# PHILIPPINE BIDDING DOCUMENTS

# Procurement of INFRASTRUCTURE PROJECTS

Government of the Republic of the Philippines

Supply, Installation, Testing and Commissioning of Gas-Based Fire Detection, Suppression and Control System for the 4<sup>th</sup> Level and IT Division Data Center Server Room of the National Library of the Philippines Phase 3

PB23-06

ABC: Php 24,000,000,00

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#### **Preface**

These Philippine Bidding Documents (PBDs) for the procurement of Infrastructure Projects (hereinafter referred to also as the "Works") through Competitive Bidding have been prepared by the Government of the Philippines for use by all branches, agencies, departments, bureaus, offices, or instrumentalities of the government, including government-owned and/or -controlled corporations, government financial institutions, state universities and colleges, local government units, and autonomous regional government. The procedures and practices presented in this document have been developed through broad experience, and are for mandatory use in projects that are financed in whole or in part by the Government of the Philippines or any foreign government/foreign or international financing institution in accordance with the provisions of the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.

The PBDs are intended as a model for admeasurements (unit prices or unit rates in a bill of quantities) types of contract, which are the most common in Works contracting.

The Bidding Documents shall clearly and adequately define, among others: (i) the objectives, scope, and expected outputs and/or results of the proposed contract; (ii) the eligibility requirements of Bidders; (iii) the expected contract duration; and (iv)the obligations, duties, and/or functions of the winning Bidder.

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

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

- a. All the documents listed in the Table of Contents are normally required for the procurement of Infrastructure Projects. 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 Instructions to Bidders, Bid Data Sheet, and Special Conditions of Contract. The final documents should contain neither blank spaces nor options.
- c. This Preface and the footnotes or notes in italics included in the Invitation to Bid, BDS, General Conditions of Contract, Special Conditions of Contract, Specifications, Drawings, and Bill of Quantities are not part of the text of the final document, although they contain instructions that the Procuring Entity should strictly follow.
- d. The cover should be modified as required to identify the Bidding Documents as to the names of the Project, Contract, and Procuring Entity, in addition to date of issue.

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

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# Glossary of Terms, Abbreviations, and Acronyms

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

**ARCC** – Allowable Range of Contract Cost.

**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])

**Bidding Documents for Design and Build Scheme** – These shall basically be similar to the Bidding Documents for infrastructure projects and shall also include the performance specifications and parameters to be followed by the design and build contractors and the method for allocation of risks for the design and build contract, among others.

BIR - Bureau of Internal Revenue.

**BSP** – Bangko Sentral ng Pilipinas.

**CDA** – Cooperative Development Authority.

**Conceptual Design** – This shall describe the general idea of the procuring entity with regard to the completed facility and shall identify the scope or physical components and structures, specific outputs and requirements of the structures and proposed methods of construction, where necessary.

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])

**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.

**Contractor** – is a natural or juridical entity whose proposal was accepted by the Procuring Entity and to whom the Contract to execute the Work was awarded. Contractor as used in these Bidding Documents may likewise refer to a supplier, distributor, manufacturer, or consultant.

**CPI** – Consumer Price Index.

**Design and Build Projects** – This refers to infrastructure projects where the procuring entity awards a single contract for the architectural/engineering design and construction to a single firm, partnership, corporation, joint venture or consortium.

**DOLE** – Department of Labor and Employment.

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

**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]).

**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.

**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.

**PCAB** – Philippine Contractors Accreditation Board.

**Performance Specifications and Parameters** – The procuring entity shall define the required performance specifications and criteria and its means of measurement based on the operating outputs and in accordance with appropriate design and construction standards, legal and technical obligations and any other relevant government commitments as required by existing laws and regulations. It shall not be drawn up to favor a particular solution, design and construction method.

**PhilGEPS** - Philippine Government Electronic Procurement System.

**Preliminary Investigations** – These shall include, among others, information on soil, geotechnical, hydrologic, hydraulic, seismic, traffic, and environmental conditions that shall be used to define project design criteria, to set the basis for any changed conditions and establish preliminary project cost estimates.

**Preliminary Survey and Mapping** – These shall determine boundaries and provide stationing along control lines to establish feature and design criteria location, and identify existing and future right-of-way limits and construction easements associated with the procuring entity's conceptual design

**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)

**Project Description** – This shall define the objectives, purpose, limitations or constraints, as well as the allocation of risks between the procuring entity and the winning bidder.

**PSA** – Philippine Statistics Authority.

**PB-** PublicBidding (PB23-06 – Supply, Installation, Testing and Commissioning of Gas-Based Fire Detection, Suppression and Control System for the 4<sup>th</sup> Level and IT Division Data Center Server Room of the National Library of the Philippines Phase 3)

**SEC** – Securities and Exchange Commission.

**SLCC** – Single Largest Completed Contract.

**UN** – United Nations.

**Utility Locations** – The procuring entity shall provide information on existing utilities in and around the project's area.

### Section I. Invitation to Bid

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

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

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

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

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



# Republic of the Philippines NATIONAL LIBRARY OF THE PHILIPPINES

# Invitation to Bid for the Supply, Installation, Testing and Commissioning of Gas-Based Fire Detection, Suppression and Control System for the 4<sup>th</sup> Level and IT Division Data Center Server Room of the National Library of the Philippines Phase 3

- 1. The National Library of the Philippines (NLP), through the General Appropriations Act for CY 2023 intends to apply the sum of Twenty-Four Million Pesos (24,000,000.00) being the Approved Budget for the Contract (ABC) to payments under the contract for the Supply, Installation, Testing and Commissioning of Gas-Based Fire Detection, Suppression and Control System for the 4<sup>th</sup> Level and IT Division Data Center Server Room for the National Library of the Philippines Phase 3 (PB23-06). Bids received in excess of the ABC shall be automatically rejected at bid opening.
- 2. The *National Library of the Philippines (NLP)* now invites bids for the above Procurement Project. Completion of the Works is required *sixty (60) calendar days*. Bidders should have completed 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 non-discretionary "pass/fail" criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.
- 4. Interested bidders may obtain further information from *National Library of the Philippines (NLP)* and inspect the Bidding Documents at the address given below from *Monday to Friday (except holidays)*, from 08:00am to 04:00pm.
- 5. A complete set of Bidding Documents may be acquired by interested Bidders on April 20, 2023 from the given address and website below and upon payment of a non-refundable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB. The Procuring Entity shall allow the bidder to present its proof of payment for the fees through email.
- 6. The *National Library of the Philippines (NLP)* will hold an online Pre-Bid Conference on **April 28, 2023** at **10:00 AM** through videoconferencing which shall be open to all prospective bidders. Send interest to <u>bac@nlp.gov.ph</u> with subject: Request to join the Pre-Bid Conference of Public Bidding No. 23-06. The BAC shall also entertain inquiries through email up to **May 10, 2023** or 1 day before the bid opening.

