

PHILIPPINE BIDDING DOCUMENTS

(As Harmonized with Development Partners)

Procurement of GOODS

Government of the Republic of the Philippines
Civil Aviation Authority of the Philippines

PURCHASE/INSTALLATION OF AUTOMATED WEATHER OBSERVING SYSTEM (AWOS) FOR NEW BICOL INTERNATIONAL AIRPORT (RE-BID)

Bid No. 21-008-04 **CHARLIE**
(RE-BID)

**Sixth Edition
July 2020**

Preface

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

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

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

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

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

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

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Glossary of Acronyms, Terms, and Abbreviations

ABC – Approved Budget for the Contract.

BAC – Bids and Awards Committee.

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

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

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

BIR – Bureau of Internal Revenue.

BSP – Bangko Sentral ng Pilipinas.

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

CDA - Cooperative Development Authority.

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

CIF – Cost Insurance and Freight.

CIP – Carriage and Insurance Paid.

CPI – Consumer Price Index.

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

DTI – Department of Trade and Industry.

EXW – Ex works.

FCA – “Free Carrier” shipping point.

FOB – “Free on Board” shipping point.

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

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

GFI – Government Financial Institution.

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

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

GOP – Government of the Philippines.

GPPB – Government Procurement Policy Board.

INCOTERMS – International Commercial Terms.

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

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

LGUs – Local Government Units.

NFCC – Net Financial Contracting Capacity.

NGA – National Government Agency.

PhilGEPS - Philippine Government Electronic Procurement System.

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

PSA – Philippine Statistics Authority.

SEC – Securities and Exchange Commission.

SLCC – Single Largest Completed Contract.

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

UN – United Nations.

Section I. Invitation to Bid

Notes on the Invitation to Bid

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

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

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

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



INVITATION TO BID FOR
Purchase/Installation of Automated Weather Observing System
(AWOS) for New Bicol International Airport (Re-bid)
Bid No. 21-008-04 **CHARLIE (RE-BID)**

1. The **Civil Aviation Authority of the Philippines (CAAP)**, through the **DOTr-CAAP Memorandum of Agreement (DOTr Downloaded) CY2018** intends to apply the sum of **Php 35,463,000.00** being the Approved Budget for the Contract (ABC) to payments under the contract for the ***Purchase/Installation of Automated Weather Observing System (AWOS) for New Bicol International Airport (Re-bid)***. Bids received in excess of the ABC shall be automatically rejected at bid opening.

2. The **CAAP** now invites bids for the above Procurement Project. Delivery of the Goods is required *within 365 calendar days*. Bidders should have completed, within *five (5) years* from the date of submission and receipt of bids, a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II (Instructions to Bidders).

3. Bidding will be conducted through open competitive bidding procedures using a non-discretionary “*pass/fail*” criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.

Bidding is restricted to Filipino citizens/sole proprietorships, partnerships, or organizations with at least sixty percent (60%) interest or outstanding capital stock belonging to citizens of the Philippines, and to citizens or organizations of a country the laws or regulations of which grant similar rights or privileges to Filipino citizens, pursuant to RA No. 5183.

4. Prospective Bidders may obtain further information from CAAP and inspect the Bidding Documents at the address given below during **8:00am to 5:00pm at the BAC Office**.

5. A complete set of Bidding Documents may be acquired by interested Bidders on 27 May 2021 until the deadline of submission of bids 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 **Php28,000.00 (inclusive of 12% VAT)**. The Procuring Entity shall allow the bidder to present its proof of payment for the fees *to be presented 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 **CAAP** will hold a Pre-Bid Conference¹ on 04 June 2021 *at 2:00PM* at **CAAP BAC Office** and/or through video conferencing or webcasting via Google Meet, which shall be open to prospective bidders.
7. Bids must be duly received by the BAC Secretariat through manual submission at the office address indicated below, on or before 18 June 2021 *at 2:00PM*. 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 18 June 2021 *at 2:00PM* at the given address below and/or *via online conference thru Google Meet*. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.
10. The **CAAP** 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:

DR. ROLLY BAYABAN, M.D.

Overall Head, BAC Secretariat

Civil Aviation Authority of the Philippines

Old MIA Road, Pasay City, Metro Manila 1300

www.caap.gov.ph

Tel #: (02) 7944 2358

12. You may visit the following websites:

For downloading of Bidding Documents: *PhilGEPS and CAAP websites*

24 March 2021

CAPTAIN DONALDO A. MENDOZA
Chairman, Bids and Awards Committee - Charlie

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

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, CAAP, wishes to receive Bids for the *Purchase/Installation of Automated Weather Observing System (AWOS) for New Bicol International Airport (Re-bid)*, with identification number _____

The Procurement Project (referred to herein as “Project”) is composed of 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 2018 in the amount of **Php 35,463,000.00** through the *DOTr-CAAP Memorandum of Agreement (DOTr Downloaded) CY2018*.

2.2. The source of funding is:

- a. NGA, the General Appropriations Act or Special Appropriations. *DOTr-CAAP Memorandum of Agreement (DOTr Downloaded) CY2018*.

3. Bidding Requirements

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

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

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

4. Corrupt, Fraudulent, Collusive, and Coercive Practices

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

5. Eligible Bidders

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

- a. Subcontracting is not allowed.

8. Pre-Bid Conference

The Procuring Entity will hold a pre-bid conference for this Project on the specified date and time through video conferencing/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)** and in **BDS**.
- 10.2. The Bidder's SLCC as indicated in **ITB** Clause 5.3 should have been completed within Five (5) years *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)** and in **BDS**.
- 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.

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 **Section VII (Technical Specifications)** and in **BDS**.

13. Bid and Payment Currencies

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

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**.
- 14.2. The Bid and bid security shall be valid *within 120 calendar days from the date of the opening of bids*. Any Bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

15. Sealing and Marking of Bids

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.

Each Bidder shall submit one original and two (2) copies 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**.

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.

19. Detailed Evaluation and Comparison of Bids

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

- 19.2. If the Project allows partial bids, bidders may submit a proposal on any of the lots or items, and evaluation will be undertaken on a per lot or item basis, as the case maybe. In this case, the Bid Security as required by **ITB** Clause 15 shall be submitted for each lot or item separately.
- 19.3. The descriptions of the lots or items shall be indicated in **Section VII (Technical Specifications)**, although the ABCs of these lots or items are indicated in the **BDS** for purposes of the NFCC computation pursuant to Section 23.4.2.6 of the 2016 revised IRR of RA No. 9184. The NFCC must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder.
- 19.4. The Project shall be awarded as One Project having several items that shall be awarded as one contract.
- 19.5. Except for bidders submitting a committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation, all Bids must include the NFCC computation pursuant to Section 23.4.1.4 of the 2016 revised IRR of RA No. 9184, which must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder. For bidders submitting the committed Line of Credit, it must be at least equal to ten percent (10%) of the ABCs for all the lots or items participated in by the prospective Bidder.

20. Post-Qualification

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

21. Signing of the Contract

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

Section III. Bid Data Sheet

Notes on the Bid Data Sheet

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

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

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

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

Bid Data Sheet

ITB Clause	
5.3	<p>For this purpose, contracts similar to the Project shall be:</p> <ol style="list-style-type: none"> a. <i>Supply, Delivery, Installation/Integration and Testing of Meteorological Equipment.</i> b. completed within five (5) years prior to the deadline for the submission and receipt of bids.
7.1	<i>No Sub-contracted portion</i>
10.1	<p>A. Per CAAP Memorandum dated 17 September 2018 re: Disqualification of Prospective Bidders with Pending Case against the Government in the procurement activities of the CAAP, all prospective bidders shall be required to submit the following:</p> <ol style="list-style-type: none"> 1. A Certification under oath attesting that they have no pending case(s) against the Government, in addition to the eligibility requirements for bidders as prescribed under the 2016 Revised Implementing Rules and Regulations (revised IRR) of RA9184; and; 2. Legal Clearance to be issued by the CAAP Enforcement and Legal Service with respect to the non-pendency of any cases of prospective bidders against the Authority. <p>B. Accomplished Revised Annex A –ITB 10.1</p> <p>For applicable items, the Bidder shall indicate in the Technical Component (on a separate sheet using Revised Annex A –ITB 10.1 Form) the Brand, Type and /or Model/Version and Quantities/Unit of each of the proposed equipment/subsystems and ancillaries. This document shall be signed by the Bidder’s authorized representative.</p> <p>The bill of quantities with corresponding price schedules in the accomplished financial form shall be consistent with and referenced to all plans, designs and layouts submitted in the technical bid proposal.</p> <p>C. Certificate of Site Inspection</p> <p style="text-align: center;"><i>Site Inspection Certificate shall be part of bid submission.</i></p> <p>Bids not complying with the above instructions shall be disqualified.</p>
12	The price of the Goods shall be quoted DDP <i>at New Bicol International Airport</i> or the applicable International Commercial Terms (INCOTERMS) for this Project.

