

PHILIPPINE BIDDING DOCUMENTS

Development and Installation of Lights and Sensurround Exhibition at the Philippine Science Heritage Center



**Government of the Republic of the Philippines
NATIONAL ACADEMY OF SCIENCE AND TECHNOLOGY**

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Glossary of Acronyms, Terms, and Abbreviations

ABC – Approved Budget for the Contract.

BAC – Bids and Awards Committee.

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

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

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

BIR – Bureau of Internal Revenue.

BSP – Bangko Sentral ng Pilipinas.

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

CDA - Cooperative Development Authority.

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

CIF – Cost Insurance and Freight.

CIP – Carriage and Insurance Paid.

CPI – Consumer Price Index.

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

DTI – Department of Trade and Industry.

EXW – Ex works.

FCA – “Free Carrier” shipping point.

FOB – “Free on Board” shipping point.

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

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

GFI – Government Financial Institution.

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

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

GOP – Government of the Philippines.

GPPB – Government Procurement Policy Board.

INCOTERMS – International Commercial Terms.

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

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

LGUs – Local Government Units.

NFCC – Net Financial Contracting Capacity.

NGA – National Government Agency.

PhilGEPS - Philippine Government Electronic Procurement System.

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

PSA – Philippine Statistics Authority.

SEC – Securities and Exchange Commission.

SLCC – Single Largest Completed Contract.

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

UN – United Nations.

Section I. Invitation to Bid



INVITATION TO BID FOR **Development and Installation of Light and Sensurround Exhibition at the Philippine Science Heritage Center**

1. The *National Academy of Science and Technology*, through the *General Appropriation Act 2023* intends to apply the sum of ***Twenty-Three Million One Hundred Eighty-Five Thousand Five Hundred Eighty-Three and 93/100 only (P23,185,583.93)*** being the ABC to payments under the contract for ***Contract No. 2023-39***. Bids received in excess of the ABC shall be automatically rejected at bid opening.
2. The *National Academy of Science and Technology*, now invites bids for the above Procurement Project. Delivery of the Goods is required by ***one hundred twenty (120) days***. Bidders should have completed, within ***one (1) year*** from the date of submission and receipt of bids, a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II (Instructions to Bidders).
3. Bidding will be conducted through open competitive bidding procedures using a non-discretionary “*pass/fail*” criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.
 - a. Bidding is restricted to Filipino citizens/sole proprietorships, partnerships, or organizations with at least sixty percent (60%) interest or outstanding capital stock belonging to citizens of the Philippines, and to citizens or organizations of a country the laws or regulations of which grant similar rights or privileges to Filipino citizens, pursuant to RA No. 5183.
4. Prospective Bidders may obtain further information from *National Academy of Science and Technology* and inspect the Bidding Documents at the address given below during ***8:00 a.m. to 5:00 p.m., Monday to Friday***
5. A complete set of Bidding Documents may be acquired by interested Bidders on ***October 27 – November 16, 2023*** from the given address and website(s) below *and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of Twenty-Five Thousand (P25,00.00)*. The Procuring Entity shall allow the bidder to present its proof of payment for the fees *in person*.

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

6. The *National Academy of Science and Technology* will hold a Pre-Bid Conference¹ on **November 6, 2023; 10:00 am at the NAST Conference Hall**. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.
7. Bids must be duly received by the BAC Secretariat through manual submission at the office address indicated below, on or before **November 16, 2023; 2:00 pm**. Late bids shall not be accepted.
8. All Bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 14.
9. Bid opening shall be on **November 16, 2:30 pm at the NAST Conference Hall**. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.
10. The *National Academy of Science and Technology* reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Sections 35.6 and 41 of the 2016 revised IRR of RA No. 9184, without thereby incurring any liability to the affected bidder or bidders.
11. For further information, please refer to:

Virginia Francia O. Gavica
National Academy of Science and Technology
3rd Level, Science Heritage Bldg., DOST Compound,
Bicutan, Taguig City
Telephone Numbers: 8838-7792; 8837-2071 loc. 2170
Email address: bac@nast.dost.gov.ph
Tel No. (02) 88387792
NAST website: www.nast.ph

12. You may visit the following websites:

For downloading of Bidding Documents: *www.nast.ph*

October 27, 2023

GUADA B. RAMOS-DIMAYA
Chair, Bids and Awards Committee

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

Section II. Instructions to Bidders

1. Scope of Bid

The Procuring Entity, *[indicate name]* wishes to receive Bids for the *[insert Procurement Project]*{*[insert, if applicable:]* under a Framework Agreement}, with identification number *[indicate number]*.

[Note: The Project Identification Number is assigned by the Procuring Entity based on its own coding scheme and is not the same as the PhilGEPS reference number, which is generated after the posting of the bid opportunity on the PhilGEPS website.]

The Procurement Project (referred to herein as “Project”) is composed of *[indicate number of lots or items]*, the details of which are described in Section VII (Technical Specifications).

2. Funding Information

2.1. The GOP through the source of funding as indicated below for *[indicate funding year]* in the amount of *[indicate amount]*.

2.2. The source of funding is:

[If an early procurement activity, select one and delete others:]

- a. NGA, the National Expenditure Program.
- b. GOCC and GFIs, the proposed Corporate Operating Budget.
- c. LGUs, the proposed Local Expenditure Program.

[If not an early procurement activity, select one and delete others:]

- a. NGA, the General Appropriations Act or Special Appropriations.
- b. GOCC and GFIs, the Corporate Operating Budget.
- c. LGUs, the Annual or Supplemental Budget, as approved by the Sanggunian.

3. Bidding Requirements

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

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

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

4. Corrupt, Fraudulent, Collusive, and Coercive Practices

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

5. Eligible Bidders

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

5.2. *[Select one, delete other/s]*

a. Foreign ownership exceeding those allowed under the rules may participate pursuant to:

i. When a Treaty or International or Executive Agreement as provided in Section 4 of the RA No. 9184 and its 2016 revised IRR allow foreign bidders to participate;

ii. Citizens, corporations, or associations of a country, included in the list issued by the GPPB, the laws or regulations of which grant reciprocal rights or privileges to citizens, corporations, or associations of the Philippines;

iii. When the Goods sought to be procured are not available from local suppliers; or

iv. When there is a need to prevent situations that defeat competition or restrain trade.

b. Foreign ownership limited to those allowed under the rules may participate in this Project.