- 7. Bids must be duly received by the BAC Secretariat through manual submission at the office address below on or before, but not later than 10:00 AM of May 11, 2023. Submit a soft copy of technical (in PDF) and financial (in Word or Excel) requirements onto USB flash drive. 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 16.
- 9. Bid opening shall be on **May 11, 2023, 10:01 AM** at the 3<sup>nd</sup> Floor Reading Room, NLP Building, T.M. Kalaw St. Ermita, Manila. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.
- 10. The NLP 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:

MARIE JOY H. BESTOIR

**ELEANOR C. SIYANG** 

#### JONATHAN F. SANTOS

BAC Secretariat National Library of the Philippines Tel. No.: (02) 5336-7200 loc. 412

Email: bac@nlp.gov.ph
Website: web.nlp.gov.ph

12. You may visit the following websites:

For downloading of Bidding Document: web.nlp.gov.ph www.philgeps.gov.ph

Sgd.MARICEL M. UREÑA

BAC, Chairperson

# Section II. Instructions to Bidders

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

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

#### 1. Scope of Bid

The Procuring Entity, National Library of the Philippines (NLP) invites Bids for the Supply, Installation, Testing and Commissioning of Gas-Based Fire Detection, Suppression and Control System for the 4<sup>th</sup> Level and IT Division Data Center Server Room of the National Library of the Philippines Phase 3, with Project Identification Number PB23-06.

The Procurement Project (referred to herein as "Project") is for the construction of Works, as described in Section VI (Specifications).

#### 2. Funding Information

- 2.1. The GOP through the source of funding as indicated below for FY 2023 in the amount of Twenty-Four *Million Pesos* (24,000,000.00).
- 2.2. The source of funding is:
  - a. NGA, the National Expenditure Program.

#### 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 Manual 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 invitation to bid 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 inspected the site, determined the general characteristics of the contracted Works and the conditions for this Project, such as the location and the nature of the work; (b) climatic conditions; (c) transportation facilities; (c) nature and condition of the terrain, geological conditions at the site communication facilities, requirements, location and availability of construction aggregates and other materials, labor, water, electric power and access roads; and (d) 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, Coercive, and Obstructive Practices

The Procuring Entity, as well as the Bidders and Contractors, 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. The Bidder must have an experience of having completed a Single Largest Completed Contract (SLCC) that is similar to this Project, equivalent to at least fifty percent (50%) of the ABC adjusted, if necessary, by the Bidder to current prices using the PSA's CPI, except under conditions provided for in Section 23.4.2.4 of the 2016 revised IRR of RA No. 9184.

A contract is considered to be "similar" to the contract to be bid if it has the major categories of work stated in the **BDS**.

- 5.3. For Foreign-funded Procurement, the Procuring Entity and the foreign government/foreign or international financing institution may agree on another track record requirement, as specified in the Bidding Document prepared for this purpose.
- 5.4. The Bidders shall comply with the eligibility criteria under Section 23.4.2 of the 2016 IRR of RA No. 9184.

#### 6. Origin of Associated 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.

#### 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 fifty percent (50%) of the Project.

The Procuring Entity has prescribed that:

a. Subcontracting is not allowed.

#### 8. Pre-Bid Conference

The Procuring Entity will hold a pre-bid conference for this Project on April 28, 2023 at 10:00 AM through videoconferencing which shall be open to prospective bidder, 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 IX. Checklist of Technical and Financial Documents**.
- 10.2. 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. 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.
- 10.3. A valid PCAB License is required, and in case of joint ventures, a valid special PCAB License, and registration for the type and cost of the contract for this Project. Any additional type of Contractor license or permit shall be indicated in the **BDS**.
- 10.4. A List of Contractor's key personnel (e.g., Project Manager, Project Engineers, Materials Engineers, and Foremen) assigned to the contract to be bid, with their complete qualification and experience data shall be provided. These key personnel must meet the required minimum years of experience set in the **BDS**.
- 10.5. A List of Contractor's major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership, certification of availability of equipment from the equipment lessor/vendor for the duration of the project, as the case may be, must meet the minimum requirements for the contract set in the **BDS**.

#### 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 IX. Checklist of Technical and Financial Documents**.
- 11.2. Any bid exceeding the ABC indicated in paragraph 1 of the **IB** shall not be accepted.
- 11.3. For Foreign-funded procurement, a ceiling may be applied to bid prices provided the conditions are met under Section 31.2 of the 2016 revised IRR of RA No. 9184.

#### 12. Alternative Bids

Bidders shall submit offers that comply with the requirements of the Bidding Documents, including the basic technical design as indicated in the drawings and specifications. Unless there is a value engineering clause in the **BDS**, alternative Bids shall not be accepted.

#### 13. Bid Prices

All bid prices for the given scope of work in the Project as awarded shall be considered as fixed prices, and therefore not subject to price escalation during contract implementation, except under extraordinary circumstances as determined by the NEDA and approved by the GPPB pursuant to the revised Guidelines for Contract Price Escalation guidelines.

#### 14. Bid and Payment Currencies

- 14.1. 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.
- 14.2. Payment of the contract price shall be made in:
  - a. Philippine Pesos.

#### 15. Bid Security

- 15.1. The Bidder shall submit a Bid Securing Declaration 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**.
- 15.2. The Bid and bid security shall be valid until *One Hundred Twenty (120) days*. Any bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

#### 16. Sealing and Marking of Bids

Each Bidder shall submit one copy of original of the first and second components of its Bid and plus two (2) copies of its kind, labeled as copy 1 and copy 2, the first and second components of its Bid. It should be properly tabbed with its corresponding letter for each document. (See the checklist for reference.)

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.

#### 17. Deadline for Submission of Bids

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

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

18.1. 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 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.

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

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

- 19.1. The Procuring Entity's BAC shall immediately conduct a detailed evaluation of all Bids rated "passed" using non-discretionary pass/fail criteria. The BAC shall consider the conditions in the evaluation of Bids under Section 32.2 of 2016 revised IRR of RA No. 9184.
- 19.2. If the Project allows partial bids, all Bids and combinations of Bids as indicated in the **BDS** 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 Security as required by **ITB** Clause 15 shall be submitted for each contract (lot) separately.
- 19.3. In all cases, the NFCC computation pursuant to Section 23.4.2.6 of the 2016 revised IRR of RA No. 9184 must be sufficient for the total of the ABCs for all the lots participated in by the prospective Bidder.

#### 20. Post Qualification

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

#### 21. Signing of the Contract

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

#### Section III. Bid Data Sheet

#### **Notes on the Bid Data Sheet (BDS)**

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

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

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

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

# **Bid Data Sheet**

ITB Clause	
5.2	For this purpose, contracts similar to the Project refer to contracts which have the same major categories of work, which shall be:
	Construction Work, Supply, Installation, Testing and Commissioning of Gas- Based Fire Detection, Suppression and Control System.
7.1	Subcontracting is NOT allowed.
10.3	"No additional Requirements"
10.4	The key personnel must meet the required minimum years of experience set below:
	Key Personnel General Experience Relevant Experience
10.5	The minimum major equipment requirements are the following:
	Equipment Capacity Number of Units
12	No further instructions.
15.1	The bid security shall be in the form of a Bid Securing Declaration or any of the following forms and amounts:  a. The amount of not less than <a href="Php480,000.00">Php480,000.00</a> [two percent (2%) of ABC], if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit;
	b. The amount of not less than <a href="https://example.com/Php1,200,000.00">Php1,200,000.00</a> [five percent (5%) of ABC] if bid security is in Surety Bond.
20	ISO 45001 Occupational and Health Safety Certifications Inter-Agency for Registration and classification, Medium-B Category AA, General Building
21	Additional contract documents relevant to the Project that may be required by existing laws and/or the Procuring Entity, such as construction schedule and Scurve, manpower schedule, construction methods, equipment utilization schedule, construction safety and health program approved by the DOLE, and other acceptable tools of project scheduling.