12.1(a)(iv)	<p>Incidental Services (for Goods offered from within Philippines) include but are not limited to the following:</p> <ol style="list-style-type: none"> 1. All expenses for the processing of permits and licenses shall be part of the price schedule of the equipment. 2. Provision and installation of cables, grounding, surge protection and other additional or auxiliary electronic/electrical adapter, signal converters, connectors, components, fixtures, interface, fittings/mounting kits, cable management etc. for the different equipment to meet operational and functional requirements. Prices for these incidentals shall be incorporated to the equipment listed in the BOQ of the Schedule of Requirements to which it is primarily related. 3. Importation Licenses / Permits 4. Civil/Electrical Engineering Services and Installation costs 5. Training 6. Project Management Services 7. As-Built Plans and Drawings
12.1(b)(ii)	<p>Incidental Services (for Goods offered from abroad) include but are not limited to the following:</p> <ol style="list-style-type: none"> 1. Provision and installation of cables, grounding, surge protection and other additional or auxiliary electronic/electrical adapter, signal converters, connectors, components, fixtures, interface, fittings, cable management, etc. for the different equipment to meet operational and functional requirements. Prices for these incidentals shall be incorporated to the equipment listed in the BOQ of the Schedule of Requirements to which it is primarily related. 2. Export Licenses / Permits 3. Engineering Services required for design & configurations.21 4. Equipment Installation costs 5. FAT/Training & related documents 6. Related equipment tests 7. Site Technical Training to be conducted by certified/authorized technical personnel from the Original Equipment Manufacturer (OEM). 8. 8. Installation, Operational, Maintenance and other forms of Manuals, System & Circuit Diagrams, Equipment As-Built Plans and Drawings.
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> <ol style="list-style-type: none"> a. The amount of not less than <i>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

	<p>b. The amount of not less than <i>five percent (5%) of ABC</i> if bid security is in Surety Bond.</p>
<p>15</p>	<p>Each Bidder shall submit one (1) original and two (2) copies of the first and second components of its bid. The bid (all envelopes and all documents), shall be signed, and every page thereof shall be initialed by the duly authorized representative/s of the Bidder. Submitted Eligibility, Technical and Financial Documents shall be properly marked with index tabs (ear tab) and must sequentially paginated in accurate order in the form e.g. “page 3 of 100”. Page number of last page of the document (per envelope basis). Pagination should be sequential base on the entire span of the whole documents inside the envelope.</p> <p>All envelopes must be labeled as follows:</p> <p>(a) Name of the contract to be Bid in capital letters (b) Name and address of the Bidder in capital letters (c) Name and Address of the Procuring Entity’s BAC Identified in the IB paragraph 11 (d) Bear the specific identification of this bidding process indicated in the Invitation to Bid (e) Bear a warning “DO NOT OPEN BEFORE...” the date and time for the opening of bids, in accordance with ITB Clause 16.22</p> <p>SAMPLE ILLUSTRATION</p> <div data-bbox="501 1093 1206 1456" style="border: 1px solid black; padding: 10px; margin: 10px auto; width: fit-content;"> <p style="text-align: right;">“ORIGINAL BID”</p> <p>NAME OF THE CONTRACT TO BE BID : NAME AND ADDRESS OF THE BIDDER : NAME AND ADDRESS OF PROCURING ENTITY’S BAC : CAPTAIN DONALDO A. MENDOZA BAC Chairman - Charlie Tel: 7944-2358 www.caap.gov.ph CIVIL AVIATION AUTHORITY OF THE PHILIPPINES OLD MIA ROAD, PASAY CITY, M.M. 1300</p> <p>BID NO. : “DO NOT OPEN BEFORE (THE DATE AND TIME FOR THE OPENING OF BIDS)”</p> </div>
<p>16.1</p>	<p>Bids must be duly received by the BAC Secretariat through manual submission. The address for submission of bids is</p> <p style="text-align: center;">THE BAC OFFICE CIVIL AVIATION AUTHORITY OF THE PHILIPPINES OLD MIA ROAD, PASAY CITY 1300 PHILIPPINES</p>
<p>19.3</p>	<p>Partial Bid is not allowed. The goods are grouped in a single lot and the lot shall not be divided into sub-lots for the purpose of bidding, evaluation,</p>

	and contract award.
20.2	The Contractor shall be responsible for securing all necessary permits (i.e. Electrical/Civil work Permits, Permit to Import, NTC, Security Pass, other local permits, etc.) from respective offices that may be necessary for the installation of the equipment at site. The cost of acquiring such permits including its processing shall be borne by the Contractor.
21.2	<p>The following documents shall be <u>submitted together with the Technical Proposal:</u></p> <ol style="list-style-type: none"> 1. System Interconnection Design Diagram <i>signed and sealed by a Professional ECE (PECE);</i> 2. Siting/Location Plan (<i>Wind Sensors, Relative Humidity and Temperature Sensor, RVR systems, Ceilometer, Mast and Cable Layout plan</i>) and shall indicate their distance with respect to the runway centerline and control tower. The document shall be <i>signed and sealed by a PECE;</i> 3. Detailed equipment room layout plan of AWOS system & other subsystem and shall be <i>signed and sealed by a PECE;</i> 4. Power/Electrical/Grounding and Cabling System Design Plan including electrical system single line diagram <i>signed and sealed by Professional Electrical Engineer (PEE);</i> 5. Project Work Schedule/Plan (365 calendar days) 6. Original latest versions of OEM Equipment Technical Characteristics/ Specification, manuals and brochures of proposed products; 7. Copy of the PRC Certificate or clear photocopy of PECE/PEE License of the signing PECE/PEE; 8. Copy of PTR of the signing PECE/PEE; 9. Certificate of Good Standing from Accredited Professional Organization shall be submitted by the signing PECE/PEE; 10. Item I.4 of Section VII. Technical Specifications – Certificate of Site Inspection. <p>In addition to the required documents the following documents shall be <u>submitted during the Post Qualifications stage:</u></p> <ol style="list-style-type: none"> 1. Certificate of Exclusive or Authorized Distributorship issued by the

	<p>Original Equipment Manufacturer (OEM) of supplied equipment.</p> <p>2. Valid ISO 9001 and 14001 Certificates (<i>or its internationally recognized equivalent</i>) of Company and Product.</p>
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Section IV. General Conditions of Contract

Notes on the General Conditions of Contract

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

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

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

1. **Scope of Contract**

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

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

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

2. **Advance Payment and Terms of Payment**

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

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

3. **Performance Security**

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

4. **Inspection and Tests**

The Procuring Entity or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Project specifications at no extra cost to the Procuring Entity in accordance with the Generic Procurement Manual. In addition to tests in the **SCC, Section IV (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

- 6.1. 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.
- 6.2. The Procuring Entity shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall, repair or replace the defective Goods or parts thereof without cost to the Procuring Entity, pursuant to the Generic Procurement Manual.

6. Liability of the Supplier

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

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

Section V. Special Conditions of Contract

Notes on the Special Conditions of Contract

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

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

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

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

Special Conditions of Contract

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 at New Bicol International Airport. 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 at New Bicol Airport. 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</p> <p style="text-align: center;">ANS AFOC: Leoncio M. Gomez Contact No.: 09497098965 and/or ANS FIC: Ervin B. Tino Contact No.: 09089424847 or any authorized representative at Legazpi Airport</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> <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; d. performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and

- e. training of the Procuring Entity’s personnel, at the Supplier’s plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied Goods.
- f. The Contractor/Supplier shall warrant the entire equipment, assemblies, software and related integration/site works for one (1) year Defect Liability Period (DLP) (parts and service) plus (1) year Warranty Period (parts and service).