5.3. Pursuant to Section 23.4.1.3 of the 2016 revised IRR of RA No.9184, the Bidder shall have an SLCC that is at least one (1) contract similar to the Project the value of which, adjusted to current prices using the PSA’s CPI, must be at least equivalent to:

[Select one, delete the other/s]

- a. For the procurement of Non-expendable Supplies and Services: The Bidder must have completed a single contract that is similar to this Project, equivalent to at least fifty percent (50%) of the ABC.
- b. For the procurement of Expendable Supplies: The Bidder must have completed a single contract that is similar to this Project, equivalent to at least twenty-five percent (25%) of the ABC.
- c. For procurement where the Procuring Entity has determined, after the conduct of market research, that imposition of either (a) or (b) will likely result to failure of bidding or monopoly that will defeat the purpose of public bidding: the Bidder should comply with the following requirements: *[Select either failure or monopoly of bidding based on market research conducted]*
 - i. Completed at least two (2) similar contracts, the aggregate amount of which should be equivalent to at least *fifty percent (50%) in the case of non-expendable supplies and services or twenty-five percent (25%) in the case of expendable supplies* of the ABC for this Project; and
 - ii. The largest of these similar contracts must be equivalent to at least half of the percentage of the ABC as required above.

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

6. Origin of Goods

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

7. Subcontracts

7.1. The Bidder may subcontract portions of the Project to the extent allowed by the Procuring Entity as stated herein, but in no case more than twenty percent (20%) of the Project.

The Procuring Entity has prescribed that:

[Select one, delete other/s]

- a. Subcontracting is allowed. The portions of Project and the maximum percentage allowed to be subcontracted are indicated in the **BDS**, which shall not exceed twenty percent (20%) of the contracted Goods.
- b. Subcontracting is not allowed.

- 7.2. *[If Procuring Entity has determined that subcontracting is allowed during the bidding, state:]* The Bidder must submit together with its Bid the documentary requirements of the subcontractor(s) complying with the eligibility criteria stated in **ITB** Clause 5 in accordance with Section 23.4 of the 2016 revised IRR of RA No. 9184 pursuant to Section 23.1 thereof.
- 7.3. *[If subcontracting is allowed during the contract implementation stage, state:]* The Supplier may identify its subcontractor during the contract implementation stage. Subcontractors identified during the bidding may be changed during the implementation of this Contract. Subcontractors must submit the documentary requirements under Section 23.1 of the 2016 revised IRR of RA No. 9184 and comply with the eligibility criteria specified in **ITB** Clause 5 to the implementing or end-user unit.
- 7.4. Subcontracting of any portion of the Project does not relieve the Supplier of any liability or obligation under the Contract. The Supplier will be responsible for the acts, defaults, and negligence of any subcontractor, its agents, servants, or workmen as fully as if these were the Supplier's own acts, defaults, or negligence, or those of its agents, servants, or workmen.

8. Pre-Bid Conference

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

9. Clarification and Amendment of Bidding Documents

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

10. Documents comprising the Bid: Eligibility and Technical Components

- 10.1. The first envelope shall contain the eligibility and technical documents of the Bid as specified in **Section VIII (Checklist of Technical and Financial Documents)**.
- 10.2. The Bidder's SLCC as indicated in **ITB** Clause 5.3 should have been completed within *[state relevant period as provided in paragraph 2 of the IB]* prior to the deadline for the submission and receipt of bids.
- 10.3. If the eligibility requirements or statements, the bids, and all other documents for submission to the BAC are in foreign language other than English, it must be accompanied by a translation in English, which shall be authenticated by the appropriate Philippine foreign service establishment, post, or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines. Similar to the required authentication above, for Contracting Parties to the

Apostille Convention, only the translated documents shall be authenticated through an apostille pursuant to GPPB Resolution No. 13-2019 dated 23 May 2019. The English translation shall govern, for purposes of interpretation of the bid.

11. Documents comprising the Bid: Financial Component

- 11.1. The second bid envelope shall contain the financial documents for the Bid as specified in **Section VIII (Checklist of Technical and Financial Documents)**.
- 11.2. If the Bidder claims preference as a Domestic Bidder or Domestic Entity, a certification issued by DTI shall be provided by the Bidder in accordance with Section 43.1.3 of the 2016 revised IRR of RA No. 9184.
- 11.3. Any bid exceeding the ABC indicated in paragraph 1 of the **IB** shall not be accepted.
- 11.4. For Foreign-funded Procurement, a ceiling may be applied to bid prices provided the conditions are met under Section 31.2 of the 2016 revised IRR of RA No. 9184.
- 11.5. *[Include if Framework Agreement will be used:]* Financial proposals for single or multi-year Framework Agreement shall be submitted before the deadline of submission of bids as prescribed in the **IB**. For multi-year Framework Agreement, evaluation of the financial proposal during this stage is for purposes of determining eligibility and whether or not such financial proposal is within the ABC.

12. Bid Prices

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

the Bidder shall be free to use transportation through carriers registered in any eligible country. Similarly, the Bidder may obtain insurance services from any eligible source country.

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

12.2. *[Include if Framework Agreement will be used:]* For Framework Agreement, the following should also apply in addition to Clause 12.1:

- a. For a single year Framework Agreement, the prices quoted by the Bidder shall be fixed during the Bidder's performance of the contract and not subject to variation or escalation on any account. Price schedules required under Clause 12.1 shall be submitted with the bidding documents.
- b. For a multi-year Framework Agreement, the prices quoted by the Bidder during submission of eligibility documents shall be the ceiling and the price quoted during mini-competition must not exceed the initial price offer. The price quoted during call for mini-competition shall be fixed during the Bidder's performance of that Call-off and not subject to variation or escalation on any account. Price schedules required under Clause 12.1 shall be submitted with the bidding documents.

13. Bid and Payment Currencies

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

13.2. Payment of the contract price shall be made in:

[Select one, delete the other/s]

- a. Philippine Pesos.
- b. *[indicate currency if procurement involves a foreign-denominated bid as allowed by the Procuring Entity, which shall be tradeable or acceptable by the BSP].*

14. Bid Security

14.1. The Bidder shall submit a Bid Securing Declaration² or any form of Bid Security in the amount indicated in the **BDS**, which shall be not less than the percentage of the ABC in accordance with the schedule in the **BDS**.

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

- 14.2. The Bid and bid security shall be valid until *[indicate date]*. Any Bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.
- 14.3. *[Include if Framework Agreement will be used:]* In the case of Framework Agreement, other than the grounds for forfeiture under the 2016 revised IRR, the bid security may also be forfeited if the successful bidder fails to sign the Framework Agreement, or fails to furnish the performance security or performance securing declaration. Without prejudice on its forfeiture, bid securities shall be returned only after the posting of performance security or performance securing declaration, as the case may be, by the winning Bidder or compliant Bidders and the signing of the Framework Agreement.

15. Sealing and Marking of Bids

Each Bidder shall submit one copy of the first and second components of its Bid.

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

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

16. Deadline for Submission of Bids

- 16.1. The Bidders shall submit on the specified date and time and either at its physical address or through online submission as indicated in paragraph 7 of the **IB**.
- 16.2. *[Include if Framework Agreement will be used:]* For multi-year Framework Agreement, the submission of bids shall be for the initial evaluation of their technical and financial eligibility. Thereafter, those declared eligible during the said initial eligibility evaluation and entered into a Framework Agreement with the Procuring Entity shall submit anew their best financial offer at the address and on or before the date and time indicated in the Call for each mini-competition.