# Section IV. General Conditions of Contract

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

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

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

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

#### 1. Scope of Contract

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

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

#### 2. Sectional Completion of Works

If sectional completion is specified in the **Special Conditions of Contract (SCC)**, references in the Conditions of Contract to the Works, the Completion Date, and the Intended Completion Date shall apply to any Section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).

#### 3. Possession of Site

- 3.1 The Procuring Entity shall give possession of all or parts of the Site to the Contractor based on the schedule of delivery indicated in the SCC, which corresponds to the execution of the Works. If the Contractor suffers delay or incurs cost from failure on the part of the Procuring Entity to give possession in accordance with the terms of this clause, the Procuring Entity's Representative shall give the Contractor a Contract Time Extension and certify such sum as fair to cover the cost incurred, which sum shall be paid by Procuring Entity.
  - 3.2 If possession of a portion is not given by the above date, the Procuring Entity will be deemed to have delayed the start of the relevant activities. The resulting adjustments in contract time to address such delay may be addressed through contract extension provided under Annex "E" of the 2016 revised IRR of RA No. 9184.

#### 4. The Contractor's Obligations

The Contractor shall employ the key personnel named in the Schedule of Key Personnel indicating their designation, in accordance with **ITB** Clause 10.3 and specified in the **BDS**, to carry out the supervision of the Works.

The Procuring Entity will approve any proposed replacement of key personnel only if their relevant qualifications and abilities are equal to or better than those of the personnel listed in the Schedule.

#### 5. Performance Security

- 5.1. 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 of the forms prescribed in Section 39 of the 2016 revised IRR.
- 5.2. The Contractor, by entering into the Contract with the Procuring Entity, acknowledges the right of the Procuring Entity to institute action pursuant to RA No. 3688 against any subcontractor be they an individual, firm, partnership, corporation, or association supplying the Contractor with labor, materials and/or equipment for the performance of this Contract.

#### 6. Site Investigation Reports

The Contractor, in preparing the Bid, shall rely on any Site Investigation Reports referred to in the SCC supplemented by any information obtained by the Contractor.

#### 7. Warranty

- 7.1. In case the Contractor fails to undertake the repair works under Section 62.2.2 of the 2016 revised IRR, the Procuring Entity shall forfeit its performance security, subject its property(ies) to attachment or garnishment proceedings, and perpetually disqualify it from participating in any public bidding. All payables of the GOP in his favor shall be offset to recover the costs.
- 7.2. The warranty against Structural Defects/Failures, except that occasioned-on force majeure, shall cover the period from the date of issuance of the Certificate of Final Acceptance by the Procuring Entity. Specific duration of the warranty is found in the SCC.

#### 8. Liability of the Contractor

Subject to additional provisions, if any, set forth in the SCC, the Contractor's liability under this Contract shall be as provided by the laws of the Republic of the Philippines.

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

#### 9. Termination for Other Causes

Contract termination shall be initiated in case it is determined *prima facie* by the Procuring Entity that the Contractor has engaged, before, or during the implementation of the contract, in unlawful deeds and behaviors relative to contract acquisition and implementation, such as, but not limited to corrupt, fraudulent, collusive, coercive, and obstructive practices as stated in **ITB** Clause 4.

#### 10. Dayworks

Subject to the guidelines on Variation Order in Annex "E" of the 2016 revised IRR of RA No. 9184, and if applicable as indicated in the SCC, the Dayworks rates in the Contractor's Bid shall be used for small additional amounts of work only when the Procuring Entity's Representative has given written instructions in advance for additional work to be paid for in that way.

#### 11. Program of Work

- 11.1. The Contractor shall submit to the Procuring Entity's Representative for approval the said Program of Work showing the general methods, arrangements, order, and timing for all the activities in the Works. The submissions of the Program of Work are indicated in the SCC.
- 11.2. The Contractor shall submit to the Procuring Entity's Representative for approval an updated Program of Work at intervals no longer than the period stated in the SCC. If the Contractor does not submit an updated Program of Work within this period, the Procuring Entity's Representative may withhold the amount stated in the SCC from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Program of Work has been submitted.

#### 12. Instructions, Inspections and Audits

The Contractor shall permit the GOP or the Procuring Entity to inspect the Contractor's accounts and records relating to the performance of the Contractor and to have them audited by auditors of the GOP or the Procuring Entity, as may be required.

#### 13. Advance Payment

The Procuring Entity shall, upon a written request of the Contractor which shall be submitted as a Contract document, make an advance payment to the Contractor in an amount not exceeding fifteen percent (15%) of the total contract price, to be made in lump sum, or at the most two installments according to a schedule specified in the SCC, subject to the requirements in Annex "E" of the 2016 revised IRR of RA No. 9184.

#### 14. Progress Payments

The Contractor may submit a request for payment for Work accomplished. Such requests for payment shall be verified and certified by the Procuring Entity's Representative/Project Engineer. Except as otherwise stipulated in the SCC, materials and equipment delivered on the site but not completely put in place shall not be included for payment.

#### 15. Operating and Maintenance Manuals

- 15.1. If required, the Contractor will provide "as built" Drawings and/or operating and maintenance manuals as specified in the **SCC**.
- 15.2. If the Contractor does not provide the Drawings and/or manuals by the dates stated above, or they do not receive the Procuring Entity's Representative's approval, the Procuring Entity's Representative may withhold the amount stated in the SCC from payments due to the Contractor.

# Section V. Special Conditions of Contract

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

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

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

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

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

# **Special Conditions of Contract**

GCC Clause	
2	Completion of work shall be within sixty (60) calendar days.
4.1	The Procuring Entity shall give possession of all parts of the Site to the Contractor upon receipt of the Notice to Proceed.
6	The site investigation reports are: [list here the required site investigation reports.]
7.2	Five (5) years.
10	Dayworks are applicable at the rate shown in the Contractor's original Bid.
11.1	The Contractor shall submit a detailed Program of Work to the Procuring Entity's Representative within fifteen (14) calendar days after the issuance of the Notice to Proceed for approval by the procuring entity that shall include, among others:  i. The order in which it intends to carry out the work including anticipated timing for each stage of design/detailed engineering and construction;  ii. Periods for review of specific outputs and any other submissions and approvals;  iii. Sequence of timing for inspections and tests as specified in the contract documents;  iv. General description of the design and construction methods to be adopted;  v. Number and names of personnel to be assigned for each stage of the work;  vi. List of equipment required on site for each major stage of the work; and  vii. Description of the quality control system to be utilized for the
11.2	project.  The amount to be withheld for late submission of an updated Program of Work is one -tenth (1/10) Php24,000.00
13	The amount of the advance payment is 15% of the Contract Price
14	Materials and equipment delivered on the site but not completely put in place shall be included for payment.
15.1	The date by which operating and maintenance manuals are required is not later than thirty (30) calendar days after acceptance and turn -over of work.  The date by which "as built" drawings are required is not later than thirty (30) calendar days after acceptance and turn -over of work.
15.2	The amount to be withheld for failing to produce "as built" drawings and/or operating and maintenance manuals by the date required is two percent (2%) of the contract price Php480,000.00

# SectionVI. Specifications

#### **Notes on Specifications**

A set of precise and clear specifications is a prerequisite for Bidders to respond realistically and competitively to the requirements of the Procuring Entity without qualifying or conditioning their Bids. In the context of international competitive bidding, the specifications must be drafted to permit the widest possible competition and, at the same time, present a clear statement of the required standards of workmanship, materials, and performance of the goods and services to be procured. Only if this is done will the objectives of economy, efficiency, and fairness in procurement be realized, responsiveness of Bids be ensured, and the subsequent task of bid evaluation facilitated. The specifications should require that all goods and materials to be incorporated in the Works be new, unused, of the most recent or current models, and incorporate all recent improvements in design and materials unless provided otherwise in the Contract.