For wind speed and wind direction sensor, barometric pressure sensor, relative humidity & temperature sensor, radiation shield, runway visual range system, background luminance, present weather detector, obstruction lights for the RVR system, lightning arrester/protection for RVR system, cloud measuring and vertical visibility measuring sensor, connection and termination box, central computing system, data logging system, NEMA 4X stainless steel enclosure, meteorological software and configuration software, 19” cabinet rack, IT equipment (for LAN connectivity and workstations), wind panel displays, data panel displays, workstation units (for both the cabroom and ANS equipment room), 10 meters frangible mast complete with foundation kits, passive lightning rod, LED obstacle lights, UHF transceivers/modem communication radios, UHF directional antenna, UHF antenna cable, UHF frequency license, , solar power system (as main power source), 12Vdc/52Ah batteries, battery regulator/charger, over-voltage protection device, direct burial power cable, surge protection device, interface devices (if applicable), mounting kits, connectors, configuration tools and etc.) with defects that occur within the Warranty Period and requiring the equipment to be shut down for repair/service, the Contractor/Supplier shall provide and install a service equipment with equivalent performance as temporary replacement of a defective equipment (stated above)/part in order to maintain continuous service to the Air Navigation Facility (ANF).

The Contractor/Supplier shall describe the proposed support provisions within the DLP and Warranty period.

The Contractor/Supplier shall submit an OEM issued guarantee that the availability of spare parts for the equipment supplied shall be at least 10 years after the Project acceptance.

The Contract price for the Goods shall include the prices charged by the Supplier for incidental services and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.

Spare Parts –

The Supplier is required to provide all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:

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

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

The Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spare parts or components for the Goods for a period of 10 years.

The Contractor/Supplier shall submit an OEM issued guarantee that the availability of spare parts for the equipment supplied shall be at least 10 years after the Project acceptance.

Spare parts or components shall be supplied as promptly as possible, but in any case, within 1 year of placing the order.

The period for correction of defects in the warranty period is **within fifteen (15) days**.

Packaging –

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

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

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

Name of the Procuring Entity: **Civil Aviation Authority of the Philippines**

	<p>Name of the Supplier</p> <p>Contract Description</p> <p>Final Destination</p> <p>Gross weight</p> <p>Any special lifting instructions</p> <p>Any special handling instructions</p> <p>Any relevant 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>

	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.
2.2	This is a Turn-Key Project Payment will be after issuance of project completion Certification of CAAP
4	The inspections and tests that will be conducted are: <ul style="list-style-type: none"> A. <i>Verification/Inspection of meteorological equipment and conformity to Contract Specification;</i> B. <i>Verification/Inspection of frangible mast erection/tilting, direct burial power cable laying, trenching and backfilling;</i> C. <i>Periodic inspections at site, FAT, Commissioning and SAT.</i>

Section VI. Schedule of Requirements

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

Item Number	Description	Quantity	Unit	Delivered, Weeks/Months
I	Meteorological Sensor			
	Aviation Weather System complete with:			
	Wind speed and wind direction sensors			
	Temperature and relative humidity sensor			
	Digital barometric pressure sensor			
	Radiation Shield (for temperature and relative humidity sensor)			
	Shielded connection cables (minimum of 10 meters)	2	lots	
	DOST-PAGASA Certification of Meteorological Sensors			
	Bird prevention kit and grounding kit			
	Operation, Maintenance, Technical manuals in English Language including diagrams			
	Accessories, Connectors, Configuration Tool & Mounting Kits			
	Testing & Personnel Training			
II	Runway Visual Range (RVR) System			
	Runway Visual Range (RVR) System complete with			
	Transmitter and receiver unit <i>(including interface units, and enclosure) or its equivalent system</i>			
	Present Weather Sensor			
	Background luminance sensor			
	Standard 30 meters baseline			
	2.5 meters mast			
	Backup battery			
	Obstruction lights	1	lot	
	Connection and Termination Box			
	AC power supply			
	Software Configuration, Integration, Testing & Documentation			
	Mounting Hardware, Mounting Kits and Accessories			
	Lightning Arrester/protection			
	Surge Protection Device, Cabling and Interface			
	Testing & Personnel Training			
III	Cloud Height & Vertical Visibility Measuring Systems			
	Cloud height & Vertical visibility measuring system complete with			
	Cloud height measuring sensor and vertical visibility measuring sensors			
	Foundation kits			
	Connection and Termination Box			
	AC power supply	1	lot	
	Software Configuration, Integration, Testing & Documentation			
	Mounting Hardware, Mounting Kits and Accessories			
	Surge Protection Device, Cabling and Interface			
	Testing & Personnel Training			
IV	Data Collection and Central Processing			
	Meteorological Data Collection Systems complete with:	1	lot	

365 calendar days upon receipt of NTP.
(Project Site: New Bicol International Airport)

	Data Logging System			
	Stainless steel enclosure with NEMA 4X enclosure compliant (<i>located at the runway sensor sites</i>)			
	Connection and Termination Box			
	Central Server			
	19" inches cabinet rack			
	IT Equipment, LAN connectivity and conversion circuits			
	Workstation Unit (<i>located at the equipment room</i>)			
	Workstation Unit (<i>located at the CAB room</i>)			
	Wind panel displays			
	Data panel displays			
	Transient Voltage Surge Suppressor (TVSS)			
	Uninterruptible Power Supply (UPS) with extra battery			
	Back-up external 2TB Hard disk drive (HDD)			
	Meteorological Software with unlimited licenses			
	Software Configuration, Integration, Testing & Documentation			
	Mounting Hardware, Mounting Kits and Accessories			
V	Telemetry Systems			
	UHF Communication Radio Systems complete with:			
	UHF Radio Transceivers/Modem (<i>located at control tower</i>)			
	UHF Radio Transceiver/Modem (<i>located at runway sensor sites</i>)			
	UHF Radio Combiner or equivalent system			
	UHF Directional Antenna Systems	1	lot	
	UHF Antenna cable (<i>minimum of 10 meters per antenna</i>)			
	Surge Protection Device			
	UHF Frequency Licenses			
	Operation and Maintenance Manual			
	Accessories, Connectors & Mounting Kits			
	Testing & Personnel Training			
VI	Frangible 10 meters Mast with Lightning Protection and Obstacle Light			
	ICAO Compliant Frangible 10m Mast complete with:			
	Foundation kits with plywood box			
	Provision for lightning rod			
	Passive Lightning Rod			
	LED Obstacle Lights	2	lots	
	Universal Mounting Arm for wind sensor			
	Accessories, Connectors & Mounting Kits			
	Testing & Personnel Training			
VII	Meteorological Equipment Power Source			
	Meteorological equipment power source complete with:			
	Solar Power System (Main Power Source)			
	12VDC/52Ah (minimum) internal batteries			
	Battery regulator/charger			
	Battery fuse and over-voltage protection device	2	lots	
	AC/DC power supply			
	Direct Earth Burial (DEB) power cable			
	Surge Protection Device			
	Mounting Hardware, Mounting Kits and Accessories			
VIII	Maintenance/ Test Equipment and Spare Parts			
	Standard AWOS Maintenance/ Test Equipment complete with	1	lot	

	ANS Service/Maintenance Laptop			
	Data / Communications Cable			
	Field calibrator for Present weather sensor			
	Field calibrator for Background luminance sensors			
	Field calibrator for Relative humidity and temperature sensor			
	Field calibrator for RVR transmitter and receiver			
	Configuration software, Simulation tools and licenses			
	Maintenance/Technical Personnel Training			
	Standard Spare for the following group:			
	Spare Central Server			
	Spare Workstation Unit			
	Spare parts for Meteorological Weather sensors group			
	Spare parts for Cloud height & Vertical Visibility measuring sensors group			
	Spare parts for Runway Visual Range (RVR) System group			
	Spare parts for Data Collection and Central Processing System group			
	3x2TB Hard Drive (compatible with the supplied systems)			
IX	Civil Works			
	Civil works for the installation of direct burial power cable complete with:			
	Cable Laying Jobs	1	lot	
X	Factory Acceptance Testing and Factory Training			
	Foreign Testing and Training detailed as:			
	Factory Acceptance Test (2 ANS Technical participants)	1	lot	
	Factory Training (5 ANS Technical participants)	1	lot	

NOTE:

1. Refer to Technical Specifications for details requirement.

Section VII. Technical Specifications

Notes for Preparing the Technical Specifications

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

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

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

Sample Clause: Equivalency of Standards and Codes

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

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

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

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

Bidders must state here either “Comply” or “Not Comply” against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of “Comply” or “Not Comply” must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer’s un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidders statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the applicable laws and issuances.

