	Office Productivity Software	1 lot	Within 100 Calendar Days
14.4	High-Tier Laptop	43 units	Within 100 Calendar Days
14.4.7	Windows Operating System	1 lot	Within 100 Calendar Days
14.4.8	Office Productivity Software	1 lot	Within 100 Calendar Days
14.5	All-in-one network (WiFi) Printer	10 units	Within 100 Calendar Days
14.6	ID Printer	2 units	Within 100 Calendar Days
15.1	Professional Grade Camera w/ kit lens	3 units	Within 100 Calendar Days
15.2	70-200mm F4 G OSS Lens	3 units	Within 100 Calendar Days
15.3	12-24mm F4 G Camera Lens	3 units	Within 100 Calendar Days
15.4	Uninterrupted Power Supply	100 units	Within 100 Calendar Days
15.5	Drone Camera	3 units	Within 100 Calendar Days

## ***Section VII. Technical Specifications***

# **TERM OF REFERENCE**

**E-LEARNING PLATFORM DEVELOPMENT WITH INTEGRATED DATA AND  
COMMUNICATIONS SYSTEM**

## **Project Summary**

This project encompasses a wide range of technological aspects, from high-level AI tools and robust security measures to the fundamental IT equipment. It covers the entire spectrum of technological needs, from the cutting-edge advancements of artificial intelligence to the essential hardware components that underpin digital operations.

Driven by the recent elevation of MPSPC status as a state university, this project aims to modernize the current digital infrastructure to cater the growing needs in network connectivity, data management and resiliency, and smart classrooms.

Prospective bidders should possess a valid Business Permit applicable to the contract and have completed a similar contract with a value of at least 50% of the ABC, and 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. The BAC will use non-discretionary pass/fail criteria in the Eligibility Check/Screening as well as the Preliminary Examination of Bids. The BAC will conduct post qualification of the lowest calculated bid.

## **Project Description**

### **Purpose**

As part of the continuous effort of MPSU to deliver quality education, this project aims to enhance, scale and strengthen the IT infrastructure including the university information systems.

### **Key Elements of the Project**

#### **Virtualized Infrastructure**

**A new datacenter that can house all of the university systems and applications as well as data backups will be built as part of MPSU's redundancy initiative.**

#### **Core Network and Security**

**Continuous enhancement of the MPSU university requires additional network and security equipment. These shall strengthen the cybersecurity and scale the network to cover new facilities.**

#### **Multimedia Conference Room**

**Conference rooms should be designed to accommodate both in-person and virtual meetings. They should be equipped with modern technology, such as high-speed internet, video conferencing systems, and large display screens. Additionally, comfortable seating arrangements and appropriate lighting should be provided to create a productive and inviting atmosphere for both in-person and remote participants.**

#### **Administrative and Educational Systems**

**A modernized digital tool with a focus on centralizing and streamlining both administrative and educational systems that will enhance productivity efficiency, and improve resource allocation. This ensures that MPSU staff and educators can focus more on their students**

### **Computer Laboratory**

The university shall have dedicated spaces equipped with computers and essential software, providing a platform for learning, research, and creative exploration. These labs offer access to technology and resources that empower individuals to develop digital skills, solve problems, and innovate.

### **Computer e-Laboratory**

**The university shall have dedicated spaces equipped with high-spec computers and dedicated software for multimedia, CAD, and animation.**

### **E-classrooms**

**Equipped Visual representations and interactive elements significantly enhance information comprehension and retention. By presenting information visually, complex ideas can be simplified and made more accessible to a wider audience. Additionally, interactive features allow users to actively engage with the content.**

### **University Productivity**

**University staff and offices shall be provided with digital equipment to aid with their functions and improve efficiency.**

### **Other Peripherals**

**To further enhance the learning environment and support the IT infrastructure, additional equipment will be provided. These supplementary tools will facilitate a more comprehensive and engaging learning experience for students and faculty alike.**

### **General Scope of Works**

#### **Requirement Analysis**

**Project key elements shall undergo requirement analysis with all the stakeholders.**

**Detailed Business User Requirements, Technical Design Requirements, Implementation Plan, and System Manuals**

**The winning bidder must submit the Detailed Business User Requirements, Technical Design Requirements, Implementation Plan, and System Manuals**

**A comprehensive business user requirement, technical design requirements, implementation plan and system manuals. The implementation plan will show the details of the project's timeline, milestones, deliverables, and resources required for the successful execution.**

## **Infrastructure Setup**

The project team will install and set up the necessary digital infrastructure required for the project, including servers, routers, switches, and related equipment.

## **Software Implementation**

Based on the business user requirements and technical design requirements, installation, customization, and testing of all software and applications shall be performed to ensure full integration of all systems that form part of this project.

## **Testing and Quality Assurance**

**The project team will perform individual component testing, and system integration testing for all components to ensure that they meet the specified requirements and are free from defects and errors.**

**Test scripts and user acceptance testing (UAT) documents should be provided for a smoother handover to end users.**



## **Training**

Facilitate the delivery of knowledge transfer through technical orientation and training sessions.

## **Command and Control Center Equipment Requirements (Main Datacenter)**

The Command-and-Control Center is to be located at the main office. Components to be included in this project includes the following:

### **Auxiliary Works and Services**

**The winning bidder must provide all essential works to prepare the area nominated by for MPSU to be its Command-and-Control Center. At a minimum, it must include the following:**

**Wall, ceiling, and floor finish**

**Lighting works**

**Electrical works**

**2 Units 2.5 HP Air Conditioner Split Type**

**Provision of network nodes**

**2 Units Dome Camera**

**Door Access System**

**Provision of furnishings and other fixtures necessary for a Command Center**

**Provision of 6 x 55" Display Monitor (Video Wall 3 x 2 Setup)**

**Electrical Works for connecting electricity supply wiring to electrical equipment.**

**Fixtures, Tables and Chairs for the Command Center**

**Provision of 6 Units Desktop Computers**

**The winning bidder must provide the following desktops to MPSU for its Command-and-Control Center. At a minimum, it must include the following:**

**Minimum of 10 Core Processor with 20MB Cache Memory**

**16GB Memory**

**512GB SSD Storage**

**34" curved Monitor**

**Keyboard**

**Mouse**

**UPS 650 VA**

**Windows Operating System (Version 11 or better)**

**Office Productivity Software (Word Processor, Spreadsheet, Slide Presentation)**

**Security Surveillance System**

**TCP/IP Based CCTV Cameras**

**Should support 12 VDC or 24 VAC.**

**Should support 1920 x 1080 Resolution.**

**Should support 25/30/50/60 fps.**

**Should be at least IP66 Ingress protection.**

**CCTV System is going to be installed in the NOCs of the different sites of MPSU**

**All In One Rack**

**Server Racks**

The 5 racks will be located in MPSU Datacenter:

**Rack configuration**

**Power input should be 220Vac, single phase, 50/60Hz.**

**Enclosure type should be fully enclosed hot and cold aisles(glass front door plus solid sheet metal rear door)**

**Available unit space shall be 29U**

**Single rack configuration**

**Rack size: (WxDxH) 600\*1200\*2000**

**Enclosure protection shall be IP50 rating.**

**Shall have an electronic door lock.**

**Rack enclosure is earthquake-resistant w/ seismic level 8 capability.**

**LED lighting shall be included in racks.**

**UPS**

**Shall have 1 unit of 6kVA UPS**

**UPS efficiency should be not less than 95%**

**Power meter included in UPS**

**UPS shall be capable for cloud monitoring through mobile phones or desktop**

**UPS shall have ethernet port for IoT connections**

**UPS shall have email and mobile notification.**

**PDU**

**With at least 2 unit of PDU.**

**Each PDU has 20\*C13+4 \*C19 sockets**

**PDU shall be CE certified.**

**Cooling**

**Cooling type is Split DX system**

**Cooling capacity shall be 4.2kW**

**Cooling air volume shall be 800m<sup>3</sup>/h**

**Cooling refrigerant is R410a**

**Condensate pump shall be included**

**Miscellaneous Rack Requirement**

**User interface: 10.1-inch touch screen LCD**

**Connectivity: SNMP/HTTP**

**Smoke sensor included**

**Shall have temperature and humidity sensor.**

**Pop-up front and rear doors for emergency plans.**

**Water leakage sensors included.**

**Certification**

**MDC distributor shall have ISO 9001 certification**

**MDC distributor shall have ISO 27001 certification**

**Virtualized Infrastructure**

**The winning bidder shall provide virtualized infrastructure for the university applications and other essential IT systems, and database.**

**Server Switch**

The winning bidder shall supply 2 Leaf switch where the server computers will be directly connected and 2 Spine switch for university elected by MPSU to house its disaster recovery infrastructure. It shall include 56 pcs SR transceivers and services for configuration and integration.

**Must have high-performance of at least:**

**1.28Tbps and 952 Mpps for Spine**

**1.76Tbps and 1,309 Mpps for Leaf**

**Must have intelligent monitoring and visibility with network analytics**

**Must have high availability with industry leading VSX redundancy, and redundant power supplies and fans**

**Must be designed for core/aggregation in the Top of Rack or End of Row in data center environments**

**Must have automation and programmability using built-in REST APIs and Python scripts**

**Must be capable of advanced Layer 2/3 feature set includes BGP, OSPF, VRF, and IPv6**

**Quality of Service (QoS)**

**Must be capable of enabling congestion avoidance**

**Must support lossless Ethernet networking standards to eliminate packet loss due to queue overflow**

**Must have Priority Flow Control (PFC) 2 priorities per port**

**Must have Enhanced Transmission Service (ETS)**

**Must be able to prevent accumulation of excessive congestion with periodic flushing. Avoids packets buffering for an extended time period**

**Resiliency and high availability**

**Must be redundant and have load-sharing fans and power supplies - Increases total performance and power availability while providing hitless, stateful failover**

**Must have hot swappable power supply and fan modules - Allows replacement of accessory modules without any operational impact on other modules nor the switch operations**

**Must have separate data and control paths - Separates control from services and keeps service processing isolated; increases security and performance**

**Must be capable of Virtual Router Redundancy Protocol (VRRP)-VRRP allows a group of switches to dynamically back each other up to create highly available routed environments**

**Must have IEEE 802.3ad LACP - Supports up to 52 LAGs, with up to 8 members per LAG with a user-selectable L1- 4 hashing algorithm**

## **Performance**

**Must have scalable system design - Provides investment protection to support future technologies and higher-speed connectivity**

**Must have high-speed fully distributed architecture - Provides up to 1.76Tbps for bidirectional switching and 1,309 Mpps for forwarding to meet the demands of bandwidth- intensive applications today and in the future**

## **Connectivity**

**Must support port configuration below.**

**Spine. 24 ports of 1GbE/10GbE (SFP/SFP+) 4 ports of 40GbE/100GbE (QSFP+/ QSFP28)**

**Leaf. 48 ports of 1GbE/10GbE (SFP/SFP+) 4 ports of 40GbE/100GbE (QSFP+/ QSFP28)**

**Must support Jumbo frames - Allows high-performance backups and disaster-recovery systems; provides a maximum frame size of 9K bytes**

**Must have Loopback - Supports internal loopback testing for maintenance purposes and increased availability; loopback detection protects against incorrect cabling or network configurations and can be enabled on a per-port or per-VLAN basis for added flexibility**

**Must have packet storm protection - Protects against unknown broadcast, multicast, or unicast storms with user-defined thresholds**

## **Management**

**Must have management interface control - Enables or disables each of the following interfaces depending on security preferences: console port or reset button**

**Must have industry-standard CLI with a hierarchical structure - Reduces training time and expenses, and increases productivity in multivendor installations**

- Must have management security - Restricts access to critical configuration commands; offers multiple privilege levels with password protection; ACLs provide SNMP access; local and remote Syslog capabilities allow logging of all access**
- Must have IP SLA - Monitors the network for degradation of various services, including voice. Monitoring is enabled via the NAE for history and for immediate automated gathering of additional information when anomalies are detected**
- Must support SNMP v2c/v3 - Provides SNMP read and trap support of industry standard Management Information Base (MIB), and private extensions**
- Must support sFlow (RFC 3176) - Provides scalable ASIC-based wire-speed network monitoring and accounting with no impact on network performance; this allows network operators to gather a variety of sophisticated network statistics and information for capacity planning and real-time network monitoring purposes**
- Must have Remote Monitoring (RMON) - Uses standard SNMP to monitor essential network functions and supports events, alarms, history, and statistics groups as well as a private alarm extension group**
- Must support TFTP and SFTP - Offers different mechanisms for configuration updates; trivial FTP (TFTP) allows bidirectional transfers over a TCP/ IP network ; Secure File Transfer Protocol (SFTP) runs over an SSH tunnel to provide additional security**
- Must have debug and sampler utility - Supports ping and traceroute for IPv4 and IPv6**
- Must support Network Time Protocol (NTP) - Synchronizes timekeeping among distributed time servers and clients; keeps timekeeping consistent among all clock- dependent devices within the network; Can serve as the NTP server in a customer network**
- Must have IEEE 802.1AB Link Layer Discovery Protocol (LLDP) - Advertises and receives management information from adjacent devices on a network, facilitating easy mapping by network management applications**
- Must have dual flash images - Provides independent primary and secondary operating system files for backup while upgrading**
- Must support multiple configuration files - Stores files easily to the flash image**

## **Layer 2 Switching**

- Must have VLAN that supports up to 1,024 port-based or IEEE 802.1Q-based VLANs**
- Must have Bridge Protocol Data Unit (BPDU) tunneling - Transmits STP BPDUs transparently, allowing correct tree calculations across service providers, WANs, or MANs**
- Must support port mirroring - Duplicates port traffic (ingress and egress) to a local or remote monitoring port; supports 4 mirroring groups, with an unlimited number of ports per group**
- Must support STP - standard IEEE 802.1D STP, IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) for faster convergence, and IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)**
- Must support Internet Group Management Protocol (IGMP) - Controls and manages the flooding of multicast packets in a Layer 2 network**
- Must support Rapid Per-VLAN spanning tree plus (RPVST+) - Allows each VLAN to build a separate spanning tree to improve link bandwidth usage in network environments with multiple VLANs**

## **Layer 3 Services and Routing**

- Must support Address Resolution Protocol (ARP) - Determines the MAC address of another IP host in the same subnet; supports static ARPs ; Gratuitous ARP allows detection of duplicate IP addresses; Proxy ARP allows normal ARP operation between subnets or when subnets are separated by a Layer 2 network**
- Must support Dynamic Host Configuration Protocol (DHCP) - DHCP services are offered within a client network to simplify network management. DHCP Relay enables DHCP operation across subnets**
- Must support Domain Name System (DNS) - Provides a distributed database that translates domain names and IP addresses, which simplifies network design; supports client and server**
- Must support Policy Based Routing (PBR) - Enables use of a classifier to select traffic that can be forwarded based on policy set by the network administrator**
- Must support Static IPv6 routing - Provides simple manually configured IPv6 routing**

**Must support Open shortest path first (OSPF) - Delivers faster convergence; uses link-state routing Interior Gateway Protocol (IGP), which supports ECMP, NSSA, and MD5 authentication for increased security and graceful restart for faster failure recovery**

**Must support Border Gateway Protocol 4 (BGP-4) - Delivers an implementation of the Exterior Gateway Protocol (EGP) utilizing path vectors; uses TCP for enhanced reliability for the route discovery process; reduces bandwidth consumption by advertising only incremental updates; supports extensive policies for increased flexibility; scales to very large networks**

**Must support 6in4 tunnels - tunneling of IPv6 traffic in an IPv4 network**

**Must support IP performance optimization - Provides a set of tools to improve the performance of IPv4 networks; includes directed broadcasts, customization of TCP parameters, support of ICMP error packets, and extensive display capabilities**

**Must support Static IPv6 routing - Provides simple manually configured IPv6 routing**

**Must support OSPFv3 - Provides OSPF support for IPv6**

**Must support Equal-Cost Multipath (ECMP) - Enables multiple equal-cost links in a routing environment to increase link redundancy and scale bandwidth**

**Must support Generic Routing Encapsulation (GRE) - enables tunneling traffic from site to site over a Layer 3 path**

## **Security**

**Must support Access Control List (ACL) Features - powerful ACLs for both IPv4 and IPv6. Supports creation of object groups representing sets of devices like IP addresses. For instance, IT management devices could be grouped in this way; ACLs can also protect control plane services such as SSH, SNMP, NTP or web servers**

**Must support Remote Authentication Dial-In User Service (RADIUS) - Eases security access administration by using a password authentication server**

**Must support Terminal Access Controller Access Control System (TACACS+) - Delivers an authentication tool using TCP with encryption of the full authentication request, providing additional security**



**Must support management access security - provides both on-box as well as off-box authentication for administrative access. RADIUS or TACACS+ can be used to provide encrypted user authentication; Additionally, TACACS+ can also provide user authorization, services**

**Must support Secure shell (SSHv2) - Uses external servers to securely log in to a remote device; with authentication and encryption, it protects against IP spoofing and plain-text password interception; increases the security of Secure FTP (SFTP) transfers**

## **Multicast**

**Must support Multicast Internet Group Management Protocol (IGMP) - Enables establishing multicast group memberships in IPv4 networks; supports IGMPv1, v2, and v3**

**Must support Multicast Listener Discovery (MLD) - Enables discovery of IPv6 multicast listeners; supports MLDv1 and v2**

**Must support Protocol Independent Multicast (PIM) - Protocol Independent Multicast for IPv4 and IPv6 supports one-to-many and many-to-many media casting use cases such as IPTV over IPv4 and IPv6 networks. Support for PIM Sparse Mode (PIM-SM, IPv4 and IPv6)**

**56 units of Short Range 10G Transceivers**

**50TB Enterprise NAS with the minimum following specifications:**

**The NAS must provide 50TB of storage and adhere to the specified technical parameters. The Winning Bidder have the flexibility to configure the NAS as long as it meets these requirements:**