17. Opening and Preliminary Examination of Bids

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

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

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

18. Domestic Preference

- 18.1. The Procuring Entity will grant a margin of preference for the purpose of comparison of Bids in accordance with Section 43.1.2 of the 2016 revised IRR of RA No. 9184.
- 18.2. *[Include if Framework Agreement will be used:]* For multi-year Framework Agreement, determination of margin of preference shall be conducted every call for Mini-Competition.

19. Detailed Evaluation and Comparison of Bids

- 19.1. The Procuring Entity's BAC shall immediately conduct a detailed evaluation of all Bids rated "passed," using non-discretionary pass/fail criteria. The BAC shall consider the conditions in the evaluation of Bids under Section 32.2 of the 2016 revised IRR of RA No. 9184.

[Include the following options if Framework Agreement will be used:]

- a. In the case of single-year Framework Agreement, the Lowest Calculated Bid shall be determined outright after the detailed evaluation;
- b. For multi-year Framework Agreement, the determination of the eligibility and the compliance of bidders with the technical and financial aspects of the projects shall be initially made by the BAC, in accordance with Item 7.4.2 of the Guidelines on the Use of Framework Agreement.
- 19.2. If the Project allows partial bids, bidders may submit a proposal on any of the lots or items, and evaluation will be undertaken on a per lot or item basis, as the case maybe. In this case, the Bid Security as required by **ITB** Clause 14 shall be submitted for each lot or item separately.
- 19.3. The descriptions of the lots or items shall be indicated in **Section VII (Technical Specifications)**, although the ABCs of these lots or items are indicated in the **BDS** for purposes of the NFCC computation pursuant to Section 23.4.2.6 of the 2016 revised IRR of RA No. 9184. The NFCC must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder.
- 19.4. The Project shall be awarded as follows:

[Select one, delete the other/s]

Option 1 – One Project having several items that shall be awarded as one contract.

Option 2 – One Project having several items grouped into several lots, which shall be awarded as separate contracts per lot.

Option 3 - One Project having several items, which shall be awarded as separate contracts per item.

[Delete Options 2 and 3 if Framework Agreement will be used.]

- 19.5. Except for bidders submitting a committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation, all Bids must include the NFCC computation pursuant to Section 23.4.1.4 of the 2016 revised IRR of RA No. 9184, which must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder. For bidders submitting the committed Line of Credit, it must be at least equal to ten percent (10%) of the ABCs for all the lots or items participated in by the prospective Bidder.

20. Post-Qualification

- 20.1. *[Include if Framework Agreement will be used:]* For multi-year Framework Agreement, all bidders initially determined to be eligible and financially compliant shall be subject to initial post-qualification. The BAC shall then recommend the execution of a Framework Agreement among all eligible, technically and financially compliant bidders and the Procuring Entity and shall be issued by HoPE a Notice to Execute Framework Agreement. The determination of the Lowest Calculated Bid (LCB) shall not be performed by the BAC until a Mini-Competition is conducted among the bidders who executed a Framework Agreement. When a Call for Mini-Competition is made, the BAC shall allow the bidders to submit their best financial proposals on such pre-scheduled date, time and place to determine the bidder with the LCB.
- 20.2. Within a non-extendible period of five (5) calendar days from receipt by the Bidder of the notice from the BAC that it submitted the Lowest Calculated Bid, *{[Include if Framework Agreement will be used:]* or in the case of multi-year Framework Agreement, that it is one of the eligible bidders who have submitted bids that are found to be technically and financially compliant, *}* the Bidder shall submit its latest income and business tax returns filed and paid through the BIR Electronic Filing and Payment System (eFPS) and other appropriate licenses and permits required by law and stated in the **BDS**. *{[Include if Framework Agreement will be used:]* For every mini-competition in Framework Agreement, the LCB shall likewise submit the required documents for final Post Qualification. *}*

21. Signing of the Contract

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

[Include the following clauses if Framework Agreement will be used:]

- 21.2. At the same time as the Procuring Entity notifies the successful Bidder that its bid has been accepted, the Procuring Entity shall send the Framework Agreement Form to the Bidder, which contract has been provided in the Bidding Documents, incorporating therein all agreements between the parties.

- 21.3. Within ten (10) calendar days from receipt of the Notice to Execute Framework Agreement with the Procuring Entity, the successful Bidder or its duly authorized representative shall formally enter into a Framework Agreement with the procuring entity for an amount of One Peso to be paid to the procuring entity as a consideration for the option granted by the procuring entity to procure the items in the Framework Agreement List when the need arises.
- 21.4. The Procuring Entity shall enter into a Framework Agreement with the successful Bidder within the same ten (10) calendar day period provided that all the documentary requirements are complied with.
- 21.5. The following documents shall form part of the Framework Agreement:
 - a. Framework Agreement Form;
 - b. Bidding Documents;
 - c. Call-offs;
 - d. 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;
 - e. Performance Security or Performance Securing Declaration, as the case may be;
 - f. Notice to Execute Framework Agreement; and
 - g. Other contract documents that may be required by existing laws and/or specified in the **BDS**.

Section III. Bid Data Sheet

Bid Data Sheet

ITB Clause	
5.3	<p>For this purpose, contracts similar to the Project shall be:</p> <ul style="list-style-type: none"> a. <i>Development and Installation of Lights and Sensurround Exhibition at the Philippine Science Heritage Center .</i> b. completed within one (1) year prior to the deadline for the submission and receipt of bids.
7.1	<i>Subcontracting is not allowed</i>
12	The price of the Goods shall be quoted DDP <i>in the Philippine</i> or the applicable International Commercial Terms (INCOTERMS) for this Project.
14.1	<p>The bid security shall be in the form of a Bid Securing Declaration, or any of the following forms and amounts:</p> <ul style="list-style-type: none"> a. The amount of not less than P463,711.67 <i>[Indicate the amount equivalent to two percent (2%) of ABC]</i>, if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit; or b. The amount of not less than P1,159,279.20 <i>[Indicate the amount equivalent to five percent (5%) of ABC]</i> if bid security is in Surety Bond.
19.3	<i>One (1) lot – Development and Installation of lights and Sensurround exhibition at the Philippine Science Heritage Center with an ABC of P23,185,583.93</i>
20.2	<i>PhilGEPS Platinum Membership, Updated Business Permit and SEC Registration indicating the nature of business</i>
21.2	<i>N/A</i>

Section IV. General Conditions of Contract

1. Scope of Contract

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

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

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

2. Advance Payment and Terms of Payment

2.1. Advance payment of the contract amount is provided under Annex “D” of the revised 2016 IRR of RA No. 9184.

2.2. The Procuring Entity is allowed to determine the terms of payment on the partial or staggered delivery of the Goods procured, provided such partial payment shall correspond to the value of the goods delivered and accepted in accordance with prevailing accounting and auditing rules and regulations. The terms of payment are indicated in the **SCC**.