The Bidder shall also indicate the appropriate reference section including its page number in documents submitted to support the compliance statement indicated in the table of Technical Specifications. The Bidder shall indicate “Will Supply” if items required are to be supplied by the Bidder with corresponding prices indicated in the Financial Proposal.

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
A.	GENERAL REQUIREMENT		
A.1	The Civil Aviation Authority of the Philippines (CAAP) intends to procure a brand-new aviation meteorological equipment and other ancillaries for the New Bicol International Airport in accordance with the International Civil Aviation Organization (ICAO) Standards and Recommended Practices (SARPs). The project intends to install new state-of-the-art Automated Weather Observing System (AWOS) which shall include wind speed & wind direction, barometric pressure, relative humidity & temperature, Runway Visual Range (RVR) System, Cloud Height & Vertical Visibility Measuring		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	Systems, Background Luminance, Present Weather Sensor, 10 meters frangible aviation mast, data collection system, wireless data links and other vital ancillaries.		
A.2	Construction design drawings and installation plans shall be submitted after the award of Contract for approval of CAAP (<i>design review</i>) prior to its installation/implementation.		
A.3	For non-OEM bidders (whether sole or JV partner), the CAAP requires that the bidder is an exclusive or authorized distributor of the meteorological equipment.		
A.4	The CAAP requires the equipment supplied by the contractor shall be brand-new and of latest version/model.		
A.5	The winning bidder shall be required to submit a Cash-Flow Statement. The said document shall be submitted together with the construction drawings for approval before the start of project implementation.		
A.6	The contractor shall assure that the supplied Automated Weather Observing System (AWOS) including subsystem are operational & functional and that no equipment/spare parts is left non-operational or subject for replacement. Failure to do so shall be subject for immediate replacement of the defective unit or non-acceptance of the project.		
A.7	<p>The following documents shall be <u>submitted together with the Technical Proposal:</u></p> <ol style="list-style-type: none"> 1. System Interconnection Design Diagram <i>signed and sealed by a Professional ECE (PECE);</i> 2. Siting/Location Plan (<i>Wind Sensors, Relative Humidity and Temperature Sensor, RVR systems, Ceilometer, Mast and Cable Layout plan</i>) and shall indicate their distance with respect to the runway centerline and control tower. The document shall be <i>signed and sealed by a PECE;</i> 3. Detailed equipment room layout plan of 		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	<p>AWOS system & other subsystem and shall be <i>signed and sealed by a PECE</i>;</p> <ol style="list-style-type: none"> 4. Power/Electrical/Grounding and Cabling System Design Plan including electrical system single line diagram <i>signed and sealed by Professional Electrical Engineer (PEE)</i>; 5. Project Work Schedule/Plan (365 calendar days) 6. Original latest versions of OEM Equipment Technical Characteristics/ Specification, manuals and brochures of proposed products; 7. Copy of the PRC Certificate or clear photocopy of PECE/PEE License of the signing PECE/PEE; 8. Copy of PTR of the signing PECE/PEE; 9. Certificate of Good Standing from Accredited Professional Organization shall be submitted by the signing PECE/PEE; 10. Item I.4 of Section VII. Technical Specifications – Certificate of Site Inspection. <p>In addition to the required documents the following documents shall be <u>submitted during the Post Qualifications stage:</u></p> <ol style="list-style-type: none"> 1. Certificate of Exclusive or Authorized Distributorship issued by the Original Equipment Manufacturer (OEM) of supplied equipment. 2. Valid ISO 9001 and 14001 Certificates (<i>or its internationally recognized equivalent</i>) of Company and Product. 		
A.8	The Aviation Automated Weather Observing System (AWOS) shall be of aeronautical standard type.		
A.9	The scope of the project shall be supply, delivery, installation, integration, configure and perform		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	testing of AWOS system/equipment/sensors including the supply of necessary subsystem and components for AWOS system as specified in Section VI. Schedule of Requirements.		
A.10	Prior to installation and site testing, the contractor is required to acquire a calibration certification for the supplied meteorological instrument from PAGASA. Cost of the certification shall be borne by the Contractor.		
A.11	<p>The contractor shall facilitate and shoulder the cost of facilitation, registration and permits of UHF frequency license as per NTC regulation under the name of CAAP.</p> <p>The following UHF frequencies are used by CAAP for AWOS:</p> <ul style="list-style-type: none"> • 404.2 MHz • 404.4 MHz • 404.6 MHz • 404.8 MHz 		
A.12	The contractor shall properly observe the number of runway sensor site. For this project the contractor shall consider two (2) runways sensor sites, one (1) RVR system site and one (1) ceilometer site.		
A.13	The RVR system and Cloud Height & Vertical Visibility Measuring Systems shall be installed and operate at the precision approach runway (RWY05).		
A.14	The contractor shall supply all the necessary bushing, grounding kits and passive lightning rods to prevent the aviation meteorological system from damages produced by lightning strikes.		
A.15	The contractor shall provide all the necessary connectors, mounting accessories and other ancillaries, interface cards, modules and/or data conversion circuit for the entire system.		
A.16	The contractor shall supply a service communication cable (<i>such as but not limited to RS485, RS232, and etc.</i>) that shall be able to interface the sensors with the ANS maintenance/service laptop. The contractor shall assure that the supplied service communication		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	cable shall be fully compatible and/or of the same brand with the sensor and shall be at least two (2) meters in length.		
A.17	Proper cable management and cable tagging shall be strictly enforced. The contractor shall provide documentation indicating the label and locations/terminations of the cables after the completion of installation activities.		
A.18	The contractor shall provide a (sticker) nameplate attached to the body of the equipment which clearly states the following labels: <ol style="list-style-type: none"> 1. Civil Aviation Authority of the Philippines (CAAP) 2. Name/type of Equipment 3. Date Installed (mm/dd/yyyy format) 4. Location/Site/Facility 5. Name of Contractor 		
A.19	The nameplate shall be attached to the body of the unit using special type of adhesives. The contractor shall assure that the attached nameplate shall last for the next five years regardless of continuous operation of the equipment or not.		
A.20	A warranty seal (sticker) containing the date accepted, warranty period and properly signed by the authorized representative shall be attached to the body of the equipment.		
A.21	After the end of the reliability testing, the contractor shall inform the ANS-FIC and ATS-FIC of the schedule of the conduct of meteorological readings sampling.		
A.22	The sampling of meteorological instrument shall serve as proof and assurance that the meteorological equipment supplied by contractor is of its highest performance, reliability and availability. <i>(Please refer to the ANNEX B - Meteorological Instrument Readings Sampling Form)</i>		
A.23	The remarks and findings observed by the ANS and ATS personnel pertaining to operational performance shall be given immediate action by the contractor. <i>ANNEX B - Meteorological Instrument Readings Sampling Form</i> shall serve as one of the required documents before the start of the Site Acceptance Test (SAT).		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
A.24	The contractor shall inform the CAAP for the completion of the sampling procedure.		
A.25	The contractor may have the option to supply a meteorological display that is not of the same brand/company as meteorological sensors. Provided, the supplied display shall be compatible with other critical components and shall display all required fields significant to the ATC operations in accordance with the International Civil Aviation Organization (ICAO) Standards and Recommended Practices (SARPs).		
A.26	The Bidder shall be issued with the approved reference drawings upon presentation of the official receipt (OR) as proof of payment of the applicable fee for the Bidding Document for this project.		
A.27	The contractor shall use the attached reference drawings for the proposed location of the AWOS including its subsystem. Any significant deviation or alteration to the location of the AWOS system and its subsystem which is beneficial to CAAP shall be put into writing by the prospective bidder and shall be subject for approval of CAAP during implementation. Any cost that may arise from the location change shall be borne by the Contractor.		
A.28	The contractor shall assure that the supplied meteorological equipment/system shall be fully operational from sensors at the runways up to the display at the tower cab room.		
A.29	The bidder shall explain any deviation from the design/configuration or specification giving the rationale/benefit of offering such new technologies. The explanation shall be supported by references and shall not be of lesser or lower quality or performance to meet the objective of the project.		
A.30	The contractor shall submit the approved as-built plans of the project to the New Bicol International Airport and the ANS Technical Center for future reference and archive purpose. Failure to do so shall result to non-acceptance or non-payment of the project.		