Samples of specifications from previous similar projects are useful in this respect. The use of metric units is mandatory. Most specifications are normally written specially by the Procuring Entity or its representative to suit the Works at hand. There is no standard set of Specifications for universal application in all sectors in all regions, but there are established principles and practices, which are reflected in these PBDs.

There are considerable advantages in standardizing General Specifications for repetitive Works in recognized public sectors, such as highways, ports, railways, urban housing, irrigation, and water supply, in the same country or region where similar conditions prevail. The General Specifications should cover all classes of workmanship, materials, and equipment commonly involved in construction, although not necessarily to be used in a particular Works Contract. Deletions or addenda should then adapt the General Specifications to the particular Works.

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

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

Wherever reference is made in the Contract to specific standards and codes to be met by the goods and materials to be furnished, and work performed or tested, the provisions of the latest current edition or revision of the relevant standards and codes in effect shall apply, unless otherwise expressly stated in the Contract. Where such standards and codes are national, or relate to a particular country or region, other authoritative standards that

ensure a substantially equal or higher quality than the standards and codes specified will be accepted subject to the Procuring Entity's Representative's prior review and written consent. Differences between the standards specified and the proposed alternative standards shall be fully described in writing by the Contractor and submitted to the Procuring Entity's Representative at least twenty-eight (28) days prior to the date when the Contractor desires the Procuring Entity's Representative's consent. In the event the Procuring Entity's Representative determines that such proposed deviations do not ensure substantially equal or higher quality, the Contractor shall comply with the standards specified in the documents.

These notes are intended only as information for the Procuring Entity or the person drafting the Bidding Documents. They should not be included in the final Bidding Documents.

# **Technical Specifications**

#### TITLE

Supply, Installation, Testing and Commissioning of Gas-Based Fire Detection, Suppression and Control System for the 4<sup>th</sup> Level and IT Division Data Center Server Room of the National Library of the Philippines Phase 3

#### **PROJECT**

The Project is for the Supply, Installation, Testing and Commissioning of Gas-Based Fire Detection, Suppression and Control System for the 4<sup>th</sup> Level and IT Division Data Center Server Room of the National Library of the Philippines Phase 3 for the protection and preservation of historical items housed at the National Library.

The Project calls for a technically qualified, credible, and competent company who can fulfill and undertake the scope of the project as outlined in this document.

#### LOCATION PROJECT

The location of the Project shall be the National Library of the Philippines at T.M. Kalaw Avenue, Ermita, Manila.

#### **OBJECTIVES**

- 1. Protection and preservation of items in the National Library of the Philippines which is of national and historical significance to our country.
- 2. Design and install a full system that covers fire detection, suppression and control system that the employees can manage and control upon turn-over of the project.

#### **GENERAL REQUIREMENTS**

- 1. This Project shall cover the following:
  - a) Complete review of the building and area covered from a competent design and construction firm that will provide an infrastructure plan of the fire detection, suppression and control system to be deployed. Such design criteria for the fire extinguishing system shall be meet the minimum design concentration volume in all designated spaces to be protected.
  - b) Supply and install a complete detection-control-clean agent fire suppression system that utilizes Fire Protection Fluid or change to 3M Novec 1230 Fluid. The detection-control sub-system shall have intelligent fire suppression panel utilizing protocol detectors for initiation of fire signals.
- 2. Completion and proper construction and implementation of the work specifications as provided for.

- 3. All work items under this contract shall be done in accordance with the following Standards, as applicable:
  - a) American Society for Testing Materials (ASTM)
  - b) National Building code (NBC)
  - c) National Structural Code of the Philippines (NSCP)
  - d) Philippine Society of Mechanical Engineers (PSME) Code
  - e) Philippine Electrical Code (PEC)
  - f) Occupational Safety and Health Standards (OSAHS)
  - g) Philippine Society of Mechanical Engineers (PSME)

For the fire detection, suppression and control systems, the following standards has to be complied with:

- a) ANSI B1.20.1: Standard for Pipe Threads, General Purpose
- b) FM5600: Approval Standard for Clean Agent Extinguishing System
- c) NFPA 2001: Clean Agent Fire Extinguishing Systems
- d) NFPA 70: National Electrical Code
- e) NFPA 72: National Fire Alarm and Signaling Code
- f) NFPA 92A: Recommended Practice for Smoke Control Systems
- g) UL268: Standard for Smoke Detectors for Open Areas
- h) UL266A: Standard for Smoke Detectors for Duct Areas
- i) UL864: Control Units and Accessories for Fire Alarm Systems
- j) UL2166: Halocarbon Clean Agent Extinguishing System Units

The complete system to be provided shall have the following listings and approvals:

- a) Underwriters Laboratories, Inc. (UL)
- b) Factory Mutual Global (FM)
- 4. The Contractor shall acquire all of the project's pertinent permits, and clearances including payment of taxes, professional fees and other fees (Mobilization/Demobilization including Delivery and Handling Charges, Safety & PPE including COVID 19 Protocol Expenses, BFP Fire & Tax Fee and Bonds and Insurance) due to local/national government and regulatory units and private entities for the proposed construction/installation of all permanent and temporary structures;
- 5. Due to the sensitivity of the NLP collections and to ensure the safety of the public NLP is serving, the Large B-Building and Design Project refers to Classification B. General Building, AAA Category.
- 6. The Contractor must have a Refilling Station / Supply and Installation of addressable Fire Suppression System ("Project")

- 7. The Contractor and/or Manufacturer has relevant ISO 45001 Occupational and Health Safety Certifications. If the contractor falls under a Joint Venture only one or any of the two contractors is required to be certified with ISO 45001.
- 8. The Contractor shall be responsible for conforming and correlating all data, dimensions and quantities with that of the existing equipment, site conditions, and structures on the execution of all works required under this contract;
- 9. The Contractor shall be liable for all restoration works on any affected existing structures, facilities, or plants equipment during the execution and completion of the projects.
- 10. Prior to start of work, Contractor shall submit construction methodology and schedules, product sample or proposed substitute ("or equal"), technical manual, literatures (electro-mechanical and instrumentation equipment) for review and approval;
- 11. The Contractor shall submit Shop, Design (as applicable) and/or Working Drawings of the equipment installation details including mechanical piping & electrical layout for review and approval;
- 12. If modification on the design is necessary, the Contractor shall submit working drawings for evaluation and approval prior to the execution of work.
- 13. The Contractor must submit proposed safety measures and work schedules for evaluation and concurrence. The Contractor shall comply with the safety policies provided and submit proposed safety measures, work schedules, and safety procedure job hazard analysis for evaluation and concurrence. Such project shall ensure compliance with all the safety measures required to be undertaken for safety of the workmen, the structure and the public;
- 14. Cleanliness at the work site area shall be maintained at all times. At the end of the day's work, all tools, equipment, and unused materials shall be orderly placed at designated areas;
- 15. The Contractor shall have the local capability and facilities to do the repair and maintenance of the equipment and devices to be supplied, if required.
- 16. The Contractor shall submit to the Client periodic progress reports, as required by the Engineer, covering relevant phases of work required to satisfactorily complete this contract;
- 17. Before conducting test of a completely installed facilities/system, the Contractor shall conduct, with the presence of the Client's representatives, a physical inspection of the in accordance with details and specification of this contract;
- 18. Warranty /defects and construction/installation to evaluate if all specified construction/installation works is complete and liability period shall commence after the Taking-Over Certificate has been issued; and
- 19. Certificate of Acceptance/Performance Certificate shall be issued after the defects and liability period of one (1) year;
- 20. The Contractor shall submit final accurate "As-Built" Plans & Drawings in reproducible format (A1-Size Mylar) and in electronic copy using the latest Auto CAD format.