[Include the following clauses if Framework Agreement will be used:]

2.3. For a single-year Framework Agreement, prices charged by the Supplier for Goods delivered and/or services performed under a Call-Off shall not vary from the prices quoted by the Supplier in its bid.

2.4. For multi-year Framework Agreement, prices charged by the Supplier for Goods delivered and/or services performed under a Call-Off shall not vary from the prices quoted by the Supplier during conduct of Mini-Competition.

3. Performance Security

Within ten (10) calendar days from receipt of the Notice of Award by the Bidder from the Procuring Entity but in no case later than the signing of the Contract by both parties, the successful Bidder shall furnish the performance security in any of the forms prescribed in Section 39 of the 2016 revised IRR of RA No. 9184. *[Include if Framework Agreement will be used:] In the case of Framework Agreement, the Bidder may opt to furnish the performance security or a Performance Securing Declaration as defined under the Guidelines on the Use of Framework Agreement.]*

4. Inspection and Tests

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

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

5. Warranty

5.1 In order to assure that manufacturing defects shall be corrected by the Supplier, a warranty shall be required from the Supplier as provided under Section 62.1 of the 2016 revised IRR of RA No. 9184.

5.2 The Procuring Entity shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall, repair or replace the defective Goods or parts thereof without cost to the Procuring Entity, pursuant to the Generic Procurement Manual.

6. Liability of the Supplier

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

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

Section V. Special Conditions of Contract

Special Conditions of Contract

GCC Clause	
1	<p>Delivery and Documents –</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 Commerce, Paris. The Delivery terms of this Contract shall be as follows:</p> <p><i>[For Goods supplied from abroad, state:]</i> “The delivery terms applicable to the Contract are DDP delivered in the Philippines. In accordance with INCOTERMS.”</p> <p><i>[For Goods supplied from within the Philippines, state:]</i> “The delivery terms applicable to this Contract are delivered <i>in the Philippines</i>. Risk and title will pass from the Supplier to the Procuring Entity upon receipt and final acceptance of the Goods at their final destination.”</p> <p>Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in Section VI (Schedule of Requirements).</p> <p>For purposes of this Clause the Procuring Entity’s Representative at the Project Site is <i>[indicate name(s)]</i>.</p> <p>Ms. Guada B. Ramos-Dimaya Chief Science Research Specialist Technical Services Division National Academy of Science and Technology 3rd level, Science Heritage Bldg., DOST Compound, Bicutan Taguig City</p> <p>Incidental Services –</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><i>Select appropriate requirements and delete the rest.</i></p> <ol style="list-style-type: none"> a. performance or supervision of on-site assembly and/or start-up of the supplied Goods; b. furnishing of tools required for assembly and/or maintenance of the supplied Goods; c. furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied Goods;

	<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>f. <i>[Specify additional incidental service requirements, as needed.]</i></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> <p>Spare Parts –</p> <p>The Supplier is required to provide all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:</p> <p><i>Select appropriate requirements and delete the rest.</i></p> <ol style="list-style-type: none"> 1. such spare parts as the Procuring Entity may elect to purchase from the Supplier, provided that this election shall not relieve the Supplier of any warranty obligations under this Contract; and 2. in the event of termination of production of the spare parts: <ol style="list-style-type: none"> 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. <p>The spare parts and other components required are listed in Section VI (Schedule of Requirements) and the costs thereof are included in the contract price.</p> <p>The Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spare parts or components for the Goods for a period of two year <i>[indicate here the time period specified. If not used indicate a time period of three times the warranty period]</i>.</p> <p>Spare parts or components shall be supplied as promptly as possible, but in any case, within the warranty period.</p>

	<p>Packaging –</p> <p>The Supplier shall provide such packaging of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in this Contract. The packaging shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packaging case size and weights shall take into consideration, where appropriate, the remoteness of the Goods’ final destination and the absence of heavy handling facilities at all points in transit.</p> <p>The packaging, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified below, and in any subsequent instructions ordered by the Procuring Entity.</p> <p>The outer packaging must be clearly marked on at least four (4) sides as follows:</p> <p>Name of the Procuring Entity Name of the Supplier Contract Description Final Destination Gross weight Any special lifting instructions Any special handling instructions Any relevant HAZCHEM classifications</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. If not practical the packaging list is to be placed inside the outer packaging but outside the secondary packaging.</p> <p>Transportation –</p> <p>Where the Supplier is required under Contract to deliver the Goods CIF, CIP, or DDP, transport of the Goods to the port of destination or such other named place of destination in the Philippines, as shall be specified in this Contract, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price.</p> <p>Where the Supplier is required under this Contract to transport the Goods to a specified place of destination within the Philippines, defined as the Project Site, transport to such place of destination in the Philippines, including insurance and storage, as shall be specified in this Contract, shall be arranged by the Supplier, and related costs shall be included in the contract price.</p>

	<p>Where the Supplier is required under Contract to deliver the Goods CIF, CIP or DDP, Goods are to be transported on carriers of Philippine registry. In the event that no carrier of Philippine registry is available, Goods may be shipped by a carrier which is not of Philippine registry provided that the Supplier obtains and presents to the Procuring Entity certification to this effect from the nearest Philippine consulate to the port of dispatch. In the event that carriers of Philippine registry are available but their schedule delays the Supplier in its performance of this Contract the period from when the Goods were first ready for shipment and the actual date of shipment the period of delay will be considered force majeure.</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 title will not be deemed to have passed to the Procuring Entity until their receipt and final acceptance at the final destination.</p> <p>Intellectual Property Rights –</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>
	<p>Regular and Recurring Services –</p> <p>[In case of contracts for regular and recurring services, state:] “The contract for regular and recurring services shall be subject to a renewal whereby the performance evaluation of the service provider shall be conducted in accordance with Section VII. Technical specifications.”</p>
2.2	<p><i>Partial payment is allowed.</i> The terms of payment are indicated in the TOR.</p>
4	<p>The inspections and tests that will be conducted in NAST.</p>

[

Section VII. Technical Specifications

**DEVELOPMENT AND INSTALLATION OF LIGHT AND SENSURROUND
EXHIBITION AT THE PHILIPPINE SCIENCE HERITAGE CENTER
TERMS OF REFERENCE**

1. BACKGROUND:

A new immersive exhibition area will be developed and installed on a selected area at the first floor of the Philippine Science Heritage Center (PSHC). Using state-of-the-art projection technology, the project will develop a “light and sensurround immersive exhibition.” The exhibition will focus on science in our everyday lives and how STI can achieve the aspiration “A Prosperous, Archipelagic Maritime Nation.” The exhibit will also feature contributions of Filipino scientists in the science community.