A.31	The CAAP shall have the full authority to inspect, recommend, accept and reject materials and		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	workmanship that will be found to be below the required minimum specifications and Philippine Standards.		
B.	AUTOMATED WEATHER OBSERVING SYSTEM		
B.1	Meteorological Weather Sensor		
B.1.1	Wind speed and Wind Direction Sensors		
B.1.1.1	Performance Requirement		
B.1.1.1.1	The contractor shall supply a robust, durable, high reliability and corrosion resistant wind speed and wind direction sensors.		
B.1.1.1.2	The supplied wind speed and wind direction sensor shall be maintenance-free and has a clear north indication.		
B.1.1.1.3	The contractor shall supply a wind speed and direction sensor with an Ingress Protection (IP) 65 or higher protection.		
B.1.1.1.4	The contractor shall supply a cross arm which shall be used to attach the wind speed and direction sensors.		
B.1.1.1.5	The supplied wind sensor shall have the capability to measure both wind speed and wind direction. The raw data collected shall be input to the data logging system for pre-processing and transmission to CAB room.		
B.1.1.1.6	The contractor shall supply a minimum of three (3) wind speed and wind direction sensor. The two sensors shall be installed on the runway sites while the other one shall serve as spare.		
B.1.1.2	Functional Specification		
B.1.1.2.1	Wind Speed Sensor		
B.1.1.2.1.1	Measuring range : 0 ... 75m/s		
B.1.1.2.1.2	Accuracy : ± 0.2 m/s		
B.1.1.2.1.3	Resolution : > 0.01 m/s		
B.1.1.2.1.4	Threshold : > 0.01 m/s		
B.1.1.2.1.5	Units : m/s, knots, mph, km/h		
B.1.1.2.2	Wind Direction Sensor		
B.1.1.2.2.1	Measuring range : 0... 360 degree or 0... 359.9 degrees		
B.1.1.2.2.2	Accuracy : $\pm 2^\circ$		
B.1.1.2.2.3	Resolution : $> 0.1^\circ$		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
B.1.1.2.2.4	Threshold : minimum of 0.1 m/s		
B.1.1.2.2.5	Units : degrees		
B.1.2	Temperature and Relative Humidity Sensor		
B.1.2.1	Performance Requirement		
B.1.2.1.1	The contractor shall supply reliable and high stability temperature and relative humidity sensor that can withstand harsh environmental conditions.		
B.1.2.1.2	The contractor shall supply a radiation shield that will serve as protection from scattered & direct sunlight exposure, precipitation and help achieve maximum performance of the sensor.		
B.1.2.1.3	The supplied temperature and relative humidity sensor with radiation shield shall be weather-proof and corrosion-resistant with an Ingress Protection (IP) 65 or higher protection.		
B.1.2.1.4	The contractor shall supply a service communication cable that shall be able to interface the temperature & relative humidity sensor and service /maintenance laptop. The contractor shall assure that the supplied service communication cable shall be fully compatible and/or of the same brand of the sensor.		
B.1.2.1.5	The contractor shall supply a minimum of three (3) temperature and relative humidity sensors. The two sensors shall be installed on the runway sites while the other one shall serve as spare.		
B.1.2.1.6	The contractor shall supply the required number of relative humidity and temperature sensor. However, only one temperature and relative humidity sensor shall be installed while the other sensor shall be supplied and delivered as spare.		
B.1.2.2	Functional Specification		
B.1.2.2.1	Relative Humidity Sensor		
B.1.2.2.1.1	Measurement range : 0... 100% RH		
B.1.2.2.1.2	Accuracy : $\pm 0.8\%$ RH or $\pm 1\%$ RH		
B.1.2.2.2	Runway Surface Temperature Sensor		
B.1.2.2.2.1	Measurement range : minimum 0°C to 60°C		
B.1.2.2.2.2	Sensor type : Pt100 RTD		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
B.1.3	Barometric Pressure Sensor		
B.1.3.1	Performance Requirement		
B.1.3.1.1	The supplied barometric pressure sensor shall be light weight and can be interfaced via RS232, RS485, SDI 12 or its equivalent connection interface.		
B.1.3.1.2	The contractor shall supply barometric pressure sensor enclosed in a NEMA 4 enclosure or equivalent.		
B.1.3.1.3	The contractor shall assure that the enclosure of pressure sensor shall be properly sealed and the opening of the sensor shall be free from any foreign object intrusion.		
B.1.3.1.4	The contractor shall supply a barometric pressure sensor containing a multiple transducer installed inside the sensor.		
B.1.3.1.5	The contractor shall supply a digital barometric pressure sensor that shall be installed inside the CAB Room at the control tower.		
B.1.3.1.6	The contractor shall supply the two (2) barometric pressure sensor . However, only one barometric pressure shall be installed while the other sensor shall be supplied and delivered as spare.		
B.1.3.2	Functional Specification		
B.1.3.2.1	Measurement range : 500 to 1100hPa		
B.1.3.2.2	Resolution : 0.01hPa		
B.1.3.2.3	Accuracy : less than 0.5hPa		
B.1.3.2.4	Pressure Fitting : hose barbed or barbed fitting		
B.1.3.2.5	Pressure Units : hPa, Pa, KPa, mmHg, inHg, psi and etc.		
B.1.3.2.6	Operating Temperature Range : 0°C to +60°C		
B.1.3.2.7	Voltage Supply : 10 V _{DC} to +30V _{DC} or as per OEM		
B.2	Runway Visual Range (RVR) System		
B.2.1	Performance Requirement		
B.2.1.1	The Runway Visual Range (RVR) is the range over		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	which the pilot of an aircraft can see the runway surface markings or the lights delineating the runway or identifying its center line, the said system is required to support precision landing and takeoff operations.		
B.2.1.2	The contractor shall supply runway visual range system that measures and evaluate the visibility, background luminance and runway light intensity to determine the distance a pilot should be able to see down the runway.		
B.2.1.3	The contractor shall supply all necessary subcomponent/subsystem required for the complete runway visual range system.		
B.2.1.4	The RVR system shall be supplied with lightning protection to provide additional protection and insulation of the system from damaging effects of lightning. Any form of lightning arrester/protection is acceptable, with the objective that the systems are protected from the damage due to lightning strikes.		
B.2.1.5	All equipment necessary for the installations of the lighting protection shall be supplied and installed by the contractor.		
B.2.1.6	The horizontal visibility and background luminance sensor shall be located near the touchdown zone of the precision approach runway at new Bicol International Airport.		
B.2.1.7	The horizontal visibility and background luminance sensor shall be protected against lightning and surges. Installation of the said protection devices shall be supplied and installed by the contractor.		
B.2.1.8	The horizontal visibility and background luminance sensor shall be connected to meteorological sensor site located near the touchdown zone of the precision approach runway for consolidation and transmission to ANS maintenance room.		
B.2.1.9	The calibration kit for the horizontal visibility and background luminance sensors shall be provided by the contractor.		
B.2.1.10	The contractor shall attach the horizontal visibility and background luminance sensor to a 2.5 frangible meters mast or as per OEM designed frangible mast.		
B.2.1.11	The aviation frangible mast of the RVR system shall		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	be painted with red & white strips or orange & white strip.		
B.2.1.12	The power and data cable used in the RVR systems equipment shall be enclosed and laid in the conduits and manholes as provided by the AFL project.		
B.2.1.13	The base frames of the RVR system shall be aligned or equal to the threshold elevation of the precision approach runway or as per OEM construction design.		
B.3	Cloud Height & Vertical Visibility Measuring Systems		
B.3.1	Performance Requirement		
B.3.1.1	The contractor shall supply a cloud base height and vertical visibility measuring equipment capable of measuring the cloud amount, cloud type and height of the cloud base relevant to the aeronautical operation.		
B.3.1.2	The contractor shall supply a cloud base height and vertical visibility equipment capable of measuring cloud height for minimum range of 0 feet to 20,000 feet or higher range.		
B.3.1.3	The supplied cloud measuring equipment shall use laser light detection and ranging system (LIDAR) technology or higher technological approach.		
B.3.1.4	The supplied data connection of the cloud base measuring equipment shall be connected to the wind station located at Runway 05.		
B.3.1.5	The supplied cloud base height and vertical visibility measuring equipment shall be enclosed inside a shield which shall serves as protection against direct sunlight exposure and foreign object.		
B.3.1.6	The proposed location of the cloud measuring and vertical visibility measuring systems equipment can be seen in the attached reference drawings.		
B.3.1.7	The power and data cable used in the cloud measuring and vertical visibility measuring systems equipment shall be enclosed and laid in the conduits and manholes as provided by the AFL project.		
B.3.1.8	The base frames of the cloud base height and vertical visibility measuring equipment shall be		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	aligned or equal to the threshold elevation of the precision approach runway or as per OEM construction design.		
B.4	Data Collection and Central Processing System		
B.4.1	Meteorological Data Logging Equipment		
B.4.1.1	Performance Requirement		
B.4.1.1.1	The contractor shall supply a data logging system which will collect and pre-process all necessary raw data and transmit it to the ANF equipment room for post processing and data display.		
B.4.1.1.2	The circuit board and/or data logging system shall be protected from electrostatic discharge which may cause latent damage to electronic circuits. The contractor shall supply the said protective device.		