#### SCOPE OF WORK

The Work under this contract covers the design, construction work, supply, installation, testing, commissioning and furnishing of all labor, materials, tools, equipment, transport, supplies and other necessary services required for the complete and proper conclusion of the WORK. The work shall include but not limited to the following:

#### Mechanical:

- \*Supply and installation of BI Pipe schedule 40 seamless
- \*Fabrication and Installation of Fire Suppression System manifold piping system
- \*Fabrication and installation of pipe brackets and hanger
- \*Supply and installation of fittings 3000 lbs, Capacity
- \*Painting of pipes, brackets and hangers.

#### **Electrical:**

- \*Supply and installation of electrical conduits, boxes, fittings, wires and anchors, and necessary materials.
- \*Installation of Fire Suppression System releasing panel and other field devices.
- \*Rough-in-wirings of shut-off systems

#### **Engineering:**

- \*Construction/ Shop Drawings.
- \*Design drawings as per NFPA 2001, NFPA 72 and NFPA 70.
- \*As built drawings.
- \*Computerized Flow Calculation Fire Suppression System Latest Edition.
- \*Product Seminar Orientation and transfer of technology.
- \*Testing and Commissioning

#### 1. General Obligation

- a) The Contractor is responsible for the overall functionality of the works and the coordination of all other interfaces arising from the Works. The Contractor must perform the work in a professional, timely, safe and environmentally responsible manner.
- b) All design shall be in accordance with the best modern practice and shall facilitate safe access for inspection, cleaning, lubrication, repair and replacement to ensure satisfactory operation under all service conditions. It shall also take into account constructability, potential disturbance to the interfacing with operation of existing facilities, neighboring community and industries and general operation and maintenance requirements.
- c) The local distributor of the product must have trainings and certificate stating such on the design, installation, testing and maintenance of the fire extinguishing system and shall be able to produce that certificate if requested.
- 2. Power Supply Termination Works

The Contractor shall consider the designated location of the power supply as specified by the Client.

All contractor work areas on the jobsite will be assigned, and the Contractor shall

confine its operations to the areas so assigned. Should Contractor find it necessary or advantageous to use any additional off-site area for any purpose whatsoever, Contractor shall, at its expense, provide and make its own arrangements for the use of such additional off-site areas.

The Contractor shall also provide a temporary staging area for safety and protection of the materials/equipment during the construction period

#### **GENERAL REQUIREMENTS**

- 1. The contractor shall be responsible for the design of the fire protection system with the following inclusions:
  - a) Mechanical design
  - b) Electrical design
  - c) Process and piping design
  - d) All contractor work areas on the jobsite will be assigned by National Library of the Philippines. Contractor shall confine its operations to the areas assigned. Should contractor find it necessary or advantageous to use any additional offsite area for any purpose whatsoever, contractor shall, at its expense, provide and make its own arrangements for the use of such additional off-site areas.
  - e) Contractor shall at its expense, provide and make its own arrangements for the use of such additional off-site areas.
- 2. The Fire suppression System shall be provided with the following materials and equipment specifications:

#### a. General

Must be compatible with the existing gas-based fire suppression system.

The Clean Agent Fire Suppression, actuation and Signaling Systems shall be the standard product of the same Manufacturer/ Supplier or to be certified by the manufacturer as compatible with devices, components and equipment of the manufacturer

Each Suppression system shall have its own supply of clean agent and shall be designed in accordance with the manufacturer's guidelines and conforming to all applicable codes and standards.

All devices, components and equipment shall be new and latest design suitable to perform the intended purpose/functions.

All equipment and devices shall be U. L. listed and/or FM approved, unless otherwise specified.

The Manufacturer of the Fire Suppression System hardware and detection components shall be ISO 9001 registered.

The brand name of the manufacturer, part numbers and serial numbers shall appear on all major components.

The whole systems shall be provided with the following fire detection, alarm and monitoring equipment such as but not limited to:

- a) Addressable Control Panel Assembly
- b) Addressable Photoelectric Smoke Detector
- c) Addressable Ionization Smoke Detector
- d) Addressable Dual Action Pull Station
- e) Remote Releasing Module
- f) Suppression Abort Station
- g) Fire Alarm Bell
- h) Multi Tone Horn with Flashing Strobe
- i) Evacuation Signage, Gas Discharge Signage and Warning Signage
- **3. Clean Agent Storage and Distribution.** Each specified room/area shall have its own fire suppression system and supply of clean agent. The clean agent fire extinguishing system shall consist preferably of one agent cylinder but if required to have more agent cylinders it may either be connected to a discharge pipe arrangement separately or connected to a common manifold and discharge pipe arrangement. The agent cylinder shall be filled with agent fluid, and super pressurized with dry nitrogen to a working pressure of 360 Psig at 70 F (24.8 bar gauge at 21 C);

The fire suppression systems shall be designed to discharge within 10 seconds into a room/area with structural integrity to retain the agent. The system shall ensure that the fluid shall uniformly mixed throughout the protected area achieving a minimum concentration level in accordance with NFPA 2001 and/or agency listings.

4. **Local CONTROL Panels.** The Local Alarm Control Panel (LFACP) shall be provided to perform all functions necessary to supervise, monitor and operate the fire detection and alarm, actuation and signaling systems. It shall be located at respective entrance/lobby and at protected area vicinity or an appropriate location to be designated by National Library of the Philippines.

The Control system shall be microprocessor based, utilizing a distributed processing concept and capable of independently determine wither or not a fire signature at its monitored location is of sufficient magnitude to warrant the issuance of an alarm signal to the control unit. The system shall be capable of supporting Cross Zoned Detection.

The main fire alarm control panel shall be capable of supporting addressable as well as non-addressable detection devices.

It shall be provided with back-up battery charger of adequate ampere rating complete with charge/float-charge monitoring, protection and metering devices. The battery system must be capable of powering the system for not less than 24 hours in the "powerless condition". Transfer to the secondary power supply shall be done automatically.

A fire alarm bell and trouble horn of audible rating shall be furnished and installed by the Supplier on the MFACP and shall be of NEMA 1 Operating on VDC.

The system shall be capable of:

- a) Counting the number of addressable detectors within a "Zone" or "System" which are in alarm
- b) Differentiating among types of addressable detectors such as smoke detectors and manual stations.
- **5. Smoke Detectors.** The system shall be actuated by photoelectric smoke detectors at a maximum spacing of 23.2 sq. m. (sq. ft.) per detector. The detectors shall be wired in standard Cross-Zoned detection.

The PHOTOELECTRIC smoke detectors shall be addressable. They shall be directly interchangeable with other comparable plug-in detectors. Detectors shall be UL listed and/or FM approved and shall operate from a nominal 24V dc source MFCP and shall be continuously supervised from the MFCP.