2. APPROVED BUDGET FOR THE CONTRACT: Twenty-three million one hundred eighty- five thousand five hundred eighty-three and 93/100 pesos (Php 23,185,583.93) inclusive of Value Added Tax and other government taxes.

3. PLACE AND DELIVERY PERIOD - The winning contractor shall complete the project at the Philippine Science Heritage Bldg., DOST Compound, Bicutan, Taguig City, within 120 days from the date of the approval of the contract.

4. TECHNICAL SUPPORT: 7:00 AM -5:00 PM, Mondays - Saturdays, either onsite, email, or phone

5. DESCRIPTION OF SERVICES:

- a. Develop three (3) (at 6-8 minutes per content) digital contents for light and Sensurround immersive exhibition (**Science in Everyday Life, Agricultural Science, Biological Science**) using projection mapping technology and as per scope of work
- b. Procure goods, equipment, and related services to develop the exhibits
- c. Produce display materials as required
- d. Develop an interactive digital game for PAGTANAW 2050
- e. Enhance the six (6) existing mobile games/apps of NAST PSHC
- f. Integrate interactive games within the exhibit area
- g. Manage the exhibits and logistics arrangements during the installation
- h. Provide training and documentation on operation and basic troubleshooting
- i. Consult and coordinate with NAST-PSHC to ascertain requirements of the project
- j. Turnover of all raw materials and source codes used in the production and enhancement of contents

6. SCOPE OF WORK

The selected contractor will be responsible for the following:

- A. Development and Installation of the Light and Sensurround Exhibition Using projection mapping technology
 1. Concept Development:
 - Propose a detailed concept for each of the three (3) contents for the Light and Sensurround Exhibition, aligning with the NAST-PSHC's objectives
 - Design and present the storyboards for the three (3) contents for the Light and Sensurround Exhibition
 2. Technical Specification:
 - Provide detailed technical specifications for the Light and Sensurround Exhibition hardware and software requirements
 - Ensure compatibility with various surfaces and environments
 3. Development and Testing:
 - Develop a working prototype of the exhibition
 - Conduct thorough testing to ensure reliability, quality, and optimal performance
 4. Ownership Transfer:
 - Transfer full ownership rights of the Light and Sensurround Exhibition, including source codes, documentation, footage, raw files/materials (pictures and videos), and any related intellectual property to NAST PSHC.
- B. Development and installation of an interactive simulation digital game within the exhibit area related to PAGTANAW 2050
 1. Concept Development:
 - Develop engaging and educational concepts for an interactive simulation digital game that aligns with the principles of PAGTANAW 2050
 - Create a detailed storyboard for the proposed interactive game
 2. Game Design and Development:
 - Design and develop the PAGTANAW 2050 digital interactive simulation game using state-of-the-art technology and user-friendly interfaces.
 - Ensure that the game is suitable for various platforms (e.g., mobile devices and interactive displays, among others)
 3. Testing and Quality Assurance:
 - Conduct thorough testings to ensure that the game meets quality standards and is free of bugs.
 - Address promptly any issues identified during testing
 4. Ownership Transfer:
 - Transfer full ownership rights of the PAGTANAW 2050 interactive simulation digital game, including source codes, documentation, footage, raw files/materials (pictures and videos), and any related intellectual property to NAST PSHC.

- C. Enhancement of PSHC’s existing six (6) mobile games/apps using the latest technology in developing Mobile Applications
1. Game Evaluation:
 - Review and evaluate the existing six (6) mobile apps
 - Create a detailed plan to update and enhance the mobile apps
 2. Game Updating and Enhancement:
 - Update and enhance the mobile apps using state-of-the-art technology and user-friendly interfaces
 - Ensure that the games are suitable for various platforms (e.g., mobile devices and interactive displays, among others)
 3. Testing and Quality Assurance:
 - Conduct thorough testing to ensure that the game meets quality standards and is free of bugs.
 - Address promptly any issues identified during testing
 4. Ownership Transfer:
 - Transfer full ownership rights of all mobile games, including source codes, documentation, footage, raw files/materials (pictures and videos), and any related intellectual property to NAST PSHC.

7. DELIVERABLES

- Submit a soft and hard copy of the operational, basic maintenance, and troubleshooting user’s manual
- Provide a list of Engineers or Technical personnel who shall perform corrective, preventive maintenance, and calibration of the hardware and software product.
- Provide Certification of Importation of the equipment.
- Original brochure or manual that contains all technical specifications required by the bidding documents in English language.
- List of Location/s, contact number/s of the Service Center of the supplier (the bidder) in Metro Manila, Philippines.
- Certification that the bidder will provide training for at least five (5) end users and two(2) maintenance staff.
- Certification that the bidder shall be responsible for notification, transportation, delivery, installation, commissioning, and testing at no cost to the government.
- Proposed schedule and costing of quarterly corrective, preventive maintenance, and calibration program for hardware, software materials and consumables/accessories for one year.
- Signed and sealed as-built plans for layout and details of mounted projectors, cabling, and electrical (3 hard copies of Blueprint and A3 size, soft copy CAD/ PDF File).
- Provide the source codes, documentation, and raw files/materials, among others, for the content developed of projection mapping, developed simulation games, and enhanced mobile games.

8. TECHNICAL SPECIFICATIONS: See attached Annex

9. QUALIFICATIONS OF PERSONNEL

Contractor/ Supplier must be at least fifteen (15) years in the industry to ensure company competence and stability for support.

EXPERT	MINIMUM REQUIREMENTS
SOFTWARE DEVELOPMENT - one (1) Full Stack Development Team with the following experts	
<ul style="list-style-type: none"> 3D game developer 	at least three (3) years professional experience in game development, proficient in using and developing with popular game engines, proficient in developing VR/AR experiences.
<ul style="list-style-type: none"> Mobile developer 	at least three (3) years professional experience in mobile app development, proficient in developing mobile apps for one or more major platforms, experience in integrating mobile apps with server-side technologies, APIs, and databases.
<ul style="list-style-type: none"> Graphics designer 	at least three (3) years professional experience in graphic design, mastery of graphic design tools.
<ul style="list-style-type: none"> Content developer 	With at least five (5) years related professional experience in developing and creating digital education resources, such as for AV/AR experiences, projection mapping, among others
one (1) Licensed Electronics Engineer	with at least three (3) years of professional experience dealing with exhibitions, events, and trade fairs.
one (1) Licensed Electrical Engineer	with at least three (3) years of professional experience dealing with exhibitions, events, and trade fairs.
one (1) Safety Officer	with COSH Certification, at least three (3) years professional experience in Occupational Safety and Health.