B.4.1.1.3	The data logging system shall be powered-up by either the solar PV system (main) <i>or</i> AC or local power source (secondary).		
B.4.1.1.4	Each sensor inputs of the data logging system shall be protected against induced transient. Varistor or any equivalent technology shall be used by the contractor as protection device to each sensor inputs of the logging system.		
B.4.1.1.5	The data logging system shall be housed inside a stainless-steel enclosure together with battery, battery regulators, over-voltage protection device, radio modems, surge protection device and other vital ancillaries.		
B.4.1.1.6	The contractor shall supply a stainless-steel enclosure with NEMA 4 compliant (or equivalent) and painted in powder coated paint with Ingress Protection (IP) 65 or better performance.		
B.4.1.1.7	The contractor shall supply a data logging system with a capability to manually reset in case the system shows abnormalities and inappropriate behavior.		
B.4.1.1.8	The data logging system shall be able to interface via UHF communication radios for data transmission and meteorological sensor.		
B.4.1.1.9	The enclosure shall use DIN rails for easy mounting & placement of equipment, proper tagging and labeling of the connection wires inside the enclosure is strictly observed.		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
B.4.1.1.10	The minimum number of data logging equipment shall be three (3), two of which shall be installed in the runway sensor site while the remaining shall serve as spare unit.		
B.4.1.2	Functional Specification		
B.4.1.2.1	Analog Channels : minimum of 10 inputs		
B.4.1.2.2	Memory : > 2MB (RAM) and > 1MB (built-in non-volatile memory/program)		
B.4.1.2.3	Serial Ports : one (1) RS232 and/or one (1) RS485 (optional)		
B.4.2	Central Processing System		
B.4.2.1	Performance Requirement		
B.4.2.1.1	The contractor shall supply a central processing system capable of processing the received raw data from the runway sensor sites and shall properly endorse the data to the respective meteorological displays. The said system shall act as the heart of the AWOS system.		
B.4.2.1.2	The contractor shall provide the central processing system with a fully redundant configuration. The system shall be configured to automatically switch from one system to another system once anomaly/failure is detected.		
B.4.2.1.3	The data collecting system shall be located at the runway sensor site while the central processing system shall be located at the ANS equipment room.		
B.4.2.1.4	The central processing system shall be installed on a standard 19 inches cabinet rack (or OEM approved).		
B.4.2.1.5	Cabinet rack with minimum of two (2) exhaust fans located at the rear portion and a detachable vented side panels is preferred. Any meteorological equipment manufacturer approved rack design with exhaust fans is acceptable.		
B.4.2.1.6	The front door of the cabinet rack is preferably constructed with a flexi-glass. Any manufacturer approved rack design with lock and key is		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	acceptable.		
B.4.2.1.7	The cabinet rack shall contain a detachable side panels, with detachable vented swing backdoor with push lock; or any manufacturer approved rack design.		
B.4.2.1.8	The cabinet rack shall have provision for the required electrical outlet and power strip fuses rated for the purpose.		
B.4.2.2	Functional Specification		
B.4.2.2.1	Licensed Operating System		
B.4.2.2.2	Processor Clock Speed : > 2.9 GHz		
B.4.2.2.3	Drive Bay : minimum of two (2) internal 3.5" bays		
B.4.2.2.4	Drive Capacity : minimum of two (2) 2TB 3.5" SATA 7200rpm Hot-Plug Hard Drive or SSD or SAS		
B.4.2.2.5	RAM : minimum of 16 GB DDR4		
B.4.2.2.6	RAID Controllers : capable of RAID 0 <i>(mirror)</i>		
B.4.2.2.7	Optical Drive : DVD-Writer		
B.4.2.2.8	Display : 21" HD LED Monitor		
B.4.3	Workstation Units		
B.4.3.1	Performance Requirement		
B.4.3.1.1	The contractor shall supply a workstation unit for weather display and maintenance & monitoring system for use of Air Traffic Controller and ANS Technical Personnel and respectively.		
B.4.3.1.2	The contractor shall position the supplied workstation unit at the ANS equipment room and ATC cabroom.		
B.4.3.1.3	The supplied workstation unit at the ANS equipment shall contain highest level of access credentials and all the privileges to modify, adjust and alter AWOS critical configurations and settings.		
B.4.3.1.4	The workstation located at the ATC cabroom shall		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	be limited to monitoring purposes only. The said unit shall contain limited privileges and access credential.		
B.4.3.1.5	Each workstation unit shall contain AWOS software with unlimited license. All necessary meteorological software and installers shall be endorsed to the ANS-FIC and ANS Project Implementation Department by the contractor. All configuration files shall be stored in a USB or CD for safe keeping purposes.		
B.4.3.1.6	Configuration file & tools, software and documentation shall be provided and endorsed to the ANS-FIC by the contractor as part of the delivery. Failure to do shall result to disqualification or non-acceptance of the project.		
B.4.3.2	Functional Specification		
B.4.3.2.1	Operating System: License Operating System		
B.4.3.2.2	Processor Clock Speed : ≥ 3.0 GHz		
B.4.3.2.3	Drive : 2TB SATA 7200rpm HDD or SSD or SAS		
B.4.3.2.4	RAM : minimum of 16 GB DDR4		
B.4.3.2.5	Graphics Card : as per OEM		
B.4.3.2.6	Optical Drive : DVD-Writer		
B.4.3.2.7	Display Monitor : 21" HD LED		
B.4.4	Meteorological Weather Displays		
B.4.4.1	Performance Requirement		
B.4.4.1.1	The contractor shall assure that the weather display unit supplied shall contain all meteorological information/fields needed by the ATC operations. It shall be able to display all the required fields in real-time.		
B.4.4.1.2	The contractor may have the option to supply a meteorological display that is not of the same brand/company as meteorological sensors. Provided, the supplied display shall be compatible with the central server and shall display all required fields significant to the ATC operations in accordance with the International Civil Aviation		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	Organization (ICAO) Standards and Recommended Practices (SARPs).		
B.4.4.1.3	The contractor shall supply a weather display that is readable by the ATC controller regardless of daylight and brightness of the environment.		
B.4.4.1.4	The supplied meteorological display shall be lightweight and portable and be installed directly to the ATC console at ATC cab room.		
B.4.4.1.5	The contractor shall not be confused with the workstation unit and weather display unit as it caters different purposes. The weather display specified in this provision shall be a portable and attached directly to the console while the Workstation Unit (WU) is a computer unit where configurations and settings can be modified. However, for this area (ATC cab room) the WU shall be limited to monitoring purposes only.		
B.4.5	Transient Voltage Surge Suppressor (TVSS)		
B.4.5.1	Functional Specification		
B.4.5.1.1	The contractor shall supply a Transient Voltage Surge Suppressor (TVSS) device that shall divert the excess voltage and current from transient/surge into grounding wire and prevents it from flowing through the electrical and electronic equipment while at the same time allowing the normal voltage to continue along its path.		
B.4.5.1.2	The surge protection device provided shall have minimum current handling capacity of 30KA or as per OEM design.		
B.4.5.1.3	The contractor shall supply transient surge protection device per rack that will serve as power line protection of the equipment.		
B.4.6	Uninterruptible Power Supply (UPS) with extra battery		
B.4.6.1	Performance Requirement		
B.4.6.1.1	The contractor shall supply uninterruptible power supply (UPS) that shall provide battery backup when the electrical power fails or drops to an unacceptable voltage level.		
B.4.6.1.2	The contractor shall supply an uninterruptible power supply (UPS) with a minimum runtime of 25		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)								
	minutes during power outages.										
B.4.6.1.3	The minimum volt-ampere-hour capacity shall be in accordance with the supplied load.										
B.4.6.1.4	The UPS shall have an audible alerts to alarm below performance such as low battery, etc.										
B.4.6.1.5	The UPS shall have a control console or a multi-function LCD display which indicate the status of the voltage level of battery, voltage level of AC source and other controls of the UPS.										
B.4.6.1.6	The contractor shall properly observe the minimum number of the UPS for this project: <table border="1" data-bbox="432 840 1139 1193"> <thead> <tr> <th>Equipment</th> <th>Number of UPS</th> </tr> </thead> <tbody> <tr> <td>1. Central Processing System</td> <td>1 unit</td> </tr> <tr> <td>2. Maintenance & Monitoring System</td> <td>1 unit</td> </tr> <tr> <td>3. ATC Cabroom Workstation Unit</td> <td>1 unit</td> </tr> </tbody> </table>	Equipment	Number of UPS	1. Central Processing System	1 unit	2. Maintenance & Monitoring System	1 unit	3. ATC Cabroom Workstation Unit	1 unit		
Equipment	Number of UPS										
1. Central Processing System	1 unit										
2. Maintenance & Monitoring System	1 unit										
3. ATC Cabroom Workstation Unit	1 unit										
B.4.6.2	Functional Specification										
B.4.6.2.1	Output capacity : 900 Watts/ 1.5KVA or as per MET OEM requirements										
B.4.6.2.2	Output frequency : 60Hz										
B.4.6.2.3	Input voltage : 220V										
B.4.6.2.4	Input Frequency : 60Hz +/- 3Hz (auto sensing)										
B.4.6.2.5	Output connections: minimum of eight (8) IEC 320 C13										
B.4.6.2.6	Typical recharge time: min. of three (3) hours										
B.4.6.2.7	Battery type : maintenance free sealed lead-Acid battery										
B.4.7	Lightning Arrester										
B.4.7.1	Performance Requirement										