The smoke detectors shall be designated to sense both visible and invisible products of combustion. They shall incorporate advanced solid-state, low-voltage circuitry featuring a Surface Mount Technology. The 360-degree smoke entry characteristics permits maximum smoke response from any direction. To assure that the detector is functioning, a pulsing LED allows for visual supervision of the detector. Under alarm condition, LED lights continuously at full brilliance

**6. Manual Release Stations.** Manual Release station or Manual Pull Station shall be an addressable dual action device which provides a means of manually discharging the Fire Suppression System in conjunction with detection system. The Manual Release station on Manual Pull station shall be a dual action device requiring two distinct operations to initiate a system actuation.

Manual actuation shall bypass the time delay and abort function shall cause the system to discharge and shall cause all release and shutdown devices to operate in the same manner as if the system had operated automatically.

**7. Suppression Abort Station.** The abort station shall be the "Dead Man" type and shall be located adjacent to each manual release station.

The abort station shall be supervised and shall indicate a trouble condition at the MFACP and LFACP if depressed and no alarm condition exists.

"Locking" or Keyed" abort stations shall not be permitted.

**8.** Audible Visual Alarms. Alarm Bell and Horn shall be placed outside and above each exit door from the protected space. Advisory sign at each light location shall be provided.

Alarm Horn shall be modular type suitable for surface mountings in combination with flashing light. The alarm horn circuit is required to be electrically supervised by the MFACP. Alarm horn shall be UL listed and/or FM approved and shall have a selectable sound output of at least 90 db at high mode.

Evacuation signage's shall be provided ie. "Evacuate Signage and Gas Discharge Signage".

- **9. Supplier's Experience/Qualifications.** The relative experience of Supplier/Installer of the Clean Agent Fluid Suppression System shall comply with the following:
  - a) The Supplier/Installer should have been in the business of designing, installing, test and commissioning of the Fire Suppression System for not less than Three (3) years;
  - b) The Supplier shall be trained by the Manufacturer to calculate/design, install, test and maintain the clean agent fire extinguishing system and shall be able to produce a certificate stating such on request;
  - c) The Installing Supplier shall have a Calibrated Door fan test equipment with Calibration Certificate and to conduct room integrity test before final testing & commissioning and should Level 1, 2, and 3 Certified as per NFPA 2001 Annex C
  - d) The Supplier shall confirm in writing that the stocks a full complement of spare parts and offer 24-hours emergency service for all equipment being furnished; (National Library required to inspect if the stock is available)
  - e) The Supplier shall have their own Clean Agent refilling station and shall be 24/7 in service;
  - f) The installing Supplier shall have certificate of Department of Labor and Employment (DOLE);

#### **Drawings and Documents to be submitted**

- 1. Letter of Confirmation that the local agent or representative is
  - a) available to provide "After Sales Service" and parts; and,
  - b) stating his full support. Name, address and contact no.
  - c) NLP shall be provided;
    - i. Manufacturer's Brochures/Catalogues which contain information/data to adequately support the Technical Data Sheets;
    - ii. Copy of Manufacturer's Authorization to bid.
    - iii. Completely filled-out Technical Data Sheets;
    - iv. Work Plan/Bar Chart Schedule:
    - v. Certificate of Site Inspection to be signed by NLP's authorized representative;

- 2. To be submitted before/during delivery, installation and test of equipment/component
  - i. Manpower Schedule;
  - ii. Three (3) copies of Installation, Operation, and Maintenance Manual (Hardbound):
  - iii. Hydraulic Calculation and design drawings (as per applicable NFPA Codes)
  - iv. Installation and detailed drawings, equipment/device layout drawings, including wiring diagram showing the termination points for all fieldwiring circuits;
  - v. Test Procedures and Test Reports.
- 3. To be submitted after completion of works
  - i. "As-Built" Installation and Layout Drawings; and
  - ii. "Warranty" Certificate for one (1) year against factory defects/workmanship

#### Guarantee

The Supplier shall guarantee the repair, and/or replacement of the supplied equipment, components or devices at his own expense against defect in design, workmanship and materials.

#### Measurement of payment

Payment shall be within forty-five (45) working days upon Supplier's completion of project, submission of invoice, service report, issuance of Certificate of Acceptance or Completion from Manager / End-user, and submission of other supporting documents required by National Library.

#### **Other Matter:**

For infrastructure project, JV Bidder shall submit a Joint Venture Agreement (JVA) during the opening of Bids. However, the Special PCAB License can be submitted during the post-qualification of the bidder that has the Lowest Calculated Bid (LCB).

#### TECHNICAL DATA SHEETS

Supply, Installation, Testing and Commissioning of Gas-Based Fire Detection, Suppression and Control System for the 4<sup>th</sup> Level and IT Division Data Center Server Room of the National Library of the Philippine Phase 3

1. The Bidder shall complete this technical data sheet and submit the filled-up form with the technical proposal. The Bidder shall use continuation sheets as necessary for any

- other additional information keeping to the format shown herein or by reproducing the same.
- 2. National Library of the Philippines reserve the right to reject Bids without proper and/or specific data and information as required herein.
- 3. The data required are minimum technical features and characteristics of the Equipment/Component/Parts to be provided by the bidder. Bidder's proposal shall be equal or superior to the requirements specified by the National Library

UNIT	DESCRIPTION	QUANTITY
	Supply, Installation, Testing and Commissioning of Gas-Based Fire Detection, Suppression and Control System for the 4 <sup>th</sup> Level and IT Division Data Center Server Room of the National Library of the Philippines Phase 3	Lot
	Common Addressable Fire Suppression Control Panel Devices for Novec1230 in 4th Floor Stockroom	
unit	Kidde Brand, ARIES NETLink Multi-Loop Remote LCD Display and Control Module (RDCM), P/N 76-800300-001	2
unit	Kidde Brand, ARIES MLX Multi-Loop SLC Card, supports 255 addressable devices with no restriction on device type, P/N 76-800011-002	1
unit	Kidde Brand, ARIES NETLink Multi-Loop R-NAC Card, P/N 76-800013-001	1
unit	Auxillary Booster Power Supply, 10 amps, 220 VAC Supply	1
pcs	Back-up Battery, 12VDC, 12AH (For Auxillary Booster Power Supply)	2
	Supply & Installation of Addressable Novec 1230 Fire Suppression System for 4 <sup>th</sup> Floor Stockroom	
unit	Kidde Brand, ECS -500 3M Novec 1230 Cylinder 900 lb. (408.0kg) Capacity; 3Valve; with LLI; UL, FM, P/N 45-550901-001 to be filled with 631 Novec 1230 fluid (For ITD Office Area).	4

lbs	3M Novec 1230 Fluid	208
pc	Kidde Brand, Electric Control Head,24 VDC, P/N WK-890181000	1
pcs	Kidde Brand, Pressure Operated Control Head, P/N 82-878737-000	3
pcs	Kidde Brand, Master Cylinder Adapter Kit, P/N 82-878737-000	1
pcs	Kidde Brand, Actuation Hose, 30", P/N WK-264986-000	6
pcs		3
	Kidde Brand, Male Connector, 5/6" Flare X 1/8" NPT, P/N W/k-699205-010	
pcs	Kidde Brand, Male Elbow, 5/6" Flare X 1/8" NPT, P/N W/k-699205-030	3
pcs	Kidde Brand, Male Branch Tee, 5/6" Flare X 1/8" NPT, P/N WK-699205-050	3
pcs	Kidde Brand,ECS-360 Novec Discharge Nozzels,Brass,360 Celsius 1-1/2" NPT	16
pcs	SmartOne Addressable Photoelectric Detector, P/N KS-PS/ DS-PS	16
pcs	SmartOne Addressable 135 Fahrenheit (57 Celcius) Fixed Temperature Head Detector	16
pcs	Standard Base for DS Series Detector, P/N DS-SB	32
pcs	SmartOne Al Monitor Module, P/N 70-417008-001	4
pcs	SmartOne AO Control Module, P/N 70-408004-001	4
pcs	SmartOne Alarm Signal Module (ASM), P/N 70-200200-003	4
pcs	Kidde Brand,3300 Addressable Dual Action Pull Station, P/N 84-	2