10. SCHEDULE OF PAYMENT BASED ON MILESTONES

Upon signing of Notice to Proceed	15%
Upon complete delivery and installation of equipment	30%
Upon delivery and installation of the three (3) contents for projection mapping	25%
Upon delivery and installation of the simulation game	15%
Upon delivery and installation of the enhanced mobile games	15%
TOTAL	100%

11. WARRANTIES:

One (1) year warranty on all ICT devices and equipment.

One (1) warranty and support for the content and software including software updates, if needed.

Availability of technical support on 8x6 (Monday – Saturday) via email, phone, or SMS during the warranty period. For severe or critical issues, a Service Level Agreement (SLA) of 4 hours response time in a 1-year term should be available.

12. TRAINING OF PERSONNEL: At least seven (7) Agency Personnel should be provided with two (2) days of training to operate all proposed software. They should also be able to perform first (1st) level troubleshooting and problem identification with documented guidebooks and references. Training sessions should be conducted in the best interest of the safety and health of the participants.

13. OWNERSHIP

Copyright Ownership:

- a. All creative works, designs, concepts, and materials created by the contractor are considered “Work” and shall be the exclusive property of NAST PHL
- b. The contractor acknowledges that they do not have any claim or rights to the copyright of the Work, and NAST PHL retains all intellectual property rights
- c. Any third party materials used in this project will be used with proper licensing or permissions, and copyright ownership shall be respected.

B. Non-Disclosure Agreement

- a. NAST PHL and the contractor recognize the sensitivity of the Project and agree to keep all information and details confidential
- b. Confidential information includes, but is not limited to, project plans, trade secrets, proprietary technology, and any data pertaining to the Project

- c. The confidentiality obligations under the agreement extend to all employees, contractors, or agents of NAST PHL and the contractor

c. Exclusivity of Design and Concept

- a. The design and concept developed by the contractor for the Project shall be exclusive to NAST PHL for the duration of the Project and any agreed-upon additional period.
- b. During the exclusivity period, the contractor shall not provide similar designs or concepts to any other party without the prior written consent of NAST PHL.

BILL OF QUANTITIES

Project Title: Development and Installation of Light and Sensurround Exhibition at the PSHC
 Project Location: Science Heritage Building, DOST Compound, Gen. Santos Ave., Bicutan, Taguig City

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL COST
I.	General Requirements				
1	Mobilization/ Demobilization	1.00	lot		
2	Scaffolding	1.00	lot		
3	Testing and Commissioning	1.00	lot		
4	Signed and Sealed As- built plans (design and layout)	1.00	lot		
5	Operation and Maintenance Manual	1.00	lot		
Sub- Total I					
II.	Display and Audio Unit				
1	Laser Projector <i>6,000 lumens colour and white brghtness 4k Enhancement Tech. w/ HDR support, laser light source up to 20,000 hours of use, compatible w/ wide range of up to 11powered lenses</i>	4.00	unit		
2	Ultra Short Throw Lens <i>works with interchangeable lens projectors up to 8,500 lumens, project 100" to 300"; F-number: 1.9; Focal Length: 5.8mm WUXGA/WXGA throw ratio --- .35 Lens Shift: Vertical +50% to +67% (H Center) Horizontal -10% to +10% (Vertical+50%) XGA throw ratio --- .36 Lens Shift: Vertical +50% to +57% (H Center) Horizontal -8% to +8% (Vertical+50%)</i>	4.00	unit		
3	Projector Ceiling Mounting <i>Max load: 25kg (55lbs), Tilt (pitch): +/-13°, Roll +/-6°, Yaw: 360 Adjustable ceiling drop: 728mm (28.7") - 1128mm (44.4") Maximum distance between fixings: 493mm (19.4")</i>	4.00	unit		
4	Power Amplifier, Class D 2 Channel <i>rated at 600W at 4-80 or 1 Channel with 1200W at 4-80 or 70/100Vat Bridge Mode.</i>	1.00	pc		
5	In-Ceiling Loudspeaker, Two-way 6.5" woofer and 1.25" <i>compression mounted tweeter rated 100W at 80 and selectable wattage of 80, 40, 20, 10, & 5W @ 70/100V.</i>	5.00	pc		
6	Video Wall 4k Controller/Server; <i>8u chassis; can support up to 6 input cards and 5 output cards; can support 4K 60Hz processing at RGB 4:4:4 to deliver 4K experience without compromising. Input Board: HDMI 1.3 (4 HDMI 1920x1080 port) x 2 Output Board: HDMI 2.0 (4k up to 8K Resokiton @60Hz) x 2</i>	1.00	unit		
7	Transmitter HDMI Extender TX	4.00	set		
8	Transmitter HDMI Extender RX	4.00	set		
9	42RU DATA RACK	1.00	unit		
10	PC Controller <i>I7-13700 processor, 32gb RAM DDR5, Hard Disk Drive 512 GB M.2 2280 PCI-E SSD 1inch 7200 RPM+ 2 TB 3.5, RTX 4070TI with 12GB of GDDR6X</i>	1.00	unit		
11	28" 4K 60Hz DP HDMI Monitor	1.00	unit		
12	HDMI 2.0 cable 4K, 20m	9.00	unit		
Sub- Total II					
III.	Signal System Layout				
1	25mm Ø EMT Pipe(3 meters)	8.00	pc		
2	25mmØ EMT Coupling	3.00	pc		
3	25mmØ EMT Connector w/ Locknut	3.00	pc		
4	#14 GI Wire	3.00	kg		
5	Conduit Mounting Accessories	1.00	lot		
6	4X4" Square Box (galvanized)	3.00	pc		
7	PL TO XLR Cable	1.00	pc		
8	Wire Speaker	5.00	roll		
9	CAT6 Ethernet Cable, U/UTP, 305m	1.00	roll		
10	DVI Adaptor	4.00	pc		
11	Shielded RJ45 Passthrough	20.00	pc		
12	Consumables (bolts, nuts, screws, lugs, tape, cable tie)	1.00	lot		
Sub- Total III					
IV.	Content Development- Projection Mapping				
1	Develop and install digital content for light and sensurround exhibition using projection mapping technology (6- 8 minutes)	3.00	lot		
Sub- Total IV					
V.	Content Development- Mobile Games				
1	Design and develop interactive simulation games including game animation, sound effects, and updates	1.00	lot		
2	Enhancement of existing mobile games/ apps using the latest technology on developing Mobile Applications	6.00	set		
3	Supply and installation 50" vertical touch screen kiosk with case <i>(4GB Memory, 500GB HDD, 1080x1920 screen resolution, IR multipoint touch screen, With built-in WIFI, LAN, HDMI out, Audio input and output, USB 2.0 port, Speaker, Windows 10 OS)</i>	6.00	unit		
Sub- Total V					