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
B.4.7.1.1	The contractor shall supply a lightning arrester capable of protecting the sensors from the runway site and the UHF antenna at the ATC control tower.		
B.4.7.1.2	The contractor shall provide a provision for lightning arrester and separate/dedicated grounding wire shall also be provided.		
B.4.7.1.3	The contractor shall supply passive lightning arrester that shall serves as protection against lightning strikes and prevent the weather sensor and other vital ancillaries from damage.		
B.4.7.1.4	The contractor shall supply tinned-copper wire connected from the arrester and shall serves as passage of high current lightning strike directly to ground.		
B.4.7.1.5	The contractor shall assure that the tinned-copper wire shall be highly isolated from the aviation mast structure, weather sensors and other vital ancillaries at the runway sensor site.		
B.4.7.1.6	The contractor shall assure that the supplied lightning protection device shall be able to handle a multi-strike without being damaged.		
B.4.7.1.7	The contractor shall assure that the supplied lightning arrester are properly connected to the ground via grounding radials.		
B.4.7.1.8	The contractor shall supply a grounding radial that shall be placed with 120 degrees separation.		
B.4.7.1.9	The supplied lightning protection device shall be rated with minimum ingress protection (IP) 65 that will serve as protection against extreme weather conditions.		
B.4.7.1.10	The lightning protection device to be supplied shall be placed on the top-most portion of the aviation frangible mast.		
B.4.7.1.11	The supplied lightning arrester shall be able to handle wind load in their respective ANF facility at installation.		
B.4.8	Obstruction Lights		
B.4.8.1	Performance Requirement		
B.4.8.1.1	The contractor shall supply LED obstruction light that shall serves as collision avoidance lighting systems, protecting the mast/structure and the passing aircraft from collision especially during		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	night operation.		
B.4.8.1.2	The obstruction lights shall be made from Light Emitting Diode (LED) based technology.		
B.4.8.1.3	The obstruction lights shall have a luminous intensity greater than 10 candelas with aviation red color and a horizontal radiation pattern of 360°.		
B.4.8.1.4	The obstruction lights shall have a cable gland for easy chaining without external distribution boxes.		
B.4.8.1.5	The LED obstruction light shall be photo-controlled which shall automatically illuminate on low-light/overcast environmental condition.		
B.4.8.1.6	The obstruction lights shall have a colorless glass cover and protected against severe weather condition by an Ingress Protection (IP) 65 or higher protection.		
B.4.8.1.7	The contractor shall assure that the supplied obstruction lights shall be able to handle wind load in their respective ANF facility at installation.		
B.4.8.1.8	The minimum number of obstruction light shall be two (2) units per runway sensor site.		
B.4.8.1.9	All the supplied obstruction light shall be installed on the top-most portion of frangible aviation mast.		
B.4.9	EMP Surge Protector		
B.4.9.1	Performance Requirement		
B.4.9.1.1	The contractor shall supply a lightning EMP surge protector that can give protection against dangerous surge signals on coaxial lines.		
B.4.9.1.2	The contractor shall supply a lightning EMP surge protector complete with gas discharge tube.		
B.4.9.1.3	The contractor shall supply an EMP surge protection device that shall be installed at the cable before the antenna of the UHF transceiver radio/modem.		
B.4.9.1.4	The contractor shall supply an additional/spare gas discharge tubes equivalent to the supplied surge protection device.		
B.4.9.1.5	The supplied EMP surge protector shall be rated with ingress protection (IP) 65.		
B.5	Telemetry Systems		
B.5.1	Performance Requirement		
B.5.1.1	The contractor shall supply a telemetry system that		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	will serve as main communication protocol and shall encompasses data transfer of raw data from runway sensor site to the ANF equipment room for post processing.		
B.5.1.2	The contractor shall supply an Ultra High Frequency (UHF) transceiver radio/modem.		
B.5.1.3	The contractor shall supply an UHF transceiver radio that be located at the runway sensor sites and ATC control tower. The backbone at receiving end (<i>ATC control tower</i>) shall be fully redundant.		
B.5.1.4	The contractor shall supply a UHF radio combiner or its equivalent technology that shall be used to integrate all the received inputs or raw data from runway sensor sites.		
B.5.1.5	The contractor shall supply and install all the necessary accessories for the operation of the telemetry system including antenna cables, brackets, etc.		
B.5.1.6	The contractor shall supply a directional antenna.		
B.5.1.7	The contractor shall assure that the supplied telemetry system shall not be affected by a light to moderate rains and/ moderate wind. Continuous good in quality or performance of data transmission shall be strictly implemented at installation.		
B.5.1.8	The contractor shall assure that the supplied UHF radios (<i>telemetry system</i>) of the meteorological system shall not cause interference and/ undesired noise to the aeronautical frequency (<i>communication and navigational aids</i>) of the control tower.		
B.5.1.9	The contractor shall assure at installation that the supplied telemetry system shall be fully operational and functional. Minimum downtime and loss of signal from transmit to receive shall be strictly observed.		
B.6	Frangible 10 meters Aviation Mast		
B.6.1	Performance Requirement		
B.6.1.1	The contractor shall supply frangible, lightweight, safe, durable, robust and serviceable weather mast that shall hold and support the meteorological sensors and other aviation weather ancillaries.		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
B.6.1.2	The supplied mast should be frangible in order to ensure that they will break, distort or yield if they are accidentally impacted by an aircraft.		
B.6.1.3	The contractor shall supply an aviation frangible mast with a minimum height of 10 meters.		
B.6.1.4	The aviation frangible mast shall be corrosion-free, weather-proof and tiltable during preventive maintenance of sensors and other vital ancillaries.		
B.6.1.5	The contractor shall supply a frangible mast made of fiber glass strips and powder-coated paint or any manufacturer approved mast compliant to ICAO Frangibility Requirements. The Contractor shall submit together with the Technical proposal a copy of frangibility compliance certificate of the mast design.		
B.6.1.6	The contractor shall supply all mounting brackets, foundation bolts & kits, base frames and other ancillaries for the proper erection of the frangible aviation mast.		
B.6.1.7	The minimum number of aviation frangible masts shall be per runway sensor site.		
B.7	Meteorological Equipment Power System		
B.7.1	Performance Requirement		
B.7.1.1	The contractor shall supply a meteorological equipment that shall be powered up by a solar photovoltaic (PV) system. This system shall act as the main power source of the equipment at sensor sites including respective radio links.		
B.7.1.2	The solar PV system shall cater for main power requirements for wind, temperature and pressure sensors and its ancillaries installed at the MET masts.		
B.7.1.3	The solar PV system shall be connected to a battery capable of withstanding 48 hours of continuous operation.		
B.7.1.4	The system shall be provided with a charger, regulator, and an automatic switch to AC or local power (secondary source) once the battery is drained and no sunlight is present.		