	330002-001	
pcs	Kidde Brand, Abort Station, P/N 84-878752010	2
pcs	Eaton Wheelock Multi Tone- Multi Strobe, 24 VDC, P/N MT-24MCW-FR	2
pcs	Potter Vibrating Bell, 24 VDC, 6-inch, P/N PDC-6-24	2
pcs	Gas Discharge Signage, 24 VDC	2
pcs	Evacuation Signage, 24 VDC	2
pcs	Kidde Brand, In-Line Releasing- Circuit Device, P/N 06-220023-001	4
pcs	Novec 1230 Nameplate, Warning	2
	ITD SERVER ROOM (9.324 mtrs x 4.529 mtrs x 3.422 mtrs) - Room Space Protection (Single Discharge)	
unit	Kidde Brand, ECS-500 3M Novec 1230 Cylinder 350 lb. (158.7 kg) Capacity;2" Valve; With LLI; UL, FM, P/N 45-550351-001 with 2" Valve Outlet Adapter to be filled with 208 lbs Novec 1230 fluid (For ITD Server Room)	1
lbs	3M Novec 1230 Fluid	
pcs	Kidde Brand, Electric Control Head, 24 VDC, P/N WK-890181-000	1
pcs	Kidde Brand, ECS-360 Novec Discharge Nozzles, Brass, 360°, 1-1/2" NPT (For Room Space)	2
pcs	SmartOne Addressable Photoelectric Detector, P/N KS-PS\DS-PS	4
pcs	SmartOne Addressable 135 Fahrenheit (57 Celcius) Fixed Temperature Head Detector, P/N KS-HD/DS-HFS	4
pcs	Standard Base for DS Series Detectors, P/N DS-SB	8
pcs	SmartOne AI Monitor Module, P/N 70-417008-001	2

pcs	SmartOne AO Control Module, P/N 70-408004-001	2
pcs	SmartOne AO Control Module, P/N 70-408004-001 (For Interfacing)	2
pcs	SmartOne Alarm Signal Module (ASM), P/N 70-200200-003	2
рс	Kidde Brand, 3300 Addressable Dual Action Pull Station, P/N 84-330002-001	1
pc	Kidde Brand, Abort Station, P/N 84-878752-010	1
рс	Eaton Wheelock Multi Tone-Multi Strobe, 24 VDC, P/N MT-24MCW-FR	1
pc	Potter Vibrating Bell, 24 VDC, 6-inch, P/N PDC-6-24	1
pc	Gas Discharge Signage, 24 VDC	1
pc	Evacuation Signage, 24 VDC	1
pc	Kidde Brand, In-Line Releasing-Circuit Device, P/N 06-220023-001	1
pc	Novec 1230 Nameplate, Warning	1
	Local and Installation for Fire Suppression Control Panel and its accessories	
lot	Engineering design, testing and commissioning including programming of the system, design as per NFPA 2001 and computerized Flow Calculation and supply of local materials, electro-mechanical pipes fitting with 3000 lbs capacity, wires, boxes hanger and other related materials to complete the installation.	1
lot	Cylinder Rack Brackets	1
lot	Mechanical Piping System	1
lot	Fittings for at least 3000 lbs capacity	1

lot	Pipes, Brackets, and Hangers	1
lot	Electrical conduits, boxes, fittings, wires & anchors	1
lot	Labor Installation including Testing, Commissioning, and Programming	1

- 1. The design shall include the following but not limited to:
  - a) Layout Plan
  - b) Process flow diagram
  - c) Process and hydraulics design calculation
  - d) Civil and structural design
  - e) Electrical design
  - f) Appropriate instrumentation, control and automation
  - g) Shall be economical and cost-effective treatment facility lowest OPEX cost
  - h) All ancillary work associated with the fire suppression system

#### **DOCUMENTS**

The following reference documents will be supplied for the said project:

- 1. As-Built Drawing
- 2. Design, Specification, and Standards

#### **SUBMITTALS**

- 1. The Contractor shall submit the following documents:
  - a) Evidence of accreditation from the Philippine Contractors Accreditation Board
  - b) Experience in projects relevant to the scope of work: Design and construction of fire suppression system. The Contractor must have at least 1 similar project. Evidence such project completion certificate shall be included in the proposal to be evaluated.
  - c) Installation methodology subject for technical bid evaluation. The bidder shall present their proposal/ installation methodology during the bidding;
  - d) During Construction Phase the contractor will submit the following:
  - a) Designs and working drawings, design calculation, and layout, shop drawing.
  - b) Materials/ equipment test certificate;

- c) Health and safety program approved by Department of Labor and Employment related or similar to the above project including job hazard analysis and risk assessment plan
- 2. Prior to turn-over the following shall be submitted:
  - a) The Contractor conduct a knowledge transfer to National Library personnel
  - b) The Contractor shall also provide the operation and maintenance manuals
  - c) The maintenance manual shall include the type of corrective maintenance, tools needed (special tools), consumables, procedure up to the work instruction level. Procedure/ work instruction should be as simple as possible, easily understandable with drawings and written in English;

#### **QUALITY ASSURANCE**

The Contractor is responsible for the performance of all tests and inspection required by this scope of work. In addition, the contractor shall be required to perform all prescribed test and inspection where such is deemed necessary to ensure that delivered materials conform to the specifications, at the contractor's expense. The Contractor shall furnish the clients certified copies of records showing that each material has been pre-tested and compliance certificate attesting that delivered materials have complied with all applicable requirements of this standard. The Contractor shall, at his own expense, replace all rejected materials for failure to comply with this scope of work.

#### WARRANTY

The Contractor shall provide a minimum of one (1) year warranty on work, unless otherwise stated in this section.

Warranty duration, stated in this section, of the said work shall commence the day following the final acceptance has been issued.

#### **EXECUTION**

Installation, Start-up, Testing and Commissioning:

- 1. All units shall be delivered ready for operation/ field installation.
- 2. Testing and commissioning shall be performed to confirm correct operation.

#### TRAINING AND SEMINAR

The Contractor shall conduct trainings to the client's personnel/ engineer in-charge for five (5) days to cover the use/operation and maintenance of the work under this contract.

#### **CONTRACT DURATION**

The Contract shall complete the work in <u>60</u> calendar days from the date of receipt of Notice to Proceed issued by National Library.

#### TERMS OF PAYMENT

Payment will be on Progress Billing basis and shall constitute full compensation for furnishing of all labor, materials, tools, equipment and other services required to complete the design, supply and installation/fire suppression system.