**NAS Scale-out of up to 12 arrays**

**Maximum Drives (HDD/SSD) of up to 864 or higher**

**Maximum Raw Capacity of up to 13.8PB or higher**

**Maximum onboard Flash Cache Based on NVMe Technology of up to 12TB or higher**

**Maximum Flash Pool of up to 144TB or higher**

**Maximum Memory of up to 768GB or higher**

**Maximum Drives (HDD/SSD) of up to 72 or higher**

**Maximum Raw Capacity of up to 1PB or higher**

**Maximum Onboard Flash Cache Based on NVMe Technology of up to 1TB or higher**

**Maximum Flash Pool of up to 12TB of higher**

**Minimum of ECC Memory of up to 64GB**

**At least NVRAM 4GB**

**Minimum of 4 x 25GbE Ports**

**Minimum of 4 x 10GbE BASE-T Ports (1GbE autoranging) (maximum)**

**With 12Gb / 6Gb SAS Ports (maximum)**

**With Protocols Supported FC, iSCSI, NFS, pNFS, CIFS/SMB, S3**

**With Host/Client Operating Systems Support for Microsoft Windows, Linux, VMware ESXi**

**3 Years Warranty and Maintenance with Implementation Services**

**Compute Nodes for HCI Environment consisting of Six (6) Rack mounted Servers with minimum specifications as follows:**

#### **Hardware**

**2 x Intel Xeon Gold processor**

**24 Core per processor**

**24 x 32G DDR4 RDIMM or similar type or equivalent per node**

**4 x Port 10GbE (SFP+)**

**2 x 480 GB system disk per node**

**Total of 60 TB storage capacity for the HCI stack**

**Redundant Power Supply**

#### **Software**

##### **Technology**

**Hyper-Converged Infra (HCI) is a software-defined IT infrastructure that virtualizes all the elements of conventional “hardware-defined” systems. HCI includes, at a minimum, virtualized computing (hypervisor) and virtualized SAN (software-defined storage). The HCI must be also capable and ready for network virtualization, network virtual security (Virtual Firewall, Bandwidth Manager etc.) or virtual Load balancing.**

**The HCI solution should start with minimum two nodes, and still expandable from two nodes to more nodes directly without redo of implementation or reinitialization of HCI.**

**The management platform is integrated and distributed, not relied on a certain virtual machine or physical machine, which is more reliable.**

**Do not require installing additional management software after deployment of the hypervisor to achieve basic web-based access to GUI, granular management and easy operation.**

**The crucial components for virtualization of compute, storage, networking, network functions, application firewall, application delivery controller, are provided by the same vendor, to ensure scalability and compatibility**

**Support correlated security service with intelligent threat detection and response platform to automatically take actions (such as quarantine VM by distributed firewall, take snapshot for VM, etc.,) against malicious activities that are detected by the security platform.**

#### **Compute Virtualization**

**Should have High-Availability. In case host fails, all the VMs running on that host can be recovered to another clustered host to ensure business continuity.**

**Backup is built-in by default and support agent-less incremental VM-level backup. For Windows VMs, file level recovery must be supported.**

**Should have built-in back-up and support agent-less incremental VM-level back-up. For Windows VMs, file level recovery must be supported without using 3rd Party solutions.**

**Support snapshot consistent group and scheduled snapshots.**

**Able to evaluate performance of virtual machines and hot-add resources (vCPU and vRAM) when they are running out of CPU or memory, minimizing business downtime.**

**Must be ready support module Activated CDP**

**(Continues Data Protection) capable of recording VMs' IOs at an interval as minimum as 1 second, data can be restored at any point of time in the past 3 days for both clusters.**

**AI-Enhanced database performance optimization with built-in self-adaptive performance optimization engine.**

**Support host health monitoring, when a host is deemed**

**unhealthy, it will be put in an unhealthy host list, VM placement and HA failover will avoid using the unhealthy host as a destination. When the host is back to normal, it can be taken out of the unhealthy host list automatically.**

#### **Storage Virtualization**

**Support striping function, and support setting different number of strips in units of virtual disks.**

**Support data reconstruction priority adjustment, users able to view the data reconstruction task list information and can click the priority in the operation to prioritize data reconstruction.**

**A full copy of VM's data should be existed on the node where the VM is running on to facilitate faster read and write.**

**Support striping function, and support setting different number of strips in units of virtual disks.**

**Support disk bad sector prediction, scanning and repair to maximize data security.**

**Support storage capacity prediction based on historical usage statistics and consumption behavior.**

**Support disk remaining lifecycle prediction.**

## **Network Virtualization**

**Natively Support deploying virtual routers, virtual switches and firewalls.**

**Built-in distributed firewall to apply granular access control policy between VMs, securing east-west traffic (also known as Micro-segmentation).**

**The virtual router supports high availability. A failed virtual router can be automatically recovered upon host failure, to ensure high availability of routing service.**

**Visualized Network topology can be completed simply by dragging objects and drawing connections via a visualized web-based management panel**

## **CDP Function**

CDP must support recording VMs' IOs at an interval as minimum as 1 second, data can be restored at any point of time in the past 3 days.

CDP must be integrated without additional 3rd party software.

The CDP must be agent-less to avoid any negative impact on VMs' stability and performance.

Support fast browsing files from CDP backups, able to fast retrieve data or files from CDP backups.

## **Warranty and support**

At least three (3) years software license subscription & upgrade, and technical support 7\*24.

Vendor must have direct local support in the Philippines.

## **Certification**

To ensure the maturity of Hyper-converged Infrastructure solution, the vendor must be CMMI L5 certified.

## **Core Network and Security**

### **3 units of Next Generation Firewall / SDWAN for Satellite Campuses**

The winning bidder shall supply, install and configure 3 units of NGFW / SDWAN with the specifications described below:

### **Performance and Hardware specifications**

**The system must have the minimum throughput capacity listed below.**

**Firewall Inspection at 5.2 Gbps**

**Threat Prevention at 3 Gbps**

**Application inspection at 3.6 Gbps**

**IPS at 3.4 Gbps**

**Anti-malware inspection at 2.9 Gbps**

**TLS/SSL decryption and inspection (DPI SSL) at 800 Mbps**

**VPN at 2.10 Gbps**

**The system must be capable of handling:**

**At least 21,000 Connections per second**

**Max connections (SPI) of 1,500,000**

**Max DPI-SSL Connections of 125,000**

**Max connections (DPI) of 500,000**

**The system's interface must include the following interfaces.**

**16 x 1GbE**

**3 x 10G SFP+**

**2 USB 3.0**

**1 Console**

**1 Management port**

**Storage of at least 64GB M.2 that is expandable up to 256GB**

**Capabilities and features**

**Must perform stream-based, bi-directional traffic analysis, without proxying or buffering, to uncover intrusion attempts and malware and to identify application traffic regardless of port.**

**Must scan for threats in both inbound and outbound traffic simultaneously to ensure that the network is not used to distribute malware and does not become a launch platform for attacks in case an infected machine is brought inside.**

**Must have proxy-less and non-buffering inspection technology provides ultra-low latency performance for DPI of millions of simultaneous network streams without introducing file and stream size limitations, and can be applied on common protocols as well as raw TCP streams.**

**Must have a single-pass DPI architecture simultaneously scans for malware, intrusions and application identification, drastically reducing DPI latency and ensuring that all threat information is correlated in a single architecture.**

**Must have an engine with the multi-core architecture to provide high DPI throughput and extremely high new session establishment rates to deal with traffic spikes in demanding networks.**

**Must identify and mitigate even the most insidious modern threats, including future Meltdown exploits. Detects and blocks malware that does not exhibit any malicious behavior and hides its weaponry via encryption.**

**Must prevent potentially malicious files from entering the network, files sent to the cloud for analysis can be held at the gateway until a verdict is determined.**

**Must have multi-engine sandbox platform, which includes virtualized sandboxing, full system emulation and hypervisor level analysis technology, executes suspicious code and analyzes behavior, providing comprehensive visibility to malicious activity.**

**Must have a Secure SD-WAN that enables distributed enterprise organizations to build, operate and manage secure, high-performance networks across remote sites for the purpose of sharing data, applications and services using readily-available, low-cost public Internet services without additional license cost.**

**Must have a wizard to automatically configure SDWAN Policy on the firewall.**

**Must displays SD-WAN Performance probes and top connections.**

**All network traffic must be inspected, analyzed and brought into compliance with firewall access policies.**

**Must supports Active/Passive (A/P) with state synchronization. The proposed solution should support Hardware redundancy using only single security license in both primary & secondary appliance**

**Must have block until verdict To prevent potentially malicious files from entering the network, files sent to the cloud for analysis can be held at the gateway until a verdict is determined.**

**Must have zero-day protection to protect the network against zero-day attacks with constant updates against the latest exploit methods and techniques that cover thousands of individual exploits.**

**Must have Bi-directional raw TCP inspection that scans raw TCP streams on any port and bi-directionally to detect and prevent both inbound and outbound threats.**

**Must have application control that controls applications, or individual application features that are identified by the engine against a continuously expanding database of over thousands of application signatures. That increases network security and enhances network productivity.**

**Must have DDoS/DoS attack protection. SYN flood protection provides a defense against DOS attacks using both Layer 3 SYN proxy and Layer 2 SYN blacklisting technologies. Additionally, it protects against DOS/DDoS through UDP/ICMP flood protection and connection rate limiting.**

**Must be capable of load-balances multiple WAN interfaces using Round Robin, Spillover or Percentage methods. Policy-based routing creates routes based on protocol to direct traffic to a preferred WAN connection with the ability to fail back to a secondary WAN in the event of an outage**

**Must display rules which are actively used or not being used.**

**Must be able to simplify and reduce complex distributed firewall deployment down to a trivial effort by automating the initial site-to-site VPN gateway provisioning between firewalls while security and connectivity occurs instantly and automatically.**

**Must guarantee critical communications with 802.1p, DSCP tagging and remapping of VoIP traffic on the network.**

**The system Intrusion Prevention System must be capable of Signature-based scanning, Automatic signature updates, Bi-directional inspection, Granular IPS rule capability, GeoIP enforcement, Botnet filtering with dynamic list, Regular expression matching.**

**The Anti-Malware System must be capable of Stream-based malware scanning, Gateway anti-virus, Gateway anti-spyware, Bi-directional inspection, No file size limitation**

**The system must have traffic visualization that can monitor User activity, application, bandwidth, and threat.**

**Must have a HTTP/HTTPS Web content filtering that is capable of URL filtering, Proxy avoidance, Keyword blocking, Policy-based filtering (exclusion/inclusion), HTTP header insertion, Bandwidth manage, and rating categories.**

**Must have a VPN that is capable of Secure SD-WAN, Auto-provision VPN, IPSec VPN for site-to-site connectivity, SSL VPN and IPSec client remote access, Redundant VPN gateway, and Mobile client for iOS, Mac OS X, Windows, Chrome, Android and Kindle Fire.**

**Must have networking capabilities such as Port Shield, Path MTU discovery, Enhanced logging, VLAN trunking, Layer-2 QoS, Port security, Dynamic routing (RIP/OSPF/BGP), Policy-based routing (ToS/metric and ECMP), NAT, DHCP server, Bandwidth management, A/P high availability with state sync, Inbound/outbound load balancing, L2 bridge, wire/virtual wire mode, tap mode, NAT mode, Asymmetric routing, and Common Access Card (CAC) support.**

The system management and monitoring must have Web GUI, Command Line Interface (CLI), SNMP v2/v3 support, centralized management and reporting, NetFlow/IP Fix exporting, cloud-based configuration back up, and Zero-Touch registration & provisioning.

Must be certified with ICSA labs Advance Threat Defense certified with 100% unknown threat detection for 7 consecutive quarters from Q1-Q4, 2021 & Q1-Q3, 2022.

Must have 24x7 support that includes firmware updates and hardware replacement. Support includes around-the-clock access to telephone and web-based support for basic configuration and troubleshooting assistance, as well as hardware replacement in the event of failure.

**12 pcs. of Short Range 10G Transceivers**

**Next-Generation Firewall / SDWAN for Bontoc Main Campus**

The winning bidder shall supply, install and configure 2 units of NGFW with the specifications described below:

**Performance and Hardware specifications**

The system must have the minimum throughput capacity listed below.

**Firewall Inspection at 18 Gbps**

**Threat Prevention at 9.5 Gbps**

**Application inspection at 11 Gbps**

**IPS at 10 Gbps**

**Anti-malware inspection at 9.5 Gbps**

**TLS/SSL decryption and inspection (DPI SSL) at 5 Gbps**

**VPN at 11 Gbps**

The system must be capable of handling:

**At least 115,000 Connections per second**

**Max connections (SPI) of 4,000,000**

**Max DPI-SSL Connections of 350,000**

**Max connections (DPI) of 2,000,000**

The system's interface must include the following interfaces.



**6 x 10G/5G/2.5G/1G SFP+**

**24 x 1GbE Cu**

**2 USB 3.0**

**1 Console**

**1 Management port**

**Storage of at least 128 GB that is expandable up to 1 TB**

#### **Capabilities and Features**

**Must perform stream-based, bi-directional traffic analysis, without proxying or buffering, to uncover intrusion attempts and malware and to identify application traffic regardless of port.**

**Must scan for threats in both inbound and outbound traffic simultaneously to ensure that the network is not used to distribute malware and does not become a launch platform for attacks in case an infected machine is brought inside.**

**Must have proxy-less and non-buffering inspection technology provides ultra-low latency performance for DPI of millions of simultaneous network streams without introducing file and stream size limitations, and can be applied on common protocols as well as raw TCP streams.**

**Must have a single-pass DPI architecture simultaneously scans for malware, intrusions and application identification, drastically reducing DPI latency and ensuring that all threat information is correlated in a single architecture.**

**Must have an engine with the multi-core architecture to provide high DPI throughput and extremely high new session establishment rates to deal with traffic spikes in demanding networks.**

**Must identify and mitigate even the most insidious modern threats, including future Meltdown exploits. Detects and blocks malware that does not exhibit any malicious behavior and hides its weaponry via encryption.**

**Must prevent potentially malicious files from entering the network, files sent to the cloud for analysis can be held at the gateway until a verdict is determined.**

**Must have multi-engine sandbox platform, which includes virtualized sandboxing, full system emulation and hypervisor level analysis technology, executes suspicious code and analyzes behavior, providing comprehensive visibility to malicious activity.**

- Must have a Secure SD-WAN that enables distributed enterprise organizations to build, operate and manage secure, high-performance networks across remote sites for the purpose of sharing data, applications and services using readily-available, low-cost public Internet services without additional license cost.**
- Must have a wizard to automatically configure SDWAN Policy on the firewall**
- Must displays SD-WAN Performance probes and top connections.**
- All network traffic must be inspected, analyzed and brought into compliance with firewall access policies.**
- Must supports Active/Passive (A/P) with state synchronization. The proposed solution should support Hardware redundancy using only single security license in both primary & secondary appliance**
- Must have block until verdict to prevent potentially malicious files from entering the network, files sent to the cloud for analysis can be held at the gateway until a verdict is determined.**
- Must have zero-day protection to protect the network against zero-day attacks with constant updates against the latest exploit methods and techniques that cover thousands of individual exploits.**
- Must have Bi-directional raw TCP inspection that scans raw TCP streams on any port and bi-directionally to detect and prevent both inbound and outbound threats.**
- Must have application control that controls applications, or individual application features that are identified by the engine against a continuously expanding database of over thousands of application signatures. That increases network security and enhances network productivity.**
- Must have DDoS/DoS attack protection. SYN flood protection provides a defense against DOS attacks using both Layer 3 SYN proxy and Layer 2 SYN blacklisting technologies. Additionally, it protects against DOS/DDoS through UDP/ICMP flood protection and connection rate limiting.**
- Must be capable of load-balances multiple WAN interfaces using Round Robin, Spillover or Percentage methods. Policy-based routing creates routes based on protocol to direct traffic to a preferred WAN connection with the ability to fail back to a secondary WAN in the event of an outage**

**Must display rules which are actively used or not being used.**

**Must be able to simplify and reduce complex distributed firewall deployment down to a trivial effort by automating the initial site-to-site VPN gateway provisioning between firewalls while security and connectivity occurs instantly and automatically.**

**Must guarantee critical communications with 802.1p, DSCP tagging and remapping of VoIP traffic on the network.**

**The system Intrusion Prevention System must be capable of Signature-based scanning, Automatic signature updates, Bi-directional inspection, Granular IPS rule capability, GeoIP enforcement, Botnet filtering with dynamic list, Regular expression matching.**

**The Anti-Malware System must be capable of Stream-based malware scanning, Gateway anti-virus, Gateway anti-spyware, Bi-directional inspection, No file size limitation**

**The system must have traffic visualization that can monitor User activity, application, bandwidth, and threat.**

**Must have a HTTP/HTTPS Web content filtering that is capable of URL filtering, Proxy avoidance, Keyword blocking, Policy-based filtering (exclusion/inclusion), HTTP header insertion, Bandwidth manage, and rating categories.**

**Must have a VPN that is capable of Secure SD-WAN, Auto-provision VPN, IPsec VPN for site-to-site connectivity, SSL VPN and IPsec client remote access, Redundant VPN gateway, and Mobile client for iOS, Mac OS X, Windows, Chrome, Android and Kindle Fire.**

**Must have networking capabilities such as PortShield, Path MTU discovery, Enhanced logging, VLAN trunking, Layer-2 QoS, Port security, Dynamic routing (RIP/OSPF/BGP), Policy-based routing (ToS/metric and ECMP), NAT, DHCP server, Bandwidth management, A/P high availability with state sync, Inbound/outbound load balancing, L2 bridge, wire/virtual wire mode, tap mode, NAT mode, Asymmetric routing, and Common Access Card (CAC) support.**

**The system management and monitoring must have Web GUI, Command Line Interface (CLI), SNMP v2/v3 support, centralized management and reporting, NetFlow/IP Fix exporting, cloud-based configuration back up, and Zero-Touch registration & provisioning.**

**Must be certified with ICSA labs Advance Threat Defense certified with 100% unknown threat detection for 7 consecutive quarters from Q1-Q4, 2021 & Q1-Q3, 2022.**

**Must have 24x7 support that includes firmware updates and hardware replacement. Support includes around-the-clock access to telephone and web-based support for basic configuration and troubleshooting assistance, as well as hardware replacement in the event of failure.**

**8 pcs. of Short Range 10G Transceivers**

#### **Core Switch**

The winning bidder shall supply, install and configure 2 units of Core Switch with a total of 26 pcs SR transceivers for the 2 switches. Please see the specifications as described below.