TECHNICAL SPECIFICATIONS

**DEVELOPMENT AND INSTALLATION OF LIGHT AND
SENSURROUND EXHIBITION AT THE PHILIPPINE SCIENCE
HERITAGE CENTER**

MATERIAL/ EQUIPMENT	SPECIFICATION
DISPLAY UNIT	<p>Projection Technology: RGB liquid crystal shutter projection system (3LCD)</p> <p>Specifications of Main Parts LCD Size: 0.76" (C2 Fine) Resolution: WUXGA (Support 4K Enhancement) Aspect Ratio: 16:10 Projection Lens Type: Power Zoom, Power Focus F-Number: 1.7 – 2.3 Focal Length: 24 – 38.2 mm Zoom Ratio: 1.0 - 1.60 Throw Ratio: 1.44 – 2.32 (Wide – Tele) Lens Shift Vertical: ±67% (Powered) Horizontal: ±30% (Powered) Lightsource Type: Laser Diode Life: 20,000 hours (Normal) / 30,000 hours (Extended) Screen Size (Projected Distance) Zoom: Wide 50" – 1,000" [1.53 – 31.57 m] Zoom: Tele 50" – 1,000" [2.48 - 50.44 m] Brightness White Light Output: 8,500 lm Colour Light Output (Normal): 8,500 lm Light Output (Center): 9,200 lm Contrast Ratio: Over 2,500,000:1 Keystone Correction Projection Orientation: 360° Free Vertical / Horizontal: ±45° / ±30° Connectivity Analog RGB Input: D-Sub 15Pin x1 HDMI: x1 (HDCP 2.3) DVI-D: x1 (HDCP 1.4) HDBaseT: x1 (HDCP 2.3) USB Input: USB Type A 2 (Port1 for 5V/2A Power Supply, Grackle, SMF1, Firmware Update, Copy OSD Settings, Content Playback ; Port2 for 5V/900mA Power Supply, Wireless LAN, Firmware Update, Copy OSD Settings, Content Playback) USB Type B: x1 (For Firmware Update, Copy OSD Settings) Control I/O: RS-232C D-Sub 9pin x 1 Audio Output Stereo: Mini x1</p>

	<p>Network Wired LAN: RJ45 x 1 (100Mbps)</p> <p>Operating Temperature</p> <p>Single Use:</p> <p>Low Altitude (0 - 2,286m/7,500ft): 0 - 45 °C <32 - 113 °F></p> <p>High Altitude (Over 2,286m/7,500ft): 0 - 40 °C <32 - 104 °F></p> <p>20% - 80% Humidity, No Condensation</p> <p>Operating Altitude: Over 1,500m/4,921ft with High Altitude Mode: 0 - 3,048m (0 -10,000ft)</p> <p>Start-Up Period: Less than 7 seconds (Epson Logo);</p> <p>Warm-up Period: 30 sec</p> <p>Quick Start-Up: Less than 7 seconds (Display)</p> <p>Cool Down: Period Instant Off</p> <p>Air Filter Type: Electrostatic Filter</p> <p>Maintenance Cycle: 20,000 hours (Normal) / 30,000 hours (Extended)</p> <p>Power Supply Voltage: 100 - 240 V AC ±10%, 50/60 Hz</p> <p>Power Consumption: (220 - 240V)</p> <p>Laser Diode On Normal: 535 W</p> <p>Extended: 452 W</p> <p>Standby (Normal / Eco): 2.0 W / 0.5 W</p>
CONTROLLER	<p>Video Wall 4k Controller/Server; 8u chassis; can support up to 6 input cards and 5 output cards; can support 4K 60Hz processing at RGB 4:4:4 to deliver 4K experience without compromising.</p> <p>Input Board: HDMI 1.3 (4 HDMI 1920x1080 port) x 2</p> <p>Output Board: HDMI 2.0 (4k up to 8K Resolution @60Hz) x 2</p> <p>IP Board:</p> <ul style="list-style-type: none"> 1* Monitoring interface. 3* AUX 1* RJ45
AUDIO AMPLIFIER	<p>Power Amplifier, Class D 2 Channel rated at 600W at 4-8Ω or 1 Channel with 1200W at 4-8Ω or 70/100Vat Bridge Mode. With Built in DSP configurable via Powerspace Configuration Utility and Input output expandability via Amp-Link.</p>
SPEAKER	<p>In-Ceiling Loudspeaker, Two-way 6.5" woofer and 1.25" compression mounted tweeter rated 100W at 8Ω and selectable wattage of 80, 40, 20, 10, & 5W @ 70/100V. Slim bezel, magnetic grille, QuickHold Mounting System. Black</p>
PC CONTROLLER	<p>Form Factor TOWER</p> <p>Highlight Feature/s 13th Generation Intel® Core™ i7 processor</p> <p>Processor Intel® Core™ i7-13700 processor (25MB Smart Cache, 2.1 GHz Base Frequency with Max Turbo up to 4.9 GHz, 12 Cores 20 Threads)</p>

	<p>Memory 32 GB (2x16GB) DDR5 4800 MHz UDIMM Hard Disk Drive 512 GB M.2 2280 PCI-E SSD + 2 TB 3.5-inch 7200 RPM Graphics NVIDIA® GeForce® RTX 4070Ti with 12GB of GDDR6X (supporting: 1x HDMI 2.1 / 3x DisplayPort 1.4a)" Optical Drive WITHOUT Card Reader WITHOUT Audio DTS:X® Ultra Networking WLAN 802.11ax/ac/a/b/g/n, Wi-Fi 6E and Bluetooth® 5.0 LAN Killer™ E2600 Gigabit Ethernet "</p> <p>Standard I/O Ports "Front/Side I/O connectors • Audio jack(s): 2 • USB 3.2 Gen2 Type A port(s): 3 • USB 3.2 Gen2x2 Type C port(s): 1 Rear I/O connectors • LAN port(s): 1 • Audio jack(s): 3 • USB 2.0 Type A port(s): 4 • USB 3.2 Gen1 Type A port(s): 2" Expansion Slot (s) "• Number of PCIe x16 slot(s): 2 • Number of PCIe x1 slot(s): 1 • M.2 slot (for SSD): 2 • M.2 slot (for WLAN): 1" Power Supply 800 W PFC, 80PLUS Gold, ATX Keyboard & Mouse Predator USB 4-zone RGB Keyboard & Mouse Speakers WITHOUT Accessory WITHOUT Monitor / Screen None Operating System Windows 11 Home 64-bit Dimensions 219 (W) x 504.8 (D) x 485 (H) mm (8.62 x 19.87 x 19.09 inches) Warranty 2 Years Warranty for Parts and Labor</p>
<p>HDMI OVER UTP EXTENDER</p>	<p>TRANSMITTER HDMI EXTENDER TX</p> <p>Video</p> <p>Maximum data rate 10.2 Gbps (3.4 Gbps per color) Maximum pixel clock 300 MHz Resolution range Up to 2560x1600* @ 60 Hz or 4K (4096x2160) @ 30 Hz, UHD (3840x2160) @ 30 Hz, 4K/UHD @ 60 Hz with 4:2:0 chroma subsampling (* reduced blanking) Color bit depth 8, 10, or 12 bits — subject to the maximum data rate limit Formats RGB and YCbCr digital video Standards DVI 1.0, HDMI 1.4, HDCP 2.3, CEA-861E</p> <p>Video input — transmitter</p> <p>Number/signal type 1 single linkVideo input — transmitter</p> <p>Number/signal type 1 single link HDMI (or DVI-D*) Connectors 1 female HDMI type A</p> <p>Interconnection between transmitter and receiver</p> <p>Connectors 1 female RJ-45 per unit Termination standard TIA/EIA T568B Signal transmission distance</p>