The following are the terms of payment agreement:

- a) Fifteen percent (15%) of the total project amount as an advance payment upon awarding of the project.
- b) **Twenty five percent (25%)** of the total project amount upon delivery of materials on site prior to installation supported with delivery receipt documents.
- c) Twenty five percent (25%) of the total project amount upon installation and receipt of invoice:
- 1. Supply and Construction/Installation of all Civil and Electro-Mechanical Works
- 2. Furnishing of all labor, materials, tools, transport and all necessary services to complete all civil works including pipe laying and inter-connection work, electrical work.
  - a) **Twenty five percent (25%)** of the total project amount upon issue of the Completion Certificate.
  - b) **Ten percent (10%)** of the total project amount upon issue of the Final Acceptance Certificate and training/seminar conducted to employees and after receipt of final invoice.

#### **DISCLAIMER**

The right to accept or reject any proposal, annul the biding process and reject all applications, discontinue the negotiation process or not to award the contract, at any time without thereby incurring any liability to applicants, is reserved. The acceptance of the terms hereunder constitutes acceptance of the reservation hereunder.

## Section VII. Drawings

[See attachment]

### Section VIII. Bill of Quantities

#### Notes on the Bill of Quantities

#### **Objectives**

The objectives of the Bill of Quantities are:

- a. to provide sufficient information on the quantities of Works to be performed to enable Bids to be prepared efficiently and accurately; and
- b. when a Contract has been entered into, to provide a priced Bill of Quantities for use in the periodic valuation of Works executed.

In order to attain these objectives, Works should be itemized in the Bill of Quantities in sufficient detail to distinguish between the different classes of Works, or between Works of the same nature carried out in different locations or in other circumstances which may give rise to different considerations of cost. Consistent with these requirements, the layout and content of the Bill of Quantities should be as simple and brief as possible.

#### **Daywork Schedule**

A Daywork Schedule should be included only if the probability of unforeseen work, outside the items included in the Bill of Quantities, is high. To facilitate checking by the Entity of the realism of rates quoted by the Bidders, the Daywork Schedule should normally comprise the following:

- a. A list of the various classes of labor, materials, and Constructional Plant for which basic daywork rates or prices are to be inserted by the Bidder, together with a statement of the conditions under which the Contractor will be paid for work executed on a daywork basis.
- b. Nominal quantities for each item of Daywork, to be priced by each Bidder at Daywork rates as Bid. The rate to be entered by the Bidder against each basic Daywork item should include the Contractor's profit, overheads, supervision, and other charges.

#### **Provisional Sums**

A general provision for physical contingencies (quantity overruns) may be made by including a provisional sum in the Summary Bill of Quantities. Similarly, a contingency allowance for possible price increases should be provided as a provisional sum in the Summary Bill of Quantities. The inclusion of such provisional sums often facilitates budgetary approval by avoiding the need to request periodic supplementary approvals as the future need arises. Where such provisional sums or contingency allowances are used, the SCC should state the manner in which they will be used, and under whose authority (usually the Procuring Entity's Representative's).

The estimated cost of specialized work to be carried out, or of special goods to be supplied, by other contractors should be indicated in the relevant part of the Bill of Quantities as a particular provisional sum with an appropriate brief description. A separate procurement procedure is normally carried out by the Procuring Entity to select such specialized contractors. To provide an element of competition among the Bidders in respect of any facilities, amenities, attendance, etc., to be provided by the successful Bidder as prime Contractor for the use and convenience of the specialist contractors, each related provisional sum should be followed by an item in the Bill of Quantities inviting the Bidder to quote a sum for such amenities, facilities, attendance, etc.

#### **Signature Box**

A signature box shall be added at the bottom of each page of the Bill of Quantities where the authorized representative of the Bidder shall affix his signature. Failure of the authorized representative to sign each and every page of the Bill of Quantities shall be a cause for rejection of his bid.

These Notes for Preparing a Bill of Quantities are intended only as information for the Procuring Entity or the person drafting the Bidding Documents. They should not be included in the final documents.

# Section IX. Checklist of Technical and Financial Documents

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

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

- a. GPPB Resolution No. 09-2020 on the efficient procurement measures during a State of Calamity or other similar issuances that shall allow the use of alternate documents in lieu of the mandated requirements; or
- b. any subsequent GPPB issuances adjusting the documentary requirements after the effectivity of the adoption of the PBDs.

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

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

I.	I. TECHNICAL COMPONENT ENVELOPE			
	Class "A" Documents			
	Leo	al Do	cuments	
		(a)	Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages); or	
		(b)	Registration certificate from Securities and Exchange Commission (SEC), Department of Trade and Industry (DTI) for sole proprietorship, or Cooperative Development Authority (CDA) for cooperatives or its equivalent document; and	
		(c)	Mayor's or Business permit issued by the city or municipality where the principal place of business of the prospective bidder is located, or the equivalent document for Exclusive Economic Zones or Areas;  and	
		(e)	Tax clearance per E.O. No. 398, s. 2005, as finally reviewed and approved by the Bureau of Internal Revenue (BIR).	
	Tec	hnica	<u>l Documents</u>	
		(f)	Statement of the prospective bidder of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid; <b>and</b>	
		(g)	Statement of the bidder's Single Largest Completed Contract (SLCC) similar to the contract to be bid, except under conditions provided under the rules; <b>and</b>	
		(h)	Philippine Contractors Accreditation Board (PCAB) License;  or  Special PCAB License in case of Joint Ventures;  and registration for the type and cost of the contract to be bid; and	
		(i)	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	
		(j)	Project Requirements, which shall include the following:	
			a. Organizational chart for the contract to be bid;	
			b. List of contractor's key personnel ( <i>e.g.</i> , Project Manager, Project Engineers, Materials Engineers, and Foremen), to be assigned to the contract to be bid, with their complete qualification and experience data;	
			c. List of contractor's major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership or certification of availability of equipment from the equipment lessor/vendor for the duration of the project, as the case may be; <b>and</b>	
		(k)	Original duly signed Omnibus Sworn Statement (OSS);	

		<u>and</u> if applicable, Original Notarized Secretary's Certificate in case of a
		corporation, partnership, or cooperative; or Original Special Power of
		Attorney of all members of the joint venture giving full power and authority
		to its officer to sign the OSS and do acts to represent the Bidder.
<u>Fin</u>	<u>ancia</u>	<u>l Documents</u>
	(1)	The prospective bidder's audited financial statements, showing, among
		others, the prospective bidder's total and current assets and liabilities,
		stamped "received" by the BIR or its duly accredited and authorized
		institutions, for the preceding calendar year which should not be earlier than
		two (2) years from the date of bid submission; <b>and</b>
	(m)	The prospective bidder's computation of Net Financial Contracting Capacity
		(NFCC).
		Class "B" Documents
	(n)	If applicable, duly signed joint venture agreement (JVA) in accordance with
		RA No. 4566 and its IRR in case the joint venture is already in existence;
		<u>or</u>
		duly notarized statements from all the potential joint venture partners stating
		that they will enter into and abide by the provisions of the JVA in the
		instance that the bid is successful.
TE TOTAL	4 NI C	
II. FIN	_	IAL COMPONENT ENVELOPE
	(o)	Original of duly signed and accomplished Financial Bid Form; and
Oth	er do	cumentary requirements under RA No. 9184
	(p)	Original of duly signed Bid Prices in the Bill of Quantities; and
	(q)	Duly accomplished Detailed Estimates Form, including a summary shee
		indicating the unit prices of construction materials, labor rates, and equipmen
		rentals used in coming up with the Bid; <b>and</b>
	(r)	Cash Flow by Quarter.
1	1	