**Must have high-performance of at least:**

**1.76Tbps and 1,309 Mpps**

**Must have intelligent monitoring and visibility with network analytics**

**Must have high availability with industry leading VSX redundancy, and redundant power supplies and fans**

**Must be designed for core/aggregation in the Top of Rack or End of Row in data center environments**

**Must have automation and programmability using built-in REST APIs and Python scripts**

**Must be capable of advanced Layer 2/3 feature set includes BGP, OSPF, VRF, and IPv6**

#### **Quality of Service (QoS)**

**Must be capable of enabling congestion avoidance**

**Must support lossless Ethernet networking standards to eliminate packet loss due to queue overflow**

**Must have Priority Flow Control (PFC) 2 priorities per port**

**Must have Enhanced Transmission Service (ETS)**

**Must be able to prevent accumulation of excessive congestion with periodic flushing. Avoids packets buffering for an extended time period**

#### **Resiliency and high availability**

- Must be redundant and have load-sharing fans and power supplies - Increases total performance and power availability while providing hitless, stateful failover**
- Must have hot swappable power supply and fan modules - Allows replacement of accessory modules without any operational impact on other modules nor the switch operations**
- Must have separate data and control paths - Separates control from services and keeps service processing isolated; increases security and performance**
- Must be capable of Virtual Router Redundancy Protocol (VRRP)-VRRP allows a group of switches to dynamically back each other up to create highly available routed environments**
- Must have IEEE 802.3ad LACP - Supports up to 52 LAGs, with up to 8 members per LAG with a user-selectable L1- 4 hashing algorithm**

## **Performance**

- Must have scalable system design - Provides investment protection to support future technologies and higher-speed connectivity**
- Must have high-speed fully distributed architecture - Provides up to 1.76Tbps for bidirectional switching and 1,309 Mpps for forwarding to meet the demands of bandwidth- intensive applications today and in the future**

## **Connectivity**

- Must support port configuration below.**
- 48 ports of 1GbE/10GbE (SFP/SFP+) 4 ports of 40GbE/100GbE (QSFP+/QSFP28)**
- Must support Jumbo frames - Allows high-performance backups and disaster-recovery systems; provides a maximum frame size of 9K bytes**
- Must have Loopback - Supports internal loopback testing for maintenance purposes and increased availability; loopback detection protects against incorrect cabling or network configurations and can be enabled on a per-port or per-VLAN basis for added flexibility**
- Must have packet storm protection - Protects against unknown broadcast, multicast, or unicast storms with user-defined thresholds**

## **Management**

- Must have management interface control - Enables or disables each of the following interfaces depending on security preferences: console port or reset button**
- Must have industry-standard CLI with a hierarchical structure - Reduces training time and expenses, and increases productivity in multivendor installations**
- Must have management security - Restricts access to critical configuration commands; offers multiple privilege levels with password protection; ACLs provide SNMP access; local and remote Syslog capabilities allow logging of all access**
- Must have IP SLA - Monitors the network for degradation of various services, including voice. Monitoring is enabled via the NAE for history and for immediate automated gathering of additional information when anomalies are detected**
- Must support SNMP v2c/v3 - Provides SNMP read and trap support of industry standard Management Information Base (MIB), and private extensions**
- Must support sFlow (RFC 3176) - Provides scalable ASIC-based wire-speed network monitoring and accounting with no impact on network performance; this allows network operators to gather a variety of sophisticated network statistics and information for capacity planning and real-time network monitoring purposes**
- Must have Remote Monitoring (RMON) - Uses standard SNMP to monitor essential network functions and supports events, alarms, history, and statistics groups as well as a private alarm extension group**
- Must support TFTP and SFTP - Offers different mechanisms for configuration updates; trivial FTP (TFTP) allows bidirectional transfers over a TCP/ IP network ; Secure File Transfer Protocol (SFTP) runs over an SSH tunnel to provide additional security**
- Must have debug and sampler utility - Supports ping and traceroute for IPv4 and IPv6**
- Must support Network Time Protocol (NTP) - Synchronizes timekeeping among distributed time servers and clients; keeps timekeeping consistent among all clock- dependent devices within the network; Can serve as the NTP server in a customer network**

- Must have IEEE 802.1AB Link Layer Discovery Protocol (LLDP) - Advertises and receives management information from adjacent devices on a network, facilitating easy mapping by network management applications**
- Must have dual flash images - Provides independent primary and secondary operating system files for backup while upgrading**
- Must support multiple configuration files - Stores files easily to the flash image**

## **Layer 2 Switching**

- Must have VLAN that supports up to 1,024 port-based or IEEE 802.1Q-based VLANs**
- Must have Bridge Protocol Data Unit (BPDU) tunneling - Transmits STP BPDUs transparently, allowing correct tree calculations across service providers, WANs, or MANs**
- Must support port mirroring - Duplicates port traffic (ingress and egress) to a local or remote monitoring port; supports 4 mirroring groups, with an unlimited number of ports per group**
- Must support STP - standard IEEE 802.1D STP, IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) for faster convergence, and IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)**
- Must support Internet Group Management Protocol (IGMP) - Controls and manages the flooding of multicast packets in a Layer 2 network**
- Must support Rapid Per-VLAN spanning tree plus (RPVST+) - Allows each VLAN to build a separate spanning tree to improve link bandwidth usage in network environments with multiple VLANs**

## **Layer 3 Services and Routing**

- Must support Address Resolution Protocol (ARP) - Determines the MAC address of another IP host in the same subnet; supports static ARPs ; Gratuitous ARP allows detection of duplicate IP addresses; Proxy ARP allows normal ARP operation between subnets or when subnets are separated by a Layer 2 network**
- Must support Dynamic Host Configuration Protocol (DHCP) - DHCP services are offered within a client network to simplify network management. DHCP Relay enables DHCP operation across subnets**

- Must support Domain Name System (DNS) - Provides a distributed database that translates domain names and IP addresses, which simplifies network design; supports client and server**
- Must support Policy Based Routing (PBR) - Enables use of a classifier to select traffic that can be forwarded based on policy set by the network administrator**
- Must support Static IPv6 routing - Provides simple manually configured IPv6 routing**
- Must support Open shortest path first (OSPF) - Delivers faster convergence; uses link-state routing Interior Gateway Protocol (IGP), which supports ECMP, NSSA, and MD5 authentication for increased security and graceful restart for faster failure recovery**
- Must support Border Gateway Protocol 4 (BGP-4) - Delivers an implementation of the Exterior Gateway Protocol (EGP) utilizing path vectors; uses TCP for enhanced reliability for the route discovery process; reduces bandwidth consumption by advertising only incremental updates; supports extensive policies for increased flexibility; scales to very large networks**
- Must support 6in4 tunnels - tunneling of IPv6 traffic in an IPv4 network**
- Must support IP performance optimization - Provides a set of tools to improve the performance of IPv4 networks; includes directed broadcasts, customization of TCP parameters, support of ICMP error packets, and extensive display capabilities**
- Must support Static IPv6 routing - Provides simple manually configured IPv6 routing**
- Must support OSPFv3 - Provides OSPF support for IPv6**
- Must support Equal-Cost Multipath (ECMP) - Enables multiple equal-cost links in a routing environment to increase link redundancy and scale bandwidth**
- Must support Generic Routing Encapsulation (GRE) - enables tunneling traffic from site to site over a Layer 3 path**

## **Security**

- Must support Access Control List (ACL) Features - powerful ACLs for both IPv4 and IPv6. Supports creation of object groups representing sets of devices like IP addresses. For instance, IT management devices could be grouped in this way; ACLs can also protect control plane services such as SSH, SNMP, NTP or web servers**



- Must support Remote Authentication Dial-In User Service (RADIUS) - Eases security access administration by using a password authentication server**
- Must support Terminal Access Controller Access Control System (TACACS+) - Delivers an authentication tool using TCP with encryption of the full authentication request, providing additional security**
- Must support management access security - provides both on-box as well as off-box authentication for administrative access. RADIUS or TACACS+ can be used to provide encrypted user authentication; Additionally, TACACS+ can also provide user authorization, services**
- Must support Secure shell (SSHv2) - Uses external servers to securely log in to a remote device; with authentication and encryption, it protects against IP spoofing and plain-text password interception; increases the security of Secure FTP (SFTP) transfers**

## **Multicast**

- Must support Multicast Internet Group Management Protocol (IGMP) - Enables establishing multicast group memberships in IPv4 networks; supports IGMPv1, v2, and v3**
- Must support Multicast Listener Discovery (MLD) - Enables discovery of IPv6 multicast listeners; supports MLDv1 and v2**
- Must support Protocol Independent Multicast (PIM) - Protocol Independent Multicast for IPv4 and IPv6 supports one-to-many and many-to-many media casting use cases such as IPTV over IPv4 and IPv6 networks. Support for PIM Sparse Mode (PIM-SM, IPv4 and IPv6)**

## **26 units of Short Range 10G Transceivers**

### **Distribution Switch**

The winning bidder shall supply, install and configure 2 units of Distribution Switch and a total of 22 pcs SR transceivers for all 2 switches with the specifications described below:

**Must have high-performance of at least:**

**1.76Tbps and 1,309 Mpps**

**Must have intelligent monitoring and visibility with network analytics**

**Must have high availability with industry leading VSX redundancy, and redundant power supplies and fans**

**Must be designed for core/aggregation in the Top of Rack or End of Row in data center environments**

**Must have automation and programmability using built-in REST APIs and Python scripts**

**Must be capable of advanced Layer 2/3 feature set includes BGP, OSPF, VRF, and IPv6**

#### **Quality of Service (QoS)**

**Must be capable of enabling congestion avoidance**

**Must support lossless Ethernet networking standards to eliminate packet loss due to queue overflow**

**Must have Priority Flow Control (PFC) 2 priorities per port**

**Must have Enhanced Transmission Service (ETS)**

**Must be able to prevent accumulation of excessive congestion with periodic flushing. Avoids packets buffering for an extended time period**

#### **Resiliency and high availability**

**Must be redundant and have load-sharing fans and power supplies - Increases total performance and power availability while providing hitless, stateful failover**

**Must have hot swappable power supply and fan modules - Allows replacement of accessory modules without any operational impact on other modules nor the switch operations**

**Must have separate data and control paths - Separates control from services and keeps service processing isolated; increases security and performance**

**Must be capable of Virtual Router Redundancy Protocol (VRRP)-VRRP allows a group of switches to dynamically back each other up to create highly available routed environments**

**Must have IEEE 802.3ad LACP - Supports up to 52 LAGs, with up to 8 members per LAG with a user-selectable L1- 4 hashing algorithm**

#### **Performance**

**Must have scalable system design - Provides investment protection to support future technologies and higher-speed connectivity**

**Must have high-speed fully distributed architecture - Provides up to 1.76Tbps for bidirectional switching and 1,309 Mpps for forwarding to meet the demands of bandwidth-intensive applications today and in the future**

## **Connectivity**

**Must support port configuration below.**

**48 ports of 1GbE/10GbE (SFP/SFP+) 4 ports of 40GbE/100GbE (QSFP+/QSFP28)**

**Must support Jumbo frames - Allows high-performance backups and disaster-recovery systems; provides a maximum frame size of 9K bytes**

**Must have Loopback - Supports internal loopback testing for maintenance purposes and increased availability; loopback detection protects against incorrect cabling or network configurations and can be enabled on a per-port or per-VLAN basis for added flexibility**

**Must have packet storm protection - Protects against unknown broadcast, multicast, or unicast storms with user-defined thresholds**

## **Management**

**Must have management interface control - Enables or disables each of the following interfaces depending on security preferences: console port or reset button**

**Must have industry-standard CLI with a hierarchical structure - Reduces training time and expenses, and increases productivity in multivendor installations**

**Must have management security - Restricts access to critical configuration commands; offers multiple privilege levels with password protection; ACLs provide SNMP access; local and remote Syslog capabilities allow logging of all access**

**Must have IP SLA - Monitors the network for degradation of various services, including voice. Monitoring is enabled via the NAE for history and for immediate automated gathering of additional information when anomalies are detected**

**Must support SNMP v2c/v3 - Provides SNMP read and trap support of industry standard Management Information Base (MIB), and private extensions**

- Must support sFlow (RFC 3176) - Provides scalable ASIC-based wire-speed network monitoring and accounting with no impact on network performance; this allows network operators to gather a variety of sophisticated network statistics and information for capacity planning and real-time network monitoring purposes**
- Must have Remote Monitoring (RMON) - Uses standard SNMP to monitor essential network functions and supports events, alarms, history, and statistics groups as well as a private alarm extension group**
- Must support TFTP and SFTP - Offers different mechanisms for configuration updates; trivial FTP (TFTP) allows bidirectional transfers over a TCP/ IP network ; Secure File Transfer Protocol (SFTP) runs over an SSH tunnel to provide additional security**
- Must have debug and sampler utility - Supports ping and traceroute for IPv4 and IPv6**
- Must support Network Time Protocol (NTP) - Synchronizes timekeeping among distributed time servers and clients; keeps timekeeping consistent among all clock- dependent devices within the network; Can serve as the NTP server in a customer network**
- Must have IEEE 802.1AB Link Layer Discovery Protocol (LLDP) - Advertises and receives management information from adjacent devices on a network, facilitating easy mapping by network management applications**
- Must have dual flash images - Provides independent primary and secondary operating system files for backup while upgrading**
- Must support multiple configuration files - Stores files easily to the flash image**

## **Layer 2 Switching**

- Must have VLAN that supports up to 1,024 port-based or IEEE 802.1Q-based VLANs**
- Must have Bridge Protocol Data Unit (BPDU) tunneling - Transmits STP BPDUs transparently, allowing correct tree calculations across service providers, WANs, or MANs**
- Must support port mirroring - Duplicates port traffic (ingress and egress) to a local or remote monitoring port; supports 4 mirroring groups, with an unlimited number of ports per group**

**Must support STP - standard IEEE 802.1D STP, IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) for faster convergence, and IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)**

**Must support Internet Group Management Protocol (IGMP) - Controls and manages the flooding of multicast packets in a Layer 2 network**

**Must support Rapid Per-VLAN spanning tree plus (RPVST+) - Allows each VLAN to build a separate spanning tree to improve link bandwidth usage in network environments with multiple VLANs**

### **Layer 3 Services and Routing**

**Must support Address Resolution Protocol (ARP) - Determines the MAC address of another IP host in the same subnet; supports static ARPs ; Gratuitous ARP allows detection of duplicate IP addresses; Proxy ARP allows normal ARP operation between subnets or when subnets are separated by a Layer 2 network**

**Must support Dynamic Host Configuration Protocol (DHCP) - DHCP services are offered within a client network to simplify network management. DHCP Relay enables DHCP operation across subnets**

**Must support Domain Name System (DNS) - Provides a distributed database that translates domain names and IP addresses, which simplifies network design; supports client and server**

**Must support Policy Based Routing (PBR) - Enables use of a classifier to select traffic that can be forwarded based on policy set by the network administrator**

**Must support Static IPv6 routing - Provides simple manually configured IPv6 routing**

**Must support Open shortest path first (OSPF) - Delivers faster convergence; uses link-state routing Interior Gateway Protocol (IGP), which supports ECMP, NSSA, and MD5 authentication for increased security and graceful restart for faster failure recovery**

**Must support Border Gateway Protocol 4 (BGP-4) - Delivers an implementation of the Exterior Gateway Protocol (EGP) utilizing path vectors; uses TCP for enhanced reliability for the route discovery process; reduces bandwidth consumption by advertising only incremental updates; supports extensive policies for increased flexibility; scales to very large networks**

**Must support 6in4 tunnels - tunneling of IPv6 traffic in an IPv4 network**

**Must support IP performance optimization - Provides a set of tools to improve the performance of IPv4 networks; includes directed broadcasts, customization of TCP parameters, support of ICMP error packets, and extensive display capabilities**

**Must support Static IPv6 routing - Provides simple manually configured IPv6 routing**

**Must support OSPFv3 - Provides OSPF support for IPv6**

**Must support Equal-Cost Multipath (ECMP) - Enables multiple equal-cost links in a routing environment to increase link redundancy and scale bandwidth**

**Must support Generic Routing Encapsulation (GRE) - enables tunneling traffic from site to site over a Layer 3 path**

## **Security**

**Must support Access Control List (ACL) Features - powerful ACLs for both IPv4 and IPv6. Supports creation of object groups representing sets of devices like IP addresses. For instance, IT management devices could be grouped in this way; ACLs can also protect control plane services such as SSH, SNMP, NTP or web servers**

**Must support Remote Authentication Dial-In User Service (RADIUS) - Eases security access administration by using a password authentication server**

**Must support Terminal Access Controller Access Control System (TACACS+) - Delivers an authentication tool using TCP with encryption of the full authentication request, providing additional security**

**Must support management access security - provides both on-box as well as off-box authentication for administrative access. RADIUS or TACACS+ can be used to provide encrypted user authentication; Additionally, TACACS+ can also provide user authorization, services**

**Must support Secure shell (SSHv2) - Uses external servers to securely log in to a remote device; with authentication and encryption, it protects against IP spoofing and plain-text password interception; increases the security of Secure FTP (SFTP) transfers**

## **Multicast**

**Must support Multicast Internet Group Management Protocol (IGMP) - Enables establishing multicast group memberships in IPv4 networks; supports IGMPv1, v2, and v3**

**Must support Multicast Listener Discovery (MLD) - Enables discovery of IPv6 multicast listeners; supports MLDv1 and v2**

**Must support Protocol Independent Multicast (PIM) - Protocol Independent Multicast for IPv4 and IPv6 supports one-to-many and many-to-many media casting use cases such as IPTV over IPv4 and IPv6 networks. Support for PIM Sparse Mode (PIM-SM, IPv4 and IPv6)**

## **22 units of Short-Range Transceivers**

**Supply and Installation of 5 units 32 Ports Aggregation Switch with a total of the following specifications on the IDFs per building of 5 target buildings with 1 switch per building.**

### **Performance**

**The switch must have a switching capacity of at least 760 Gbps or equivalent.**

**The switch must have a total non-blocking throughput of at least 380 Gbps or equivalent.**

**The switch must have a forwarding rate of at least 565.44 Mpps or equivalent.**

**The switch must have an operating temperature range of -5 to 40° C (23 to 104° F).**

**The switch must have an operating humidity range of 10 to 90% non-condensing.**

### **Connectivity**

**Must support below configuration**

**28 1/10 Gbps SFP+ Ethernet ports**

**4 1/10/25 Gbps SFP+ Ethernet ports**

### **Power**

**The switch must be able to support a universal input of 100-240V AC, 50/60 Hz.**

**The switch must be able to support a USP RPS DC input.**

**The switch must have an internal AC/DC power supply of 100W.**

### **Management**

**The switch must have a 1.3" touchscreen LCM display for AR Switch Management.**

### **Layer 2 Switching**

**Must support the layer 2 features listed but not limited to the following:**

**IGMP snooping**

**STP / RSTP with priorities and port-level disable**

**Port isolation**

**Storm control**

**Voice VLAN**

**Port mirroring**

**LACP port aggregation**

**Multicast / broadcast rate limiting**

**MAC address blocking**

**Flow control**

**802.1X control**

**Jumbo frames**

**DHCP snooping / guarding**

**Egress rate limit**

**LLDP-MED**

**Port restricted by MAC**

**Device isolation with ACLs**

**Layer 3 Switching**

**Must support the layer 3 features listed but not limited to the following:**

**DHCP for locally-managed networks**

**DHCP relay**

**Inter-VLAN routing between networks on same switch**

**Static routing between local networks**

**Performance**

**The switch must have a switching capacity of at least 176 Gbps or equivalent.**

**The switch must have a total non-blocking throughput of at least 88 Gbps or equivalent.**

**The switch must have a forwarding rate of at least 130.944 Mpps or equivalent.**



The switch must have an operating temperature range of -5 to 40° C (23 to 104° F).