	<p>1080p @ 60 Hz Up to 230' (70 m) using shielded twisted pair (STP) cable or XTP DTP 24 STP cable</p> <p>2560x1600 @ 60 Hz Up to 130' (40 m) using shielded twisted pair (STP) cable or XTP DTP 24 STP cable</p> <p>4K/UHD @ 30Hz and 60 Hz Up to 130' (40 m) using shielded twisted pair (STP) cable or XTP DTP 24 STP cable</p> <p>Cable requirements Solid conductor, 24 AWG or better</p> <p>Cable recommendations 400 MHz bandwidth, STP (shielded twisted pair)</p> <p>Video output — receiver</p> <p>Number/signal type 1 single link HDMI (or DVI-D*)</p> <p>Connectors 1 female HDMI type A</p> <p>Audio</p> <p>Gain Unbalanced output: 0 dB; balanced output +6 dB</p> <p>Frequency response 20 Hz to 20 kHz, ±0.5 dB</p> <p>THD + Noise 0.03% @ 20 Hz to 20 kHz at maximum output</p> <p>S/N >90 dB, at maximum output (15 dBu), balanced (unweighted)</p> <p>Stereo channel separation >80 dB @ 1 kHz to 20 kHz</p> <p>TRANSMITTER HDMI EXTENDER RX</p> <p>Video</p> <p>Maximum data rate 10.2 Gbps (3.4 Gbps per color)</p> <p>Maximum pixel clock 300 MHz</p> <p>Resolution range Up to 2560x1600* @ 60 Hz or 4K (4096x2160) @ 30 Hz, UHD (3840x2160) @ 30 Hz, 4K/UHD @ 60 Hz with 4:2:0 chroma subsampling (* reduced blanking)</p> <p>Color bit depth 8, 10, or 12 bits — subject to the maximum data rate limit</p> <p>Formats RGB and YCbCr digital video</p> <p>Standards DVI 1.0, HDMI 1.4, HDCP 2.3, CEA-861E</p> <p>Video input — transmitter</p> <p>Number/signal type 1 single link HDMI (or DVI-D*)</p> <p>Connectors 1 female HDMI type A</p> <p>Interconnection between transmitter and receiver</p> <p>Connectors 1 female RJ-45 per unit</p> <p>Termination standard TIA/EIA T568B</p>
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	<p>Signal transmission distance</p> <p>1080p @ 60 Hz Up to 230' (70 m) using shielded twisted pair (STP) cable or XTP DTP 24 STP cable</p> <p>2560x1600 @ 60 Hz Up to 130' (40 m) using shielded twisted pair (STP) cable or XTP DTP 24 STP cable</p> <p>4K/UHD @ 30Hz and 60 Hz Up to 130' (40 m) using shielded twisted pair (STP) cable or XTP DTP 24 STP cable</p> <p>Cable requirements Solid conductor, 24 AWG or better</p> <p>Cable recommendations 400 MHz bandwidth, STP (shielded twisted pair)</p> <p>Video output — receiver</p> <p>Number/signal type 1 single link HDMI (or DVI-D*)</p> <p>Connectors 1 female HDMI type A</p> <p>Audio</p> <p>Gain Unbalanced output: 0 dB; balanced output +6 dB</p> <p>Frequency response 20 Hz to 20 kHz, ±0.5 dB</p> <p>THD + Noise 0.03% @ 20 Hz to 20 kHz at maximum output</p> <p>S/N >90 dB, at maximum output (15 dBu), balanced (unweighted)</p> <p>Stereo channel separation >80 dB @ 1 kHz to 20 kHz</p>
BRACKET	<ul style="list-style-type: none"> • Max load: 25kg (55lbs) • Tilt (pitch): +/-13° • Roll: +/-6° • Yaw: 360° • Adjustable ceiling drop: 728mm (28.7") - 1128mm (44.4") • Maximum distance between fixings: 493mm (19.4")
OTHERS	STRUCTURED CABLING, 42U DataRack

Section VIII. Checklist of Technical and Financial Documents

Checklist of Technical and Financial Documents

I. TECHNICAL COMPONENT ENVELOPE

Class "A" Documents

Legal Documents

- (a) Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages) **in accordance with Section 8.5.2 of the IRR;**

Technical Documents

- (b) Statement of the prospective bidder of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid; **and**
- (c) Statement of the bidder's Single Largest Completed Contract (SLCC) similar to the contract to be bid, except under conditions provided for in Sections 23.4.1.3 and 23.4.2.4 of the 2016 revised IRR of RA No. 9184, within the relevant period as provided in the Bidding Documents; **and**
- (d) Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission **or** Original copy of Notarized Bid Securing Declaration; **and**
- (e) Conformity with the Technical Specifications, which may include production/delivery schedule, manpower requirements, and/or after-sales/parts, if applicable; **and**
- (f) Original duly signed Omnibus Sworn Statement (OSS) **and** if applicable, Original Notarized Secretary's Certificate in case of a corporation, partnership, or cooperative; or Original Special Power of Attorney of all members of the joint venture giving full power and authority to its officer to sign the OSS and do acts to represent the Bidder.

Financial Documents

- (g) The prospective bidder's computation of Net Financial Contracting Capacity (NFCC) **or** A committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation.

Class "B" Documents

- (h) If applicable, a duly signed joint venture agreement (JVA) in case the joint venture is already in existence **or** duly notarized statements from all the potential joint venture partners stating that they will enter into and abide by the provisions of the JVA in the instance that the bid is successful.

II. FINANCIAL COMPONENT ENVELOPE

- (i) Original of duly signed and accomplished Financial Bid Form; **and**
- (j) Original of duly signed and accomplished Price Schedule(s).

Other documentary requirements under RA No. 9184 (as applicable)

- (k) [For foreign bidders claiming by reason of their country's extension of reciprocal rights to Filipinos] Certification from the relevant government office of their country stating that Filipinos are allowed to participate in

- government procurement activities for the same item or product.
- (1) Certification from the DTI if the Bidder claims preference as a Domestic Bidder or Domestic Entity.