The switch must have an operating humidity range of 10 to 90% non-condensing.

### **Connectivity**

**Must support below configuration**

**48 Gigabit Ethernet RJ45 ports**

**40 PoE/PoE+ (Pins 1, 2+, 3, 6-)**

**8 60W PoE++; PoE/PoE+ (Pins 1, 2+: 3,6-)**

**PoE++ (Pair A 1, 2+; 3, 6-) (Pair B 4, 5+, 7, 8-)**

### **Power**

The switch must be able to support a universal input of 100-240V AC, 50/60 Hz.

The switch must be able to support a USP RPS DC input of 52V DC, 11.54A/11.5V DC, 5.22A.

The switch must have an internal AC/DC power supply of 660W.

The switch must have a total PoE power budget of 600W.

The switch must be able to provide a maximum PoE wattage per port of the following:

32W for PoE+

64W for PoE++.

**The switch must have a voltage range in PoE mode of the following:**

44V- 57V for PoE

50V- 57V for PoE+.

**48 Gigabit Ethernet RJ45 ports**

The switch must have a maximum power consumption of 60W (excluding PoE output).

### **Management**

The switch must have a 1.3" touchscreen LCM display for AR Switch Management.

### **Layer 2 Switching**

**Must support the layer 2 features listed but not limited to the following:**

**IGMP snooping**

**STP / RSTP with priorities and port-level disable**

**Port isolation**

**Storm control**  
**Voice VLAN**  
**Port mirroring**  
**LACP port aggregation**  
**Multicast / broadcast rate limiting**  
**MAC address blocking**  
**Flow control**  
**802.1X control**  
**Jumbo frames**  
**DHCP snooping / guarding**  
**Egress rate limit**  
**LLDP-MED**  
**Port restricted by MAC**  
**Device isolation with ACLs**

### **Layer 3 Switching**

**Must support the layer 2 features listed but not limited to the following:**

**DHCP for locally-managed networks**  
**DHCP relay**  
**Inter-VLAN routing between networks on same switch**  
**Static routing between local networks**  
**Network isolation with ACLs**  
**DHCP snooping / guarding**  
**Egress rate limit**  
**LLDP-MED**  
**Port restricted by MAC**

**Supply and Installation of 170 Indoor Access Points across several campuses with the following specifications:**

**Quantity and Location: in-building installation, Main Campus**

**Access Point shall support an aggregate radio rate of up to or equivalent or higher of the following:**

**6 Ghz (2x2 DL/UL MU-MIMO)**

**5 GHz (4x4 DL/UL MU-MIMO)**

**2.4 GHz (2x2 DL/UL MU-MIMO)**

**Access Point shall support the following data rates for Wifi 7:**

**802.11be (Wifi 7)**

**802.11ax (WiFi 6/6e)**

**802.11ac (WiFi 5)**

**802.11n**

**The Access point shall be able to have a Maximum Transmit of the following:**

**2.4 Ghz: 23dBm**

**5 Ghz: 29dBm**

**6 Ghz: 23dBm**

**Access Point shall be able to power up using the following methods**

**PoE**

**Power supply: PoE switch and PoE adapter with supported voltage of 44-57V DC and power consumption of 13W**

**The Access Point shall have the following features:**

BSSID: 8 per radio

VLAN: 802.1Q

Advanced QoS: Per-user rate limiting

Guest Traffic Isolation

Concurrent Clients: 350 or equivalent

**The Access Point shall have the following features:**

**Max BSSID: 8 per radio**

**VLAN: 802.1Q**

**Advanced QoS: Per-user rate limiting**

## **Guest Traffic Isolation**

**Concurrent Clients: 350 or higher**

**Access Point shall support the following data rates:**

### **802.11n (WiFi 4)**

6.5 Mbps to 300 Mbps (MCS0- MCS15, HT 20/40)

### **802.11ac (WiFi 5)**

**6.5 Mbps to 1.7 Gbps (MCS0 - MCS9 NSS1/2, VHT 20/40/80/160)**

### **802.11ax (WiFi 6/6e)**

7.3 Mbps to 4.8 Gbps (MCS0- MCS11 NSS1/2/3/4, HE 20/40/80/160)

### **802.11be (Wifi 7)**

5 GHz: 7.3 Mbps to 8.6 Gbps (MCS0- MCS13 NSS1/2/3/4, EHT 20/40/80/160/240)

6 GHz: 7.3 Mbps to 5.7 Gbps (MCS0- MCS13 NSS1/2, EHT 20/40/80/160/240/320)

## **Network Controller**

Winning bidder shall supply one (1) network controller for the Bontoc campus.

## **General Features and Capabilities**

**The network controller must have the following specifications:**

**Processor: Quad-core ARM® Cortex®-A57 at 1.7 GHz or equivalent**

**System memory: 4 GB DDR4 or equivalent**

**On-board storage: 16 GB eMMC**

### **Connectivity**

**The network controller must support below configuration:**

**8 Gigabit Ethernet RJ45 ports**

**1 10G SFP+ port**

### **SDWAN**

1 Gigabit Ethernet RJ45 port

1 10G SFP+ port

### **Power**

The network controller must be able to support a universal input of 100-240V AC, 50/60 Hz and 1 DC input.

The switch must be able to support a USP RPS DC input

The switch must have an internal AC/DC power supply of 50W.

The switch must have a maximum power consumption of 33W of and ESD/EMP protection of Air:  $\pm 15\text{kV}$ , contact:  $\pm 8\text{kV}$

### **Management Tools**

The controller must have the following management interfaces:

**Ethernet port**

**Bluetooth**

**Performance**

The controller must have the following features:

**Redundant WAN with failover and load balancing WiFi QoS for the following:**

[Access points](#)

**Internet quality reporting**

**Outage reporting**

**Internet failover with LTE Backup**

**Security**

The controller must have the following security features:

**Application-aware firewall**

**Signature-based IPS/IDS threat detection**

**Content/country/domain/ad filtering**

**VLAN/subnet-based traffic segmentation**

**Full-stateful firewall**

**Security**

The controller must support the following advanced networking features:

**License-free SD-WAN**

**WireGuard**

**L2TP**

**OpenVPN server and client**

**IPsec site-to-site VPN**

**Policy-based WAN and VPN routing**

**DHCP relay**

**Customizable DHCP server**

**IGMP proxy**

**IPv6 ISP support**

**The switch must have an operating humidity range of 10 to 90% non-condensing.**

**Other SR transceiver requirements:**

**50 pcs transceivers for distribution switches proposed for the purposes of connecting the aggregate switch to the distribution switch.**

**40 pcs transceivers for access switches for the purpose of connecting the aggregate switch to the access switch.**

**2 pcs transceiver from Ubiquiti Dream Machine to Core Switch**

**Out-Of-Band Switch**

Winning bidder shall supply, install and configure 1 unit of Out-Of-Band switch for the network equipment and servers.

**Console and Interface**

**24 x Selectable RJ45 RS-232 Ports and 24 x Managed 10/100/1000 Base-T Switched Ethernet Ports**

**2 x 10/100/1000 Ethernet/SFP Fiber auto-media ports (1GbE chassis)**

**2 x SFP+ (10G only) Fiber and 1 x 10/100/1000 Base-T Ethernet (10 GbE chassis)**

**1 x micro USB 2.0 Console Port and 1 x RJ45 Serial (Straight Pinout)**

**16, 32, or 48 x RJ45 RS-232 Software Selectable 50 to 230,400 bps Console Ports**

**1 x Internal V.92 modem with RJ11 Socket**

**2 x USB 3.0 Host Ports for storage and 8 x USB 2.0 ports for device console management**

**24 x managed 10/100/1000 Base-T switched Ethernet Ports**

**Power**

**Dual IEC 60320 Socket Universal 100-240V AC 50/60Hz and IEC C14 side connectors**

## **Memory and CPU**

**4-core CPU**

**8 GB DDR3 RAM**

**16 MB SPI with password protection**

**M.2 SATA III 64 GB SSD**

## **Security, Encryption & Authentication**

**Trusted Platform Module 2.0**

**AAA - TACACS+, RADIUS, Active Directory/OpenLDAP, Kerberos, with local fallback**

**Embedded Firewall**

**IPSec and OpenVPN**

## **Automation & Scalability**

**Docker support**

**Python**

**Perl and bash support**

**ZTP**

**SNMP-Standard MIBs**

**Global LTE Cellular Interface**

**Coverage      Global LTE-A Support**

**University Internet**

**Winning bidder shall provide internet subscription for the main campus under the university with 1 Gbps speed.**

## **Systems**

### **Administrative Systems**

Winning bidder shall develop, install and configure the following systems for MPSU.

### **Integrated Student Information System**

#### **Student Information Management**

**Must maintain accurate and up-to-date student records, including personal information, contact details, emergency contacts, and academic history.**

**Must track student demographics, such as age, gender, and nationality.**

#### **Enrollment Management**

**Must manage the entire enrollment process, from application submission to admission decisions and registration.**

**Must track student enrollment status, course registration, and fee payments.**

#### **Academic Records Management**

**Must maintain accurate academic records, including grades, transcripts, and degree audits.**

**Must calculate GPAs and generate academic reports.**

**Must manage course schedules, room assignments, and instructor assignments.**

#### **Financial Management**

**Must track student fees, payments, and refunds.**

**Must generate invoices and receipts.**

**Must integrate with the financial system to ensure accurate financial reporting.**

#### **Scholarship Management**

**Must manage student discounts and other scholarship grants**

#### **Attendance Management**

**Must track student attendance, including class attendance and event attendance.**

**Must generate attendance reports to monitor student engagement.**

#### **Access Rights Management**

**Must allow administrators to define roles and permissions, ensuring secure access to sensitive information.**

#### **Data Migration**

**Must provide a secure migration of existing data into the new system in ensuring a smooth transition.**

#### **User Training**

**Must provide end-user training, knowledge transfer, administrator training, user management, reports creation, and site administration.**

#### **Generation of Reports**

**Must generate reports such as Transcript of Records, Student Evaluation, Grades, and others**



**Must generate reports required by oversight agencies**

## **Human Resource Management System**

### **Employee Information Management**

**Must maintain accurate and up-to-date employee records, including personal information, contact details, emergency contacts, and employment history.**

**Must manage the organizational structure, including departments, job titles, and reporting hierarchies.**

### **Performance Management**

**Must allow for the creation, distribution, and completion of performance review forms.**

**Must track employee performance and provide feedback.**

### **Payroll Processing**

**Must calculate salaries, wages, and deductions accurately.**

**Must generate payslips and other payroll reports.**

**Must comply with tax laws and regulations.**

### **Benefits Administration**

**Must manage employee benefits, such as health insurance, retirement plans, and leave entitlements.**

**Must track benefit eligibility and deductions**

**Must track leave balances**

### **Time and Attendance Tracking**

**Must track employee attendance, including time-in, time-out, and overtime hours.**

**Must generate attendance reports and calculate overtime pay.**

### **Items (Plantilla) Management**

**Must manage employee positions, designations, and other employee agency profile**

### **Generation of Reports**

**Must generate reports required by oversight agencies**

## **Financial System**

### **General Ledger**

**Must maintain a comprehensive general ledger, including a chart of accounts.**

### **Financial Reporting**

**Must generate various financial reports, such as income statements, balance sheets, and cash flow statements.**

### **User Access Control**

**Must implement strong access controls to protect sensitive financial information.**

**Must assign roles and permissions to different users to limit access to specific functions.**

### **Procurement Module Vendor Management**

**Must allow for the creation and maintenance of a vendor database, including vendor information, contact details, and payment terms.**

### **Procurement Module Purchase Order Management**

**Must track student attendance, including class attendance and event attendance.**

**Must generate attendance reports to monitor student engagement.**

### **Financial Management**

**Must generate purchase orders, track order status, and manage purchase order approvals.**

**Must integrate with the inventory system to update stock levels upon receipt of goods.**

### **Procurement Module Receiving and Inspection**

**Must facilitate the process of receiving goods, verifying quantities, and inspecting quality.**

### **Procurement Module Accounts Payable**

**Must process vendor invoices, match them with purchase orders and receiving documents, and generate payment vouchers.**

**Must manage vendor payments and reconcile accounts.**

### **Point-of-Sale (POS) Module Product and Service Catalog**

**Must maintain a comprehensive product and service catalog, including pricing, taxes, and discounts.**

### **Point-of-Sale (POS) Module Sales Transactions**

**Must process sales transactions, including cash, credit card, and other payment methods.**

**Must generate sales receipts and invoices.**

### **Point-of-Sale (POS) Module Inventory Management**

**Must track inventory levels, manage stock replenishment, and generate inventory reports.**

**Must integrate with the procurement module to initiate purchase orders when stock levels fall below a certain threshold.**

### **Records Management System**

#### **Centralized Document Repository**

**Must provide a centralized repository for storing and organizing electronic documents.**

**Must support various file formats, including documents, spreadsheets, presentations, and images.**

#### **Document Classification and Indexing**

**Must allow for the classification and indexing of documents based on metadata, such as subject, author, date, and keywords.**

**Must use a consistent classification system to ensure easy retrieval.**

#### **Document Security and Access Control**

**Must implement strong security measures to protect sensitive documents.**

**Must assign access permissions to different user groups to limit access to authorized personnel.**

## **Document Retention and Disposal**

**Must establish and enforce document retention policies based on legal and regulatory requirements.**

**Must automate document disposal processes to avoid unnecessary storage.**

## **Workflow Management**

**Must automate document workflows, such as approval processes and routing.**

**Must track the status of documents and generate notifications.**

## **Document Search and Retrieval**

**Must provide advanced search capabilities to quickly locate documents based on keywords, metadata, or full-text search.**

**Must support filtering and sorting options to refine search results.**

## **Document Version Control**

**Must track changes to documents over time and maintain version history.**

**Must allow for easy comparison of different versions.**

## **Campus-wide Online Portal (Web App and Mobile App)**

### **Personalized Dashboard**

**Must display relevant information, such as announcements, notifications, and upcoming deadlines.**

### **Student Services**

**Must provide access to student information systems, including academic records, course schedules, and financial aid.**

**Must enable online registration, fee payment, and other student-related transactions.**

### **Campus News and Events**

**Must display the latest campus news, events, and announcements.**

**Must allow users to subscribe to relevant news and event notifications.**

## **Asset and Fleet Management System**

### **Asset Inventory and Tracking**

**Must maintain a comprehensive inventory of all MPSU assets, including IT equipment, furniture, laboratory equipment, and vehicles.**

**Must track asset information, such as purchase date, cost, and current location.**

**Must use barcode or RFID technology for efficient asset identification and tracking.**

#### **Asset Lifecycle Management**

**Must track the entire lifecycle of assets, from acquisition to disposal.**

**Must schedule preventive maintenance and repairs to extend the life of assets.**

**Must calculate depreciation and generate depreciation schedules.**

#### **Asset Utilization and Allocation**

**Must allocate assets to departments or individuals based on need and availability.**

**Must track asset usage and utilization rates.**

#### **Fleet Management**

**Must track vehicle information, including make, model, year, and mileage.**

**Must schedule vehicle maintenance and repairs.**

**Must monitor fuel consumption and track vehicle usage.**

**Must manage driver licenses and insurance information.**

#### **Asset Disposal**

**Must establish procedures for asset disposal, including surplus property and equipment.**

**Must ensure compliance with disposal regulations and guidelines.**

#### **Reporting and Analytics**

**Must generate reports on asset utilization, maintenance costs, and depreciation.**

**Must provide data-driven insights to optimize asset management.**

#### **Hardware Integration**

**Must integrate with barcode scanners and RFID readers to automate asset tracking and inventory management.**

#### **Executive Management System**

**Dashboard and Key Performance Indicators (KPIs)**

**Must provide a centralized dashboard with real-time key performance indicators (KPIs) to track the overall performance of the institution.**

**Must allow for customization of dashboards to suit individual preferences and roles.**

#### **Data Visualization and Reporting**

**Must offer powerful data visualization tools to represent complex data in easy-to-understand charts and graphs.**

**Must generate comprehensive reports on various aspects of the institution's operations, such as financial performance, student enrollment, and faculty productivity.**

#### **Decision Support Tools**

**Must provide decision support tools, such as forecasting, scenario analysis, and what-if analysis, to assist in strategic planning.**

#### **Collaboration Tools**

**Must facilitate collaboration among executives and other stakeholders through features like document sharing, messaging, and video conferencing.**

#### **Security and Access Control**

**Must implement robust security measures to protect sensitive information and ensure data privacy.**

**Must provide role-based access control to limit access to authorized users.**

#### **Attendance Management**

**Must track student attendance, including class attendance and event attendance.**

**Must generate attendance reports to monitor student engagement.**

#### **Integration with Other Systems**

**Must integrate with other campus systems, such as the SIS, HRMS, and Financial System, to provide a unified view of institutional data.**

#### **Educational Systems**

Winning bidder shall supply, install and configure the following systems for MPSU.

#### **Library Management System**

##### **Catalog Management**

**Must allow for the creation, editing, and deletion of bibliographic records for books, journals, articles, and other library materials.**

### **Item Management**

**Must track the physical items in the library, including their location, status (e.g., available, checked out, lost), and circulation history.**

### **User Management**

**Must create and manage user accounts, including student, faculty, and staff accounts.**

**Must assign privileges and access rights to different user groups.**

### **Circulation Management**

**Must allow for the automated checkout, return, and renewal of library materials.**

**Must generate overdue notices and fines.**

### **Online Catalog**

**Must provide a user-friendly online catalog that allows users to search for library materials by keyword, author, title, subject, or other criteria.**

**Must enable users to place holds on items, request interlibrary loans, and save search results.**

### **Digital Resources**

**Must support the management of electronic resources, such as e-books, databases, and online journals.**

**Must provide access to licensed databases and e-books through the library's website or a dedicated portal.**

### **Attendance Management**

**Must track student attendance, including class attendance and event attendance.**

**Must generate attendance reports to monitor student engagement.**

### **Reporting and Analytics**

**Must generate various reports, such as circulation statistics, usage reports, and inventory reports.**

**Must provide analytics tools to track library usage patterns and trends.**

### **Learning Management System**

### **Course Management**

**Must allow instructors to create and manage online courses, including organizing course content, setting deadlines, and assigning grades.**

**Must support various content formats, such as text, images, videos, and multimedia files.**

#### **Student Enrollment**

**Must allow students to enroll in courses and access course materials.**

#### **Communication Tools**

**Must provide tools for communication between instructors and students.**

#### **Assessment Tools**

**Must allow instructors to create and administer various types of assessments, including quizzes, exams, and assignments.**

**Must provide automated grading and feedback features.**

#### **Content Delivery**

**Must support various content delivery methods, such as streaming video, downloading files, and online lectures.**

#### **Progress Tracking**

**Must track student progress and provide timely feedback on assignments and assessments.**

**Must generate reports on student performance and course completion rates.**

#### **Auditorium**

The winning bidder shall develop the existing auditorium MPSU university that should include the specifications below:

##### **Wide LED Wall Display**

##### **Display**

**Dimension: ~8 ft. (vertical) x 11 ft. (horizontal) (Approximately)**

**Display area: ~97.59 ft<sup>2</sup>**

**Diagonal dimension: ~169.651 in.**

**Resolution of at least 1344 x 1080**

##### **Power requirement**



**Max: 3300 watts**

**Typical: 1100 watts**

**Heat generation**

**Max: 11260 BTU**

**Typical: 3755 BTU**

**1 Unit Mixer with the following specifications:**

**20-Channel Mixing Console**

**Max. 16 Mic / 20 Line Inputs (12 mono + 4 stereo)**

**4 GROUP Buses + 1 Stereo Bus**

**4 AUX (incl. FX)**

**“D-PRE” mic preamps with an inverted Darlington circuit**

**1-Knob compressors High-grade effects: SPX with 24 programs**

**24-bit / 192kHz 2in / 2out USB Audio functions**

**Works with the iPad (2 or later) through the Apple iPad Camera Connection Kit / Lightning to USB Camera Adapter**

**Includes Cubase AI DAW software download version**

**Cubasis LE for iPad available at App Store**

**PAD switch on mono inputs**

**+48V phantom power**

**Internal Universal Power Supply for world-wide use**

**XLR balanced outputs**

**Rack Mount Kit included**

**Metal chassis**

**2 Units Speakers with the following specifications:**

**System Performance**

**System Type Self-powered, 2-way**

**Frequency Response ( $\pm 3$  dB) 55 Hz – 14 kHz**

**Frequency Range ( $-10$  dB) 48 Hz – 16 kHz**

**Nominal Dispersion 100° H × 40° V (C-position)**

**Maximum SPL @ 1 m 132 dB-SPL (peak)**

**Crossover Frequency 600 Hz acoustic 4th-order Butterworth**

**Amplification**

**System Power 1000 W**

**Distortion at Rated Power 0.1% max (30 Hz – 15 kHz)**

**System Limiter Dynamic limiter**

**Power Indicator Blue LED (system on)**

**Transducers**

**Driver Complement 8 × 21/4 in mid-high drivers; 1 × 12 in LF**

## **Channels**

**Signal Indicators Power/fault, limit, front LED, signal input**

**Input Connections Channel 1: XLR balanced: Pin 1 (GND), Pin 2 (+), Pin 3 (–)**

**2 units Subwoofer Speakers with the following specifications:**

## **System Performance**

**System Type Self-powered**

**Frequency Response (–3 dB) 40 Hz – 250 Hz**

**Frequency Range (–10 dB) 38 Hz – 250 Hz**

**Nominal Dispersion Omni-directional**

**Maximum SPL @ 1 m 130 dB-SPL (peak 6 dB CF)**

**Crossover Frequency 40 – 100 Hz Butterworth bandpass, 100 Hz 4th-order Butterworth HPF at Line Out**

**Amplification**

**System Power 1000 W**

**Distortion at Rated Power 0.1% max (30 Hz – 15 kHz)**

**System Limiter Dynamic limiter**

**Power Indicator Blue LED (system on)**

## **Transducers**

**Driver Compliment** 2 × 10-in high-excursion drivers

**Channels**

**Channels** 1/2

**Signal Indicators** Power/fault, limit, front LED, signal input

**Input Connections** 2 XLR-1/4-in combo

**Controls** Volume level, front LED function select, power on/off, polarity select, line output

**3 Units Wireless PA System Bluetooth Speakers**

**3 Units Compact Loudspeakers with the following specifications:**

**Frequency Response** (–3 dB) 1 80 Hz – 16,000 Hz

**Frequency Range** (–10 dB) 1 70 Hz – 18,000 Hz

**Nominal Coverage Pattern** AMU208: 90° × 60° in horizontal configuration (rotatable high-frequency horn)

**AMU208-120:** 120° × 60° in horizontal configuration (rotatable high-frequency horn)

**Recommended High-pass Filter** 70 Hz with minimum 12-dB/octave filter

**Crossover** Passive, separate bandpass filters per transducer (200 Hz & 1.2 kHz)

**Transformer Taps** 70V: 5, 10, 20, 40, 80 W, bypass

100V: 10, 20, 40, 80 W, bypass

**1 Unit Amplifier**

**Power Rating**

**Amplifier Power** 2 × 600 W (THD+N < 0.04%, 1 kHz, 4–8 Ω, 70/100V)

**I-Share Mode Power** 1 × 1200 W (2–4 Ω, 70/100V)

**Gain (Low-Z mode)** 35 dB

**Gain (70V mode)** 35 dB

**Gain (100V mode)** 38 dB

**Audio Performance**

**Frequency Response** 4–8 Ω: 20 Hz – 20 kHz (±1 dB @ 1 W)

70/100V: 20 Hz – 20 kHz (±1 dB @ 1 W) with 50 Hz high-pass filter

**Channel Separation (Crosstalk) > 80 dB @ 1 kHz, > 65 dB @ 20 kHz**

**Dynamic Range ≥ 100 dBA (at rated power)**

**Audio Latency < 1 ms (any analog or AmpLink input to loudspeaker output)**

**6 pcs Wireless Microphone (with receiver and transmitter for the 6 units Wireless Microphones)**

**1 Unit Dual Band Equalizer to integrate with the sound system solution in this section**

**2 Units Live streaming mixer**

### **Multimedia Conference Room**

The winning bidder shall develop a total of 2 multimedia conference rooms for MPSU university. Each conference room should include quantities based on the specifications below:

**Must include 1 unit Interactive Display of at least 75" with the specifications below:**

**Screen type resolution of 3,840 x 2,160 with 60Hz.**

**Brightness of 350cd/m<sup>2</sup>**

**Contrast ratio of 1200:1**

**Must have 10ms response time.**

**Speaker type: Built in Speaker (12W x 2CH);**

**External Control: RS232C In/Out, RJ45 In/Out**

**# of Touch 40 points**

**Touch pen type - passive pen.**

**Object recognition range 5mm/ 10mm / 15mm.**

**Touch response time of 10ms.**

**Drawing speed (touch latency) of 45ms.**

**VESA Mount of 800 \* 400.**

**Must be Wall Mounted**

**Hardware features Touch Overlay (IR), Front Connectivity, OPS I/F Support (w/OPS Box); WiFi/BT Module.**

**Conference table for 15 people**

**15 units of ergonomic office chair**

**2 units 2.5HP Split type Air-conditioning unit**

**1 unit of Digital Signal Processor (DSP) unit**

**1 unit of ceiling microphone**

**Must have automatic dynamic beamforming.**

**Must have 28 electret condenser capsules.**

**Must have perfect speech intelligibility.**

**Must be certified to work with MS Teams and Zoom.**

**Must have exclusion zones.**

**Must have priority zone.**

**Must have an audio output 1 x 3-pin terminal (fits Phoenix contact MCVW 1.5-3-ST-3.81); 2 x Digital Dante Network Audio (RJ-45 Primary and Secondary).**

**Must have a minimum latency of 4 ms**

**Must have max. sound pressure level 104 dB SPL.**

**Must have transducer principle of pre-polarized condenser microphone.**

**Must be integrated to the sound system solution.**

**1 unit of WiFi Access Point (See item 9.5 for specifications).**

### **E-Classrooms**

The winning bidder shall develop a total of 20 e-classrooms for MPSU main campus. Each conference room should include quantities based on the specifications below:

**Must include 1-unit Interactive Display of at least 75" with the specifications below.**

**Must have screen size of 75"**

**Must have IPS panel technology**

**Must have direct type back light**

**Must have an aspect ratio of 16:09**

**Must have native resolution of 3,840 x 2,160 (UHD)**

**Must have 60 Hz Refresh Rate**

**Must have brightness of 440 nit (w/o Glass Max.) and 390 nit (w/o Glass Typ.)**

**Must have contrast ratio of 1,200: 1**

**Must have a color gamut of 72% NTSC**

**Must have a viewing angle (H x V) of 178 × 178**

**Must have a color depth of 16.7 Million colors**

**Must have a response time of 8ms**

**Must have a surface treatment (haze) of 25%**

**Must have Built-in OPS Slot**

**Must have an operation hour of 16 / 7  
(Hours / Days)**

**Must include a wall mount kit**

**Must have AC 100-240 V ~, 50/60 Hz power supply**

**Must have a touch screen response time of ≤ 5 ms**

**Must have a power consumption of 225 W / 430 W**

**Must have the following technical specifications**

**CPU - At least a Quad Core**

**RAM - At least 8GB**

**Storage – 64GB**

**WiFi – 802.11a/b/g/n/ac/ax (Wi-Fi 6)**

**LAN – Gigabit LAN**

**Bluetooth – 5.0**

**OS Ver – Android 13**

**Must have the following input/output connectivity**

**HDMI (3, HDCP 2.2)**

**RGB (VGA)**

**Audio In**

**RS-232C In**

**RJ45 (LAN),**

**USB 3.0 Type A (4),**

**USB 2.0 (Type A)**

**USB Type C (USB-PD, DP-Alt)**

**Must have the following video/audio input/output**

**HDMI Out**

**Audio Out (1, Optical 1 (SPDIF))**

**Touch USB (2)**

**RJ45 (LAN)**

**10.1.23. Must have the English language interface**

**10.1.24. Must have the following accessories**

**10.1.24.1. Remote Controller**

**10.1.24.2. Power Cord**

**10.1.24.3. QSG**

**10.1.24.4. 2 pcs writing pen**

**10.2. HDMI (3 (HDMI1/2: HDCP 2.2/1.4, HDMI3: HDCP 1.4)),**

**10.3. 31 units of tables with chairs**

**10.4. Must include 1 unit of 4K dome CCTV camera**

**10.5. 2 units 2.5HP Split type Air-conditioning unit**

**10.6. 1 unit of WiFi Access Point (see item 6.7 for specifications).**

**11. Computer Laboratory**

The winning bidder shall develop a total of 2 computer Laboratories for the 4 university of MPSU to be nominated on project kick-off. The laboratories should include the following components:

**11.1. Must include 1-unit Interactive Display of at least 75" with the specifications below.**

**Must have screen size of 75"**

**11.1.23. Must have IPS panel technology**

**11.1.24. Must have direct type back light**

**11.1.25. Must have an aspect ratio of 16:09**

**11.1.26. Must have native resolution of 3,840 x 2,160 (UHD)**

- 11.1.27. Must have 60 Hz Refresh Rate
- 11.1.28. Must have brightness of 440 nit (w/o Glass Max.) and 390 nit (w/o Glass Typ.)
- 11.1.29. Must have contrast ratio of 1,200: 1
- 11.1.30. Must have a color gamut of 72% NTSC
- 11.1.31. Must have a viewing angle (H x V) of 178 × 178
- 11.1.32. Must have a color depth of 16.7 Million colors
- 11.1.33. Must have a response time of 8ms
- 11.1.34. Must have a surface treatment (haze) of 25%
- 11.1.35. Must have Built-in OPS Slot
- 11.1.36. Must have an operation hour of 16 / 7 (Hours / Days)
- 11.1.37. Must include a wall mount kit
- 11.1.38. Must have AC 100-240 V ~, 50/60 Hz power supply
- 11.1.39. Must have a touch screen response time of ≤ 5 ms
- 11.1.40. Must have a power consumption of 225 W / 430 W

**11.1.41. Must have the following technical specifications**

- 11.1.41.1. CPU - At least a Quad Core
- 11.1.41.2. RAM - At least 8GB
- 11.1.41.3. Storage – 64GB
- 11.1.41.4. WiFi – 802.11a/b/g/n/ac/ax (Wi-Fi 6)
- 11.1.41.5. LAN – Gigabit LAN
- 11.1.41.6. Bluetooth – 5.0
- 11.1.41.7. OS Ver – Android 13

**11.1.42. Must have the following input/output connectivity**

- 11.1.42.1. HDMI (3, HDCP 2.2)
- 11.1.42.2. RGB (VGA)
- 11.1.42.3. Audio In
- 11.1.42.4. RS-232C In



- 11.1.42.5. RJ45 (LAN),
- 11.1.42.6. USB 3.0 Type A (4),
- 11.1.42.7. USB 2.0 (Type A)
- 11.1.42.8. USB Type C (USB-PD, DP-Alt)

**11.1.43. Must have the following video/audio input/output**

- 11.1.43.1. HDMI Out
- 11.1.43.2. Audio Out (1, Optical 1 (SPDIF))
- 11.1.43.3. Touch USB (2)
- 11.1.43.4. RJ45 (LAN)

**11.1.23. Must have the English language interface**

**11.1.24. Must have the following accessories**

- 11.1.43.5. Remote Controller
- 11.1.43.6. Power Cord
- 11.1.43.7. QSG
- 11.1.43.8. 2 pcs writing pen

**11.2. Must include 30 sets of desktop computers with minimum specifications below.**

**11.2.23. CPU should be at least Intel Core Ultra 5 or equivalent**

**11.2.24. Minimum of 16 GB RAM**

**11.2.25. At least 512 GB SSD Storage**

**11.2.26. At least 23" Monitor size**

**11.2.27. With Keyboard, Mouse and built-in camera**

**11.2.28. Equipped with UPS**

**11.2.29. Windows Operating System**

**11.2.30. Office Productivity Software**

**11.2.31. Endpoint protection**

**11.3. Must include 31 units of tables with chairs.**

**11.4. Must include 2 units split type air-conditioning with 2.5 HP.**

**11.5. Must include 2 units of 4K dome CCTV camera.**

**11.6. Must include 1 units of WiFi Access Point (see item 6.7 for specifications)**

**12. Computer e Laboratory**

The winning bidder shall develop a total of 2 computer e-Laboratories for MPSU to be nominated on project kick-off. These e-Laboratories should include the following components:

**12.1. Must include 1-unit Interactive Display of at least 75” with the specifications below.**

**12.1.23. Must have IPS panel technology**

**12.1.24. Must have direct type back light**

**12.1.25. Must have an aspect ratio of 16:09**

**12.1.26. Must have native resolution of 3,840 x 2,160 (UHD)**

**12.1.27. Must have 60 Hz Refresh Rate**

**12.1.28. Must have brightness of 440 nit (w/o Glass Max.) and 390 nit (w/o Glass Typ.)**

**12.1.29. Must have contrast ratio of 1,200: 1**

**12.1.30. Must have a color gamut of 72% NTSC**

**12.1.31. Must have a viewing angle (H x V) of 178 × 178**

**12.1.32. Must have a color depth of 16.7 Million colors**

**12.1.33. Must have a response time of 8ms**

**12.1.34. Must have a surface treatment (haze) of 25%**

**12.1.35. Must have Built-in OPS Slot**

**12.1.36. Must have an operation hour of 16 / 7 (Hours / Days)**

**12.1.37. Must include a wall mount kit**

**12.1.38. Must have AC 100-240 V ~, 50/60 Hz power supply**

**12.1.39. Must have a touch screen response time of ≤ 5 ms**

**12.1.40. Must have a power consumption of 225 W / 430 W**

**12.1.41. Must have the following technical specifications**

**12.1.41.1. CPU - At least a Quad Core**

- 12.1.41.2. RAM - At least 8GB
- 12.1.41.3. Storage – 64GB
- 12.1.41.4. WiFi – 802.11a/b/g/n/ac/ax (Wi-Fi 6)
- 12.1.41.5. LAN – Gigabit LAN
- 12.1.41.6. Bluetooth – 5.0
- 12.1.41.7. OS Ver – Android 13

**12.1.42. Must have the following input/output connectivity**

- 12.1.42.1. HDMI (3, HDCP 2.2)
- 12.1.42.2. RGB (VGA)
- 12.1.42.3. Audio In
- 12.1.42.4. RS-232C In
- 12.1.42.5. RJ45 (LAN),
- 12.1.42.6. USB 3.0 Type A (4),
- 12.1.42.7. USB 2.0 (Type A)
- 12.1.42.8. USB Type C (USB-PD, DP-Alt)

**12.1.43. Must have the following video/audio input/output**

- 12.1.43.1. HDMI Out
- 12.1.43.2. Audio Out (1, Optical 1 (SPDIF))
- 12.1.43.3. Touch USB (2)
- 12.1.43.4. RJ45 (LAN)

**11.1.25. Must have the English language interface**

**11.1.26. Must have the following accessories**

- 12.1.43.5. Remote Controller
- 12.1.43.6. Power Cord
- 12.1.43.7. QSG
- 12.1.43.8. 2 pcs writing pen

**12.2. Must include 30 sets of desktop computers with minimum specifications below.**

- 12.2.23. CPU should be at least Intel Core Ultra 7 or equivalent**
- 12.2.24. GPU should be at least RTX 4060 or equivalent**
- 12.2.25. Minimum of 16 GB RAM**
- 12.2.26. At least 512 GB SSD Storage**
- 12.2.27. At least 23" Monitor size**
- 12.2.28. With Keyboard, Mouse and camera**
- 12.2.29. Equipped with UPS**
- 12.2.30. Windows Operating System**
- 12.2.31. Office Productivity Software**
- 12.2.32. Endpoint protection**

- 12.3. Must include 31 units of tables with chairs.**
- 12.4. Must include 2 units split type air-conditioning with 2.5 HP.**
- 12.5. Must include 1 unit of 4K dome CCTV camera.**
- 12.6. Must include 1 units of WiFi Access Point (see item 6.7)**
- 13. IP PBX Solution**

Winning bidder shall supply 122 units IP Phones, 1 unit IP Phone for Operator and 1 unit IP PBX Platform for BRHMC.

#### **13.1. 1 unit IP Phone for operator**

##### **13.1.23. Protocols/Standards**

**13.1.23.1. The solution must support the following: SIP RFC3261, TCP/IP/UDP, RTP/RTCP, HTTP/HTTPS, ARP, ICMP, DNS (A record, SRV, NAPTR), DHCP, PPPoE, TELNET, TFTP, NTP, STUN, SIMPLE, LLDP, LDAP, TR-069, 802.1x, TLS, SRTP, and IPv6.**

##### **13.1.24. Network Interfaces**

**13.1.24.1. The solution must have dual switched auto-sensing 10/100/1000 Mbps Gigabit Ethernet ports with integrated PoE.**

##### **13.1.25. Graphic Display**

**13.1.25.1. The solution must have a 2.8 inch (320x240) TFT color LCD.**

**13.1.26.Wi-Fi**

**13.1.26.1. The solution must have integrated dual-band (2.4Ghz & 5Ghz) Wi-Fi.**

**13.1.27.Bluetooth**

**13.1.27.1. The solution must have integrated Bluetooth.**

**13.1.28.Feature Keys**

**13.1.28.1. The solution must have 5 navigation/menu keys and 9 dedicated function keys for: MESSAGE (with LED indicator), TRANSFER, HEADSET, HOLD, MUTE, SEND/REDIAL, SPEAKERPHONE, VOL+, and VOL-..**

**13.1.29.Auxilliary Port**

**13.1.29.1. The solution must have an RJ9 headset jack allowing EHS with USB headsets.**

**13.1.30.Voice Codecs and Capabilities**

**13.1.30.1. The solution must support G7.29A/B, G.711μ/a-law, G.726, G.722(wide-band), G723, iLBC, OPUS, in-band and out-of-band DTMF (in audio, RFC2833, SIP INFO)..**

**13.1.31.Telephony Features**

**13.1.31.1. The solution must support Hold, transfer, forward, 5-way conference, call park, call pickup, shared-call appearance(SCA)/bridged-line-appearance(BLA), downloadable phonebook(XML, LDAP, up to 2000 items), call waiting, call log(up to 2000 records), XML customization of screen, off-hook auto dial, auto answer, click-to-dial, flexible dial plan, hot-desking, personalized music ringtones and music on hold, server redundancy, and fail-over.**

**13.1.32.HD Audio**

**13.1.32.1. The solution must have HD audio, an HD handset, and a speakerphone with support for wideband audio.**

**13.1.33.Extension Module**

**13.1.33.1. The solution must have an extension module.**

**13.1.34.QoS**

**13.1.34.1. The solution must support Layer 2 QoS (802.1Q, 802.1P), 802.11e (WMM), and Layer 3 (ToS, DiffServ, MPLS) QoS.**

**13.1.35.Security**

**13.1.35.1. The solution must have user and administrator level passwords, MD5 and MD5-session based authentication, a 256-bit AES encrypted configuration file, SRTP, TLS, 802.1x media access control, and secure boot.**

**13.1.36.Multi Language**

**13.1.36.1. The solution must support multiple languages: English, German, Italian, French, Spanish, Portuguese, Russian, Croatian, Chinese, Korean, Japanese, and more.**

**13.1.37.Upgrade/Provisioning**

**13.1.37.1. The solution must support firmware upgrade via FTP/TFTP/TFTPS/HTTP/HTTPS and mass provisioning using GDMS/TR-069 or AES encrypted XML configuration file..**

**13.1.38.Power & Green Energy Efficiency**

**13.1.38.1. The solution must include a universal power adapter: Input: 100-240V; Output: +12V, 1A; Integrated Power-over-Ethernet(802.3af) IEEE 802.3az Energy-Efficient Ethernet. Max power consumption 6.5W (power adapter).**

**13.1.39.Temperature and Humidity**

**13.1.39.1. The solution must operate at 0°C to 40°C and store at -10°C to 60°C. Humidity: 10% to 90% non-condensing.**

**13.1.40.Compliance**

**13.1.40.1.** The solution must comply with FCC: Part 15 Subpart B (Class B), Part 15 Subpart C 15.247, Part 15 Subpart C 15.407, Part 1 Subpart I, Part 68. 316/317; IC: RSS-247, RSS-Gen, RSS-102, ICES-003, CS-03 Part V; CE: EN 55032, EN 55035, EN 61000-3-2, EN 61000-3-3, EN 62368-1, EN 62311, EN 301 489-1, EN 301 489-17, EN 300 328, EN 301 893; RCM: AS/NZS CISPR 32, AS/NZS 62368.1, AS/NZS 4268, AS NZS 2772.2, AS.

**13.2. 122 units IP Phones for users**

**13.2.23.Protocols/Standards**

**13.2.23.1.** The solution must support the following: SIP RFC3261, TCP/IP/UDP, RTP/RTCP, HTTP/HTTPS, ARP, ICMP, DNS (A record, SRV, NAPTR), DHCP, PPPoE, TELNET, TFTP, NTP, STUN, SIMPLE, LLDP, LDAP, TR-069, 802.1x, TLS, SRTP, and IPv6.

**13.2.24.Network Interfaces**

**13.2.24.1.** The solution must have dual switched auto-sensing 10/100/1000 Mbps Gigabit Ethernet ports with integrated PoE.

**13.2.25.Graphic Display**

**13.2.25.1.** The solution must have a 2.8-inch (320x240) capacitive touch screen TFT LCD.

**13.2.26.Wi-Fi**

**13.2.26.1.** The solution must have integrated dual-band (2.4Ghz & 5Ghz) Wi-Fi.

**13.2.27.Bluetooth**

**13.2.27.1.** The solution must have integrated Bluetooth.

**13.2.28.Feature Keys**

**13.2.28.1.** The solution must have 5 navigation/menu keys and 9 dedicated function keys for: MESSAGE (with LED indicator), TRANSFER, HEADSET, HOLD, MUTE, SEND/REDIAL, SPEAKERPHONE, VOL+, and VOL-..

**13.2.29.Auxilliary Port**

**13.2.29.1.** The solution must have an RJ9 headset jack allowing EHS with USB headsets.

#### **13.2.30.Voice Codecs and Capabilities**

**13.2.30.1.** The solution must support G7.29A/B, G.711μ/a-law, G.726, G.722(wide-band), G723, iLBC, OPUS, in-band and out-of-band DTMF (in audio, RFC2833, SIP INFO)..

#### **13.2.31.Telephony Features**

**13.2.31.1.** The solution must support Hold, transfer, forward, 5-way conference, call park, call pickup, shared-call appearance(SCA)/bridged-line-appearance(BLA), downloadable phonebook(XML, LDAP, up to 2000 items), call waiting, call log(up to 2000 records), XML customization of screen, off-hook auto dial, auto answer, click-to-dial, flexible dial plan, hot-desking, personalized music ringtones and music on hold, server redundancy, and fail-over.

#### **13.2.32.HD Audio**

**13.2.32.1.** The solution must have HD audio, an HD handset, and a speakerphone with support for wideband audio.

#### **13.2.33.QoS**

**13.2.33.1.** The solution must support Layer 2 QoS (802.1Q, 802.1P), 802.11e (WMM), and Layer 3 (ToS, DiffServ, MPLS) QoS.

#### **13.2.34.Security**

**13.2.34.1.** The solution must have user and administrator level passwords, MD5 and MD5-sess based authentication, a 256-bit AES encrypted configuration file, SRTP, TLS, 802.1x media access control, and secure boot.

#### **13.2.35.Multi Language**

**13.2.35.1.** The solution must support multiple languages: English, German, Italian, French, Spanish, Portuguese, Russian, Croatian, Chinese, Korean, Japanese, and more.

#### **13.2.36.Upgrade/Provisioning**



**13.2.36.1.** The solution must support firmware upgrade via FTP/TFTP/TFTPS/HTTP/HTTPS and mass provisioning using GDMS/TR-069 or AES encrypted XML configuration file..

#### **13.2.37.Power & Green Energy Efficiency**

**13.2.37.1.** The solution must include a universal power adapter: Input: 100-240V; Output: +12V, 1A; Integrated Power-over-Ethernet(802.3af) IEEE 802.3az Energy-Efficient Ethernet. Max power consumption 6.5W (power adapter).

#### **13.2.38.Temperature and Humidity**

**13.2.38.1.** The solution must operate at 0°C to 40°C and store at -10°C to 60°C. Humidity: 10% to 90% non-condensing.

#### **13.2.39.Compliance**

**13.2.39.1.** The solution must comply with FCC: Part 15 (CFR 47) Class B CE: EN55022 Class B; EN55024 Class B;EN61000-3-2; EN61000-3-3;EN60950-1

### **13.3. 1 unit IP PBX Solution**

#### **13.3.23.Network Interface**

**13.3.23.1.** The solution must have 8 RJ11 FXS ports. All ports must have lifeline capability in case of a power outage. The number of ports must be expandable by peering with an FXS gateway.

**13.3.23.2.** The solution must have 8 RJ11 FXO ports. All ports must have lifeline capability in case of a power outage. The number of ports must be expandable by peering with an FXO gateway.

**13.3.23.3.** The solution must have three self-adaptive Gigabit ports (switched, routed, or dual mode) with PoE+.

#### **13.3.24.Routing**

**13.3.24.1.** The solution must have a NAT router (supporting router mode and switch mode).

#### **13.3.25.Peripherals**

**13.3.25.1.** The solution must have a reset switch.

**13.3.25.2.** The solution must have a 128x32 dot matrix graphic LCD with DOWN and OK buttons.

**13.3.25.3.** The solution must have LED indicators for Power 1/2, FXS, FXO, LAN, WAN, and Heartbeat.

**13.3.25.4.** The solution must have 2 USB 3.0 ports and 1 SD card interface.

#### **13.3.26.Voice-over-Packet Capabilities**

**13.3.26.1.** The solution must have LEC with NLP Packetized Voice Protocol Unit, 128ms-tail-length carrier-grade Line Echo Cancellation, Dynamic Jitter Buffer, Modem detection & auto-switch to G.711, NetEQ, FEC 2.0, and jitter resilience up to 50% audio packet loss.

#### **13.3.27.Voice and Fax Codecs**

**13.3.27.1.** The solution must support Opus, G.711 A-law/U-law, G.722, G722.1 G722.1C, G.723.1 5.3K/6.3K, G.726-32, G.729A/B, iLBC, GSM; and T.38.

#### **13.3.28.Video Codecs**

**13.3.28.1.** The solution must support H.264, H.263, H263+, and VP8.

#### **13.3.29.QoS**

**13.3.29.1.** The solution must support Layer 2 QoS (802.1Q, 802.1p) and Layer 3 (ToS, DiffServ, MPLS) QoS.

#### **13.3.30.API**

**13.3.30.1.** The solution must have a full API available for third-party platform and application integration.

#### **13.3.31.Telephony Operating System**

**13.3.31.1.** The solution must be based on Asterisk version 16.

#### **13.3.32.DTMF**

**13.3.32.1.** The solution must support In-band audio, RFC2833, and SIP INFO DTMF methods.

#### **13.3.33.Provisioning Protocol & Plug-and-play**

**13.3.33.1.** The solution must support mass provisioning using AES encrypted XML configuration file, auto-discovery & auto-provisioning of IP endpoints via ZeroConfig (DHCP Option 66 multicast SIP SUBSCRIBE mDNS), and eventlist between local and remote trunk..

#### **13.3.34. Network Protocols**

**13.3.34.1.** The solution must support SIP, TCP/UDP/IP, RTP/RTCP, IAX, ICMP, ARP, DNS, DDNS, DHCP, NTP, TFTP, SSH, HTTP/HTTPS, PPPoE, STUN, SRTP, TLS, LDAP, HDLC, HDLC-ETH, PPP, Frame Relay (pending), IPv6, and OpenVPN®.

#### **13.3.35. Disconnect Methods**

**13.3.35.1.** The solution must support Busy/Congestion/Howl Tone, and Polarity disconnect methods.

#### **13.3.36. Media Encryption**

**13.3.36.1.** The solution must support SRTP, TLS, HTTPS, SSH, 802.1X, and ZRTP media encryption.

#### **13.3.37. Power Supply**

**13.3.37.1.** The solution must have 2x DC 12V Power Jack Input: 100~240VAC, 50/60Hz; Output: DC 12V, 2A.

#### **13.3.38. Multi-Language Support**

**13.3.38.1.** Web UI: The solution must support English, Simplified Chinese, Traditional Chinese, Spanish, French, Portuguese, German, Russian, Italian, Polish, Czech, and Turkish for the web UI.

**13.3.38.2.** Customizable IVR/voice prompts: The solution must support English, Chinese, British English, German, Spanish, Greek, French, Italian, Dutch, Polish, Portuguese, Russian, Swedish, Turkish, Hebrew, Arabic, and Netherlands for customizable IVR/voice prompts.

**13.3.38.3.** Customizable language pack: The solution must support a customizable language pack to support any other languages.

#### **13.3.39. Caller ID:**

**13.3.39.1. The solution must support Bellcore/Telcordia, ETSI-FSK, ETSI-DTMF, SIN 227 – BT, and NTT Caller ID.**

**13.3.40. Polarity Reversal/Wink**

**13.3.40.1. The solution must support Polarity Reversal/Wink with an enable/disable option upon call establishment and termination.**

**13.3.41. Call Center**

**13.3.41.1. The solution must support multiple configurable call queues, automatic call distribution (ACD) based on agent skills/availability/work-load, and in-queue announcements..**

**13.3.42. Customizable Auto Attendant**

**13.3.42.1. The solution must support up to 5 layers of IVR (Interactive Voice Response) in multiple languages..**

**13.3.43. Call Capacity**

**13.3.43.1. Users: The solution must support 3000 users.**

**13.3.43.2. Concurrent calls (G.711): The solution must support 450 concurrent calls (G.711).**

**13.3.43.3. Max concurrent SRTP calls (G.711): The solution must support 300 max concurrent SRTP calls (G.711).**

**13.3.43.4. Maximum Attendees of Conference Bridges: The solution must support up to 25 simultaneous video conference rooms, up to 300 simultaneous participants in all rooms combined, and up to 9 video feeds in all conference rooms.**

**13.3.44. Call Features**

**13.3.44.1.** The solution must support call park, call forward, call transfer, call waiting, caller ID, call record, call history, ringtone, IVR, music on hold, call routes, DID, DOD, DND, DISA, ring group, ring simultaneously, time schedule, PIN groups, call queue, pickup group, paging/intercom, voicemail, call wakeup, SCA, BLF, voicemail to email, fax to email, speed dial, call back, dial by name, emergency call, call follow me, blacklist/whitelist, voice conference, video conference, eventlist, feature codes, busy camp-on/call completion, voice control, post-meeting reports, virtual fax sending/receiving, and email to fax..

#### **13.3.45.Firmware Upgrade**

**13.3.45.1.** The solution must be supported by a proprietary management system and a zero-touch cloud provisioning.

#### **13.3.46.Internet Protocol Standards**

**13.3.46.1.** The solution must comply with RFC 3261, RFC 3262, RFC 3263, RFC 3264, RFC 3515, RFC 3311, RFC 4028. RFC 2976, RFC 3842, RFC 3892, RFC 3428, RFC 4733, RFC 4566, RFC 2617, RFC 3856, RFC 3711, RFC 4582, RFC 4583, RFC 5245, RFC 5389, RFC 5766, RFC 6347, RFC 6455, RFC 8860, RFC 4734, RFC 3665, RFC 3323, RFC 3550, RFC6189..

#### **13.3.47.Compliance**

**13.3.47.1.** The solution must comply with FCC: Part 15 (CFR 47) Class B, Part 68; CE: EN 55032, EN 55035, EN 61000-3-2, EN 61000-3-3, EN 62368-1, ETSI ES 203 021, ITU-T K.21; IC: ICES-003, CS-03 Part I Issue 9; RCM: AS/NZS CISPR 32, AS/NZS 62368.1, AS/CA S002, AS/CA S003.1/.2; Power adapter: UL 60950-1 or UL 62368-1.

### **14. University Productivity**

The winning bidder shall supply computing devices for university personnels that will be used aligned with the nature of their function.

**Must include 1-unit Interactive Display of at least 75” with the specifications below.**

**14.1.23. Must have IPS panel technology**

**14.1.24. Must have direct type back light**

**14.1.25. Must have an aspect ratio of 16:09**

- 14.1.26. Must have native resolution of 3,840 x 2,160 (UHD)
- 14.1.27. Must have 60 Hz Refresh Rate
- 14.1.28. Must have brightness of 440 nit (w/o Glass Max.) and 390 nit (w/o Glass Typ.)
- 14.1.29. Must have contrast ratio of 1,200: 1
- 14.1.30. Must have a color gamut of 72% NTSC
- 14.1.31. Must have a viewing angle (H x V) of 178 × 178
- 14.1.32. Must have a color depth of 16.7 Million colors
- 14.1.33. Must have a response time of 8ms
- 14.1.34. Must have a surface treatment (haze) of 25%
- 14.1.35. Must have Built-in OPS Slot
- 14.1.36. Must have an operation hour of 16 / 7 (Hours / Days)
- 14.1.37. Must include a wall mount kit
- 14.1.38. Must have AC 100-240 V ~, 50/60 Hz power supply
- 14.1.39. Must have a touch screen response time of ≤ 5 ms
- 14.1.40. Must have a power consumption of 225 W / 430 W
- 14.1.41. Must have the following technical specifications
  - 14.1.41.1. CPU - At least a Quad Core
  - 14.1.41.2. RAM - At least 8GB
  - 14.1.41.3. Storage – 64GB
  - 14.1.41.4. WiFi – 802.11a/b/g/n/ac/ax (Wi-Fi 6)
  - 14.1.41.5. LAN – Gigabit LAN
  - 14.1.41.6. Bluetooth – 5.0
  - 14.1.41.7. OS Ver – Android 13
- 14.1.42. Must have the following input/output connectivity
  - 14.1.42.1. HDMI (3, HDCP 2.2)
  - 14.1.42.2. RGB (VGA)
  - 14.1.42.3. Audio In

- 14.1.42.4. RS-232C In
- 14.1.42.5. RJ45 (LAN),
- 14.1.42.6. USB 3.0 Type A (4),
- 14.1.42.7. USB 2.0 (Type A)
- 14.1.42.8. USB Type C (USB-PD, DP-Alt)
- 14.1.43. Must have the following video/audio input/output
  - 14.1.43.1. HDMI Out
  - 14.1.43.2. Audio Out (1, Optical 1 (SPDIF))
  - 14.1.43.3. Touch USB (2)
  - 14.1.43.4. RJ45 (LAN)
- 11.1.27. Must have the English language interface
- 11.1.28. Must have the following accessories
  - 14.1.43.5. Remote Controller
  - 14.1.43.6. Power Cord
  - 14.1.43.7. QSG
  - 14.1.43.8. 2 pcs writing pen
- 14.2. 100 units of All-in-One (AiO) PC
  - 14.2.23. CPU should be at least Intel Core Ultra 5 or equivalent
  - 14.2.24. Minimum of 16 GB RAM
  - 14.2.25. At least 512 GB SSD Storage
  - 14.2.26. At least 21.5" Display
  - 14.2.27. Windows Operating System
  - 14.2.28. Office Productivity Software
  - 14.2.29. Endpoint protection
  - 14.2.30. 3 Years Warranty
- 14.3. 100 units of General-Purpose laptop
  - 14.3.23. CPU should be at least Intel Core Ultra 5 or equivalent

**14.3.24. Minimum of 16 GB RAM**

**14.3.25. At least 512 GB SSD Storage**

**14.3.26. At least 13” Display**

**14.3.27. Windows Operating System**

**14.3.28. Office Productivity Software**

**14.3.29. Endpoint protection**

**14.3.30. Power Adapter**

**14.3.31. Laptop Bag**

**14.3.32. 3 Years Warranty**

**14.4. 43 units of High-Tier Laptop**

**14.4.23. CPU should be at least Ultra 9 CPU or the equivalent**

**14.4.24. GPU should be at least 8GB or higher**

**14.4.25. Minimum of 32 GB RAM**

**14.4.26. At least 1TB SSD Storage**

**14.4.27. At least 15” Display or higher**

**14.4.28. 2560 x 1600 IPS Screen**

**14.4.29. Windows Operating System**

**14.4.30. Office Productivity Software**

**14.4.31. Endpoint protection**

**14.4.32. Power Adapter**

**14.4.33. Laptop Bag**

**14.4.34. 3 Years Warranty**

**14.5. All-in-one network (WiFi) Printer**

Winning bidder shall supply 15 units of all-in-one printer with the specifications below.

**14.5.23. Must have a print speed of up to 40 pages per minute (simplex/duplex).**

**14.5.24. Must be able to functions as print, copy and scan.**

**14.5.25. Must have high yield ink cartridges for printing up to 50,000 pages (black) and 30,000 pages (colour).**



**14.5.26. Must support a paper capacity of up to six paper sources with a maximum paper capacity of 5,150 sheets.**

**14.5.27. Must be environmentally friendly which uses up to 85% less power compared to laser printers and has fewer replacement parts, reducing environmental impact.**

**14.5.28. Must have consistent high-speed printing without the need for warm-up.**

**14.5.29. Finishing Options: New integrated inner finisher (optional).**

#### **14.6. ID Printer**

The winning bidder shall supply 2 units of ID printer w/ 6,000 printable IDs (Consumable).

##### **14.6.1. Printing and Laminating Specifications**

- 14.6.1.1. Color dye sublimation or monochrome thermal-transfer printing
- 14.6.1.2. One-pass single- and dual-sided wasteless lamination
- 14.6.1.3. Single- and dual-sided printing
- 14.6.1.4. 300 cards / hour full-color YMCKO single-sided printing
- 14.6.1.5. 270 cards / hour full-color YMCKO single-sided printing with lamination
- 14.6.1.6. Near photographic print quality
- 14.6.1.7. Edge-to-edge printing on standard CR-80 media

##### **Standard Features**

**USB and Ethernet connectivity**

**Single-card feed capability**

**150 card capacity feeder (30 mil)**

**15 card capacity reject hopper (30 mil)**

**100 card capacity output hopper (30 mil)**

**ix Series intelligent media technology**

**21-character x 6-line LCD operator display**

**14.6.2.8. Print Resolution: printers available with 300 dpi**

**14.6.2.9. 2-year limited warranty on printer and printhead**

##### **14.6.3. Card Compatibility**

**14.6.3.8. Card thickness: 10-50 mil\Card size: ISO 7810 format, Type ID-1, CR-80 size**

**14.6.3.9. Card material: PVC and composite, ABS cards, PET, PET-G, and Teslin® composite**

**14.6.3.10. Specialty cards: transparent with IR-blocker, adhesive backed, signature panel**

**14.6.3.11. Technology cards: contact and contactless smart cards**

**14.6.4. Communications Interfaces**

**14.6.4.8. USB 2.0**

**14.6.4.9. USB supports plug-and-play printer identification**

**14.6.4.10. 10/100 Ethernet**

**14.6.4.11. 802.11 b/g wireless connectivity**

**15. Other Peripherals**

The winning bidder shall supply peripherals that will support and compliment the IT equipment on this project.

**3 Units Professional Grade Camera with the following specifications:**

**Camera Specifications**

**Lens Mount - E-mount**

**Size & Weight**

**Weight (including supplied accessories): 5 lb 11 oz (2.59 kg)**

**Weight (main unit only): 1 lb 15 oz (890 g)**

**Dimensions (W x H x D) (body without protrusions): 4.49 x 4.57 x 6.02" (114 x 116 x 153 mm)**

**Power**

**Power Consumption: Approx. 18.0 W**

**Battery Operating Time: Approx. 105 min (BP-U35 battery), 215 min (BP-U70 battery)**

**Power Requirements: DC 19.5 V**

**Operation**

**Storage Temperature: -4 °F to +140 °F (-20 °C to +60 °C)**

**Operating Temperature: 32 °F to 104 °F (0 °C to 40 °C)**

## **Recording Format (Video)**

**XAVC Intra and XAVC Long**

## **Recording Format (Audio)**

**LPCM 24 bits, 48 kHz, 4 channels**

## **Recording Frame Rate**

**Various XAVC Intra and Long formats**

## **Recording/Playback Time**

**Various for XAVC Intra and Long formats**

## **Camera Section**

**Shutter Speed: 64F to 1/8000 s**

**Sensitivity: ISO 800/12800**

**Signal-to-Noise Ratio: delete**

**Pixels: Approx. 12.9 megapixels (total), 10.2 megapixels (effective)**

**Built-in Optical Filters: Clear, variable ND (1/4ND to 1/128ND)**

**Sensor Type: 35 mm full-frame, single-chip CMOS image sensor**

## **Slow & Quick Motion**

**Various frame rates for XAVC Intra and Long format**

## **White Balance**

**Modes: Preset, Memory A, Memory B (2000K–15000K)/ATW**

## **Exposure**

**Gain Control: –3 to 30 dB (every 1 dB), AGC**

## **Gamma**

**Gamma Curve: SDR mode: S-Cinetone, Standard, Still, ITU709, 709tone; HDR mode: HLG\_Live, HLG\_Natural**

## **Latitude**

**15+ stop**

## **Interface**

**Various input/output options, including minijack, BNC, USB, XLR, SDI, and HDMI**

## **Media**

**CF express Type A / SD card (x2)**

## **Monitoring**

**8.8cm (3.5 type), Approx. 2.76M dots**

## **Built-in Microphone**

**Omnidirectional monaural and stereo electret condenser microphone**

## **Wi-Fi/NFC**

**Frequency Band: 2.4 GHz, 5.2/5.3/5.6/5.8 GHz**

**Supported Format: IEEE 802.11 a/b/g/n/ac**

## **Supplied Accessories**

**Handle, LCD monitor, Grip remote control, AC adapter, power cord, battery charger, battery pack, USB-C cable, liquid crystal display hood, cold shoe kit, lens mount cap, handle connector cap, user guide, warranty booklet**

### **70-200mm F4 G OSS Lens**

#### **E Mount**

**Focal Length: 70-200mm**

**Aperture: F4**

**Mount: E-Mount**

**Weight: 1.8 lb (840g)**

**Features: Optical SteadyShot (OSS), operation in a variety of conditions**

### **12-24mm F4 G Camera Lens**

#### **E Mount**

**Focal Length: 12-24mm**

**Aperture: F4**

**Mount: E-Mount**

**Weight: 1.24 pounds (565g)**

**Features: Ultra-wide-angle zoom, constant aperture, dust and moisture resistant**

### **Uninterrupted Power Supply**

Different variants of UPS shall support different types of equipment from low power to high power requirement. Different variations shall have the minimum specifications below.

**Winning bidder shall supply 100 units of 650VA UPS**

**Features**

**Power capacity of 360 W / 650 VA**

**4 battery backups with surge protection outlets for multi-device power protection**

**Automatic Voltage Regulation (AVR). AVR instantly corrects voltage fluctuations without using the battery, saving battery life for power outages**

**Circuit breaker button to reset for easy recovery from circuit overloads, protecting the UPS and connected electronics from electrical damage**

**Periodic battery self-test ensures early detection of a battery that needs to be replaced.**

**Generator Compatible, instant battery power to prevent frequency variations from affecting the connected load**

**Output**

**Power Capacity, 360 W / 650 VA**

**Nominal Output Voltage, 230 VAC +/- 10%**

**Output Frequency Range (sync mode) 50 Hz / 60 Hz +/- 1 Hz**

**Topology Line Interactive**

**Output Waveform, Stepped approximation to a sinewave**

**Transfer Time 4-6ms typical, 10ms max**

**Output Connections, (4) NEMA 5-15R Battery Backup Outlets**

**Input**

**Nominal Input Voltage of 230 VAC**

**Input Voltage Range of 140 - 300 VAC**

**Frequency of 50 Hz / 60 Hz  $\pm$  5Hz**

**Input Circuit Breaker of 5A**

**Input Connection of NEMA 5-15P**

**Management**

**LED Indicators. Provide easy-to-read status of the unit and utility power conditions.**

### 15.5. Drone Camera

Winning bidder shall supply 3 units of Drone cameras for productivity.

- 15.5.1. Integrates powerful imaging capabilities, omnidirectional obstacle sensing, ActiveTrack 360° with the new manual mode, and 20km FHD video transmission.
  - 15.5.2. Should have an Advanced Pilot Assistance Systems (APAS) ensures additional safety by enabling automatic braking and bypassing during flight.
  - 15.5.3. Can capture more complex details easily and powered by a 1/1.3-inch CMOS sensor featuring Dual Native ISO Fusion, a f/1.7 aperture, and 2.4µm 4-in-1 pixels.
  - 15.5.4. Weighs less than 249 g.
  - 15.5.5. Max wind speed resistance of at least 10.7 m/s
16. Other Requirements

#### 16.1. Project Management

Commitment is to ensure that information and communication technology projects are completed successfully. This involves overseeing the project team, creating project plans, tracking progress, identifying and managing risks, and communicating with stakeholders.

- 16.1.1. Develop a clear understanding of the project goals and objectives, and ensure that all project team members have a shared understanding of these goals.
- 16.1.2. Create a comprehensive business user requirements and technical design requirements document.
  - 16.1.3. Create a detailed project plan that includes timelines, milestones, and deliverables.**
  - 16.1.4. Assign roles and responsibilities to the project team members and ensure that everyone understands their roles.**
  - 16.1.5. Monitor project progress regularly and adjust the project plan as necessary.**
  - 16.1.6. Identify potential risks and develop contingency plans to mitigate these risks.**
  - 16.1.7. Communicate regularly with stakeholders, including sponsors, customers, and team members, to ensure that everyone is aware of project progress and any issues that arise.**
  - 16.1.8. Ensure that project documentation is accurate and up-to-date, including project plans, progress reports, and risk assessments.**
  - 16.1.9. Foster a positive team environment by encouraging collaboration, providing support, and recognizing team members' contributions.**

**16.1.10. Continuously evaluate project performance and identify opportunities for improvement.**

16.1.11 To ensure seamless coordination and immediate response to any issues, the winning bidder shall assign a dedicated Project Manager who will oversee all aspects of the project, including planning, execution, and communication with MPSU stakeholders. Furthermore, a dedicated technical manpower team from the winning bidder shall be stationed at MPSU's Bontoc Campus for the whole duration of the project to provide continuous on-site support, troubleshooting, and immediate resolution of technical concerns.

## **16.2. Testing and Commissioning Services**

The winning bidder shall be required to perform testing and commissioning. Minimum Scope of Services are as follows:

**16.2.1. The winning bidder shall submit the test scripts, UAT documents, MoP documents, to MPSU PMT prior to actual testing.**

**16.2.2. Perform actual testing as per Manufacturer prescribed testing methodologies.**

**16.2.3. Testing results must be documented and submitted to MPSU PMT not later than 48 hours from completion of the testing activities.**

**16.2.4. Should there be failed testing, the winning bidder is given a maximum of 12 hours to troubleshoot or rectify the problem. Re-testing shall then be performed. After completion of the 2nd testing and such has failed anew, the winning bidder shall furnish MPSU PMT with full report not more than 24 hours from the time failed testing has been declared, and must replace the defective hardware and/or software not more than fourteen (14) days from the date of completion of the failed testing. In case of longer replacement period, the winning bidder must inform MPSU PMT in writing, stating the reasons thereof and arrival date.**

## **16.3. As-Built Plans Development**

The winning bidder must develop and submit As-Built Plans for all works covered in this project such as electrical works, civil works, cabling works and system deployments. The As-Built Plans must accurately reflect the actual installations, and other relevant works completed and duly signed off by the signing authority designated by MPSU, as well as the respective trade engineers from the winning bidder's side. Mechanical and Electrical Load Schedules must form part of the As-Built plans. Submittal should be in the following form:

**16.3.1. 3 Sets of Print Outs in A1 Sheet, (properly compiled and labeled accordingly)**

**16.3.2. Sets of Print Outs in A3 Sheets (properly compiled and labeled accordingly)**

**16.3.3. Soft Copies in pdf format, compiled and stored in a USB drive**

**Manufacturers or Distributor's Certification for the Servers, Storage, Networking, and Workstations must:**

**Have local spare parts warehouse in Metro Manila**

**Have more than 10 years of business experience in the Philippines**

**The manufacturer and/or its authorized distributor must have certified engineers.**



Certification from the Manufacturer or Authorized Distributor stating that the equipment supplied is not obsolete or shortly to be phased out of production.

Warranty Certificates of all supplied equipment and devices, stating the warranty coverage.

**Section VIII. Philippine Bidding Document Related Forms**

**Notes to the Philippine Bidding Document Related Forms**

The Bidder shall complete and submit with its Bid the **Bid Form** and **Price Schedules** in accordance with ITB Clause 13 with the requirements of the Bidding Documents and the format set out in this Section.

When requested in the BDS, the Bidder should provide the **Bid Security**, either in the form included hereafter or in another form acceptable to the Procuring Entity, pursuant to ITB Clause 16.

The **Contract Form** should incorporate any correction or modification to the accepted Bid resulting from price corrections when it is finalized at the time of contract award. The Price Schedule and Schedule of Requirements which form part of the contract should be modified accordingly.

The **Omnibus Sworn Statement** must be completed by all Bidders in accordance with ITB Clause 4.2. Failure to submit it with the Bid shall result in the rejection of the Bid and the Bidder's disqualification.

The **Performance Securing Declaration, if allowed and Bank Guarantee Form for Advance Payment** shall be completed only by the successful Bidder in accordance with one of the forms indicated herein by the Procuring Entity, and pursuant to **GCC** Clause 13 and its corresponding SCC provision.

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## Bid Form for Procurement of Goods

***[Note: The duly accomplished form shall be submitted with the Bid]***

---

### BID FORM

Project Identification No.: ***[Insert number]***

To: ***[Name of Procuring Entity]***

Having examined the Philippine Bidding Documents (PBD) including the Supplemental Bid Bulletin Numbers ***[insert numbers]***, the receipt of which is hereby duly acknowledged, we, the undersigned, declare that:

- a) I/We have no reservation to the PBD, including the Supplemental Bid Bulletins, for the Procurement Project ***[Project Title]***;
- b) Select one, delete the other
  - I/We undertake to deliver the Goods in accordance with the delivery schedule in the Schedule of Requirements;
  - I/We offer to execute the Works for this Contract in accordance with the PBD;
- c) The total price of our Bid in words and figures, excluding any discount offered below, is ***[ insert information]***;
- d) The discounts offered and the methodology for their application are: ***[insert information]***;
- e) 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 ***[Select one, delete the other: the Price Schedules/ Detailed Estimates]***;
- f) This Bid shall remain valid within a period stated in the PBD, and it shall be binding upon me/us at any time before the expiration of that period;
- g) If our bid is accepted, I/We commit to provide a performance security in the form, amounts, and within the times prescribed in the PBD.

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 the Bidder.

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

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

The undersigned is authorized to submit the bid on behalf of ***[Name of the Bidder]*** as evidenced by the attached ***[State the Written Authority]***.

I/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.

Duly authorized to sign the Bid for and behalf of:

***[Insert Bidder's Name]***

***[Signature over Printed Name]***

***[Position/Designation]***

***[Date]***

---

### Pricing Details for Goods Offered from Within the Philippines

### Summary of Bid Prices

1	2	3	4
Item No.	Item	Particulars / Description	Total Amount

Signature: \_\_\_\_\_

### Price Schedule for Goods

Name of Bidder \_\_\_\_\_ . Project ID No. \_\_\_\_\_. Page \_ of \_\_\_\_\_

### Pricing Details for Goods Offered from Abroad

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)

### Summary of Bid Prices

*The Procuring Entity may modify the table below as necessary to comply with the requirements of a specific Project.*

1	2	3	4
Item No.	Item	Particulars / Description	Total Amount

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Duly authorized to sign the Bid for and behalf of: \_\_\_\_\_

## Contract Form

***[Note: The duly accomplished form is not required to be submitted with the Bid but shall be submitted within ten (10) days after receiving the Notice of Award]***

---

### CONTRACT FOR [Insert Project Title]

This **CONTRACT** executed on the \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_ by and between:

***[Name of Procuring Entity]***, a government agency of the Republic of the Philippines, hereinafter called "the Entity";

-and-

***[Name of Supplier /Contractor/ Consultant]*** a company duly organized and existing under the laws of [city and country], with principal office at [insert address], hereinafter called "the Supplier".

**WHEREAS**, the Entity invited Bids for certain goods and services/works/consulting services, particularly ***[Brief description of Project]***;

**WHEREAS**, the Supplier/Contractor/Consultant submitted a responsive bid and was awarded the contract for the procurement in the total amount of ***[Contract price in words and figures, including currency]***, hereinafter referred to as the "Contract Price."

**NOW, THEREFORE**, for and in consideration of the foregoing premises, the parties hereby agree as follows:

- 1) Unless otherwise stated, terms and expressions used in this Contract shall have the same meanings as those assigned to them in the Conditions of Contract, which form an integral part of this Contract.
- 2) The following documents as required by the Implementing Rules and Regulations of Republic Act No. 12009 shall form part and be read and construed as integral parts of this Contract, viz.:

a) Philippine Bidding Document (PBD); ***[Select one, delete the others]***

☐ ***For Procurement of Goods***

- i) Invitation to Bid;
- ii) Instruction to Bidders;
- iii) Bid Form, including all the documents/statements contained in the Bidder's bidding envelopes, as annexes, and all other documents submitted (e.g., Bidder's response to request for

clarifications on the bid), including corrections to the bid, if any, resulting from the Procuring Entity's bid evaluation;

- iv) Bid Data Sheet;
- v) Schedule of Requirements; vi) Technical Specifications; vii) General and Special Conditions of Contract; viii) Supplemental Bid Bulletins, if any; and
- ix) Other contract documents that may be required by existing laws and/or the Entity.

□ **For Procurement of Infrastructure Projects**

- i) Drawings/Plans; ii) Specifications;/Scope of Work;
- iii) Bill of Quantities;
- iv) General and Special Conditions of Contract; and v) Supplemental Bid Bulletins, if any;

□ **For Procurement of Consulting Services**

- i) General and Special Conditions of Contract; ii) Terms of Reference;
- iii) Request for Expression of Interest; iv) Instructions to Bidders;
- v) Bid Data Sheet; vi) Addenda and/or Supplemental/Bid Bulletins, if any; vii) Bid forms, including all the documents/statements contained in the Bidder's bidding envelopes, as annexes, and all other documents/ statements submitted (e.g., bidder's response to request for clarifications on the bid), including corrections to the bid, if any, resulting from the Procuring Entity's bid evaluation;
- viii) Eligibility requirements, documents and/or statements; ix) Performance Security;
- x) Notice of Award of Contract and the Bidder's *conforme* thereto; and
- xi) Other contract documents that may be required by existing laws and/or the Entity.

- b) Winning bidder's bid, including the Eligibility Requirements, Technical and Financial Proposals, and all other documents or statements submitted;

- c) Performance Security;

- d) Notice of Award of Contract; and the Bidder's *Conforme* thereto; and

- e) Other contract documents that may be required by existing laws and/or the Procuring Entity concerned in the PBD, such as but not limited to the Notice to Proceed and Warranty Security.

- 3) In consideration of the Contract Price of **[Contract Price in words and figures]**, or such other sums as may be determined in accordance with the terms of the Contract, the Supplier/Contractor/Consultant agrees to deliver and perform the items and related services for the **[Project Title]** described herein in accordance with the terms and conditions specified in the Contract and its annexed documents.

- 4) The **[Name of the Procuring Entity]** agrees to pay the above-mentioned sum to the Supplier/Contractor/Consultant in accordance with the schedule and manner provided in the Bidding Documents and its annexes.
- 5) Any dispute, difference, or claim arising out of or relating to this Contract, including its existence, validity, interpretation, breach, or termination thereof, may be submitted to arbitration or other form of alternative dispute resolution in accordance with the applicable law, such as Republic Act No. 9285 (Alternative Dispute Resolution Act of 2004) or Executive Order No 1008, series 1985 (Construction Industry Arbitration Law).

**IN WITNESS WHEREOF**, the parties hereto have caused this Contract to be executed in accordance with the laws of the Republic of the Philippines on the day and year first above written.

*For the Procuring Entity*

Head of the Procuring Entity or Duly  
Authorized Representative

*For the Bidder*

Duly authorized to sign the Contract for and  
behalf of **[Bidders Name]**:

**[Signature over Printed Name]**  
**[Position/Designation]**  
**[Date]**

**[Signature over Printed Name]**  
**[Position/Designation]**  
**[Date]**

*Signed in the presence of:*

**[Name and Signature]** **[Name and Signature]** *Witness – Procuring Entity*  
*Witness- Supplier*



## ACKNOWLEDGMENT

BEFORE ME, A Notary Public for and in the \_\_\_\_\_, City/Province of \_\_\_\_\_, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, personally appeared the above-named persons who have satisfactorily proven to me their identity, through their identifying documents written below their names and signatures, that they are the same persons who executed and voluntarily signed the foregoing instrument consisting of \_\_\_\_\_ pages, including this page where this Acknowledgement is written, which they acknowledged before me as their free and voluntary act and deed.

**WITNESS MY HAND AND SEAL** this \_\_\_\_ day of *[month]* *[year]*.

### NAME OF NOTARY PUBLIC

Notarial Commission No. \_\_\_\_\_  
Notary Public for \_\_\_\_\_ until \_\_\_\_\_ Roll  
of Attorneys No. \_\_\_\_\_  
PTR No. \_\_, *[date issued]*, *[place issued]*  
IBP No. \_\_, *[date issued]*, *[place issued]*

Doc. No. \_\_\_\_\_  
Page No. \_\_\_\_\_  
Book No. \_\_\_\_\_  
Series of \_\_\_\_\_

## Omnibus Sworn Statement Form

**[Note: The duly accomplished form shall be submitted with the Bid]**

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REPUBLIC OF THE PHILIPPINES )  
CITY/MUNICIPALITY OF \_\_\_\_\_ ) S.S.

### OMNIBUS SWORN STATEMENT

I, **[Name of Affiant]**, of legal age, **[Civil Status]**, **[Nationality]**, and with residence at **[Address of Affiant]**, after having been duly sworn in accordance with law, do hereby depose and state that:

**1) Select one, delete the others:**

- *If sole proprietorship:* I am the sole proprietor or authorized representative of **[Name of Bidder]** with office address at **[Address of Bidder]**;
- *If 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]**;
- *If individual consultant not registered under a sole proprietorship, in case of Consulting Services:* I am the individual consultant or authorized representative of **[Name of Bidder]** with office address at **[Address of Bidder]**;

**2) Select one, delete the others:**

- *If 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 **[Project Title]** of the **[Name of the Procuring Entity]***[insert "as supported by the attached duly notarized Special Power of Attorney" for authorized representative];*
- *If 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 **[Project Title]** of the **[Name of the Procuring Entity]**, as supported by the attached duly notarized Special Power of Attorney, Board/Partnership Resolution, or Secretary's Certificate, whichever is applicable;
- *If individual consultant not registered under a sole proprietorship, in case of Consulting Services:* As the individual consultant 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 **[Project Title]** of the **[Name of the Procuring Entity]**, as supported by the attached duly notarized Special Power of Attorney for authorized representative;

- 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;
- 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 others:**
  - *If sole proprietorship* : The **[Name of Bidder]** and its spouse are not related by consanguinity or affinity up to the third civil degree to the Head of the Procuring Entity, Procurement Agent (if engaged), EndUser or Implementing Unit, project consultants, head of the Project Management Office, or the members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat;
  - *If partnership* : The partnership itself and the partners of **[Name of Bidder]** are not related by consanguinity or affinity up to the third civil degree to the Head of the Procuring Entity, Procurement Agent (if engaged), End-User or Implementing Unit, project consultants, head of the Project Management Office, or the members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat;
  - *If cooperative*: The cooperative itself and members of the board of directors, general manager, or chief executive officer of **[Name of Bidder]** are not related by consanguinity or affinity up to the third civil degree to the Head of the Procuring Entity, Procurement Agent (if engaged), End-User or Implementing Unit, project consultants, head of the Project Management Office, or the members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat;
  - *If corporation, or joint venture*: The corporation or joint venture itself, and officers, directors, and controlling stockholders of **[Name of Bidder]** are not related by consanguinity or affinity up to the third civil degree to the Head of the Procuring Entity, Procurement Agent (if

engaged), End-User or Implementing Unit, project consultants, head of the Project Management Office, or the members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat;

- *If individual consultant not registered under a sole proprietorship, in case of Consulting Services:* The individual consultant and its spouse are not related by consanguinity or affinity up to the third civil degree to the Head of the Procuring Entity, Procurement Agent (if engaged), End-User or Implementing Unit, project consultants, head of the Project Management Office, or the members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat;

- 7) It is understood that failure to faithfully disclose its relationship with the HoPE, members of the BAC, the TWG, and the BAC Secretariat, the head of the PMO or the end-user unit or implementing unit, and the project consultants of the Procuring Entity, or of the procurement agent by consanguinity or affinity up to the third civil degree, as well as its submission of beneficial ownership information containing false entries shall be subject to blacklisting under Section 100 of the IRR of RA No. 12009, without prejudice to criminal and civil liabilities under applicable laws, including their accessory penalties, if any.

***[Select one, delete the rest:]***

- *In case of corporations:* ***[Name of Bidder]*** declares its beneficial ownership consistent with its updated General Information Sheet or Beneficial Ownership Declaration Form or any other document duly submitted to the SEC in accordance with its annual reportorial requirements.
- *In case of Foreign Bidders:* ***[Name of Bidder]*** submitted an appropriate equivalent document in English issued by the country of the bidder concerned in accordance with Section 20.2.9.2 of the IRR of RA No. 12009.

- 8) ***[Name of Bidder]*** complies with existing labor laws and standards; and

- 9) ***[Name of Bidder]*** is aware of and has undertaken the following responsibilities as a Bidder:

- a) Carefully examine all of the Bidding Documents;
- b) Acknowledge all conditions, local or otherwise, affecting the implementation of the Contract;
- c) Made an estimate of the facilities available and needed for the contract to be bid, if any; and
- d) Inquire or secure Supplemental Bid Bulletin(s) issued for the ***[Project Title]***.

10) **[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.

11) In case advance payment was made or given to **[Name of Bidder]**, failure to perform or deliver any of the obligations and undertakings in the contract shall be sufficient grounds to constitute criminal liability under existing laws.

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

Duly authorized to sign the Bid for and behalf of:

**[Insert Bidder's Name]**

**[Affiant's Signature over Printed Name]**

**[Position/Designation]**

**[Date]**

#### **JURAT**

**SUBSCRIBED AND SWORN** to before me this \_\_\_\_ day of **[month]** **[year]** at **[place of execution]**, Philippines. Affiant/s is/are personally known to me and was/were identified by me through competent evidence of identity as defined in the 2004 Rules on Notarial Practice (A.M. No. 02-8-13-SC). Affiant/s exhibited to me his/her **[insert type of government identification card used]**, with his/her photograph and signature appearing thereon, with no. \_\_\_\_\_.

**WITNESS MY HAND AND SEAL** this \_\_\_\_ day of **[month]** **[year]**.

#### **NAME OF NOTARY PUBLIC**

Notarial Commission No. \_\_\_\_\_

Notary Public for \_\_\_\_\_ until \_\_\_\_\_

Roll of Attorneys No. \_\_\_\_\_

PTR No. \_\_\_\_, **[date issued]**, **[place issued]** IBP

No. \_\_\_\_, **[date issued]**, **[place issued]**

Doc. No. \_\_\_\_\_  
Page No. \_\_\_\_\_ Book  
No. \_\_\_\_\_  
Series of \_\_\_\_\_.

## Bid Securing Declaration Form

*[The duly accomplished form shall be submitted with the Bid if bidder opts to provide this type of bid security]*

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REPUBLIC OF THE PHILIPPINES )  
CITY/MUNICIPALITY OF \_\_\_\_\_ ) S.S.

### BID SECURING DECLARATION

Project Identification No.: *[Number]*

To: *[Insert name 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;

***[Insert paragraph for Unsolicited Offer with Bid Matching]***

I/We understand that upon conferment of the original offeror status under Section 30.6 of the Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 12009, the offeror shall submit a Bid Securing Declaration within ten (10) days from the receipt of the certificate of conferment;

- 2) **Select one, delete the other:**

- I/We accept that: (a) I/we will be automatically disqualified from bidding for any procurement contract with any Procuring Entity upon receipt of your Blacklisting Order; and, (b) I/we will pay the applicable fine provided under 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 52.2 (a), 63.2, 69.1 and 100, except 100.3 (c), of the IRR of Republic Act No. 12009; without prejudice to other legal action the government may undertake; and

*(For Unsolicited Offer with Bid Matching)*

- I/We accept that: I/we will be automatically disqualified from any procurement opportunity of the Procuring Entity for a period of one (1) year on the first offense, two (2) years on the second offense, and perpetually on the third offense without prejudice to other legal action the government may undertake.
- 3) 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;

***[Insert this paragraph for Unsolicited Offer with Bid Matching]***

- c) Upon contract award and the LCCRB is not the original offeror; or
- d) I am/we are declared the bidder with the ***[Insert Award Criterion<sup>1</sup>]*** 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]*.

Duly authorized to sign the Bid for and behalf of:

***[Insert Bidder's Name]***

***[Signature over Printed Name]***

***[Position/Designation]***

***[Date]***

### **JURAT**

**SUBSCRIBED AND SWORN** to before me this \_\_\_\_ day of *[month]* *[year]* at *[place of execution]*, Philippines. Affiant/s is/are personally known to me and was/were identified by me through competent evidence of identity as defined in the 2004 Rules on Notarial Practice (A.M. No. 02-8-13-SC). Affiant/s exhibited to me his/her *[insert type of government identification card used]*, with his/her photograph and signature appearing thereon, with no. \_\_\_\_\_.

**WITNESS MY HAND AND SEAL** this \_\_\_\_ day of *[month]* *[year]*.

### **NAME OF NOTARY PUBLIC**

Notarial Commission No. \_\_\_\_\_

Notary Public for \_\_\_\_\_ until \_\_\_\_\_

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Republic of the Philippines



Government Procurement Policy Board