B.7.1.5	The contractor shall supply a control circuit device that shall automatically trip to avoid overcharging the battery. It shall be installed inside the		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	enclosure.		
B.7.1.6	The contractor shall supply a separate secondary (backup) power source for the RVR and ceilometer systems.		
B.7.1.7	The contractor shall supply a direct earth burial cable that shall serve as connection medium from the power source (MET 05 - GP shelter; MET 23 - DVOR/DME shelter).		
B.7.1.8	The supplied direct burial power cable shall contain a minimum of 8 mm ² copper wire cross sectional area, XLPE or ERP/PCP insulation, 1KV (or as per AWOS operating voltage) stranded direct burial PVC jacketed and printed with manufacturers trademark throughout the length.		
B.7.1.9	The contractor shall assure that the length of the supplied direct burial power cable shall be able to accommodate the distance between the power sources and the meteorological equipment at runway sensor sites described in B.7.1.7.		
B.7.1.10	The contractor shall coordinate to the ANS Facility-in-Charge or refer to the attached preliminary drawings for the location of the power sources.		
B.7.1.11	The direct burial power cable shall contain an additional 10% from the total length as reserve for slack, bending and turns at installation.		
B.8	Maintenance/ Test Equipment and Spare Parts		
B.8.1	Performance Requirement		
B.8.1.1	The contractor shall supply a service/maintenance laptop that shall be used by the ANS Technical personnel during the conduct of preventive and corrective maintenance.		
B.8.1.2	The service laptop shall be complete with all necessary software & configuration files and shall be able to interface directly at the runway sensor site.		
B.8.1.3	The contractor shall supply a field calibrator equipment but shall not be limited for the following equipment/sensor: <ol style="list-style-type: none"> 1. Present Weather Sensor 2. Background Luminance 3. Relative Humidity and Temperature sensor 		
B.8.1.4	The contractor shall provide spare parts but shall		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	not be limited to the following group of equipment: <ol style="list-style-type: none"> 1. Meteorological weather sensor group 2. Cloud height & vertical visibility measuring sensors group 3. Runway Visual Range (RVR) system group 4. Data Collection and Central Processing system group 5. Telemetry System group 		
B.8.1.5	The contractor shall supply spare central rack-mountable server that shall be used in the advent of one server encountered beyond repair.		
B.8.1.6	The contractor shall supply additional or spare data/communication cable. The minimum quantity shall be sufficient for the operations of the AWOS system.		
B.8.1.7	The contractor shall assure that the supplied Automated Weather Observing System (AWOS) shall contain all necessary spare parts relevant to the operation. Failure to do so shall result to non-acceptance of the project.		
B.8.1.8	The contractor shall supply 3 x 2TB disk capacities compatible with the supplied systems as spare provision. This shall be included in the bill of quantities with corresponding price schedules in the accomplished financial form.		
B.9	Civil Works		
B.9.1	Performance Requirement		
B.9.1.1	The contractor shall consider minor civil works for the cable laying of the power cable.		
B.9.1.2	The contractor shall secure a copy of the reference drawing at the CAAP End-User office after payment of bidding documents.		
B.9.1.3	The contractor shall lay the power cable on the manhole and cable conduits as provided by the Airfield Lighting (AFL) project. During the implementation stage, the contractor shall properly coordinate with AFL project contractor for the exact location of manholes and cable conduits.		
B.9.1.4	The contractor shall strictly implement the standard cable trenching minimum depth and width. CAAP requires that the depth shall be at minimum of 0.6 meters and width shall be at minimum of 0.3 meters all trough-out the entire		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	trenching.		
B.9.1.5	The contractor shall supply a 4 in. yellow caution tape that shall serve as critical marker and demarcation of the cable trenching in the advent where new installation or trenching on the existing site.		
B.9.1.6	The trench shall be provided with a yellow caution tape three (3) inches from the top soil running in line with the Direct Earth Burial (DEB) cable.		
B.10	Factory Acceptance Testing, Factory Training, and Site Training		
B.10.1	Prior to delivery, the Contractor shall conduct a Factory Acceptance Test in order to ensure that the Automated Weather Observing System (AWOS) equipment will operate as intended and that it meets all the contractual requirements.		
B.10.2	A certified factory test result shall be submitted in lieu of the conduct of the FAT test in case of travel restrictions to OEM factory. Tests shall be witnessed via online.		
B.10.3	The CAAP requires that the Automated Weather Observing System (AWOS) equipment and subsystems have passed all tests in the factory (OEM) prior to shipment to the site.		
B.10.4	The factory tests shall be witnessed by two (2) ANS technical personnel for the Automated Weather Observing System (AWOS) equipment. The conduct of all test procedures shall be for 5 days.		
B.10.5	The Bidder shall provide information on: (a). the place; (b). activities for the equipment testing during implementation.		
B.10.6	All travel expenses including its processing (VISA, airfare, hotel accommodations, meals, daily allowances, and health/accident insurance for the duration of the stay) shall be borne by the Contractor. As a minimum, allowances shall be in accordance with the UNDP Daily Subsistence Allowance (DSA) rates. The travel allowance shall commence on the day of departure from home country and shall cease upon arrival/return regardless of time. Cost of the travel		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	<p>expenses shall be included/reflected in the Contractor's Financial Bid Proposal.</p> <p>This provision shall apply for both Factory Acceptance Testing and Factory Training.</p>		
B.10.7	UNDP rates include hotel accommodation and daily allowance of the participant. Latest UNDP rates approved for the month of travel for the specific country shall be used as minimum allowance. Other travel expenses such as VISA, airfare, health/accident insurance shall be borne by the Bidder/Contractor.		
B.10.8	The CAAP requires submission of a proposed Site Test plan for the Automated Weather Observing System (AWOS) and ancillary equipment prior to commissioning. The Site Test plan may be revised by CAAP as necessary.		
B.10.9	The CAAP requires Factory and On-site training of ANS personnel for Automated Weather Observing System (AWOS) systems.		
B.10.10	The Factory Training (FT) shall be attended by 5 ANS technical personnel only for a minimum of 10 training days.		
B.10.11	Site Training (ST) shall be attended by a minimum of 10 CAAP personnel.		
B.10.12	The OEM shall issue a Training Certificate to ANS personnel who attended the training. The Certificate shall indicate the following: (a) name of the trainee, (b) course title, (c) place of training, (d) date and duration of the training with the OEM company logo.		
B.10.13	The cost of the accommodation and meals of the personnel conducting the training on site shall be borne by the contractor and shall be included in the financial estimates.		
C	WORK SCHEDULE		
C.1.	The Bidder shall include in their proposal a project activity schedule for the project starting from the Notice to Proceed.		
C.2.	CAAP specifies that the project be completed within 365 calendar days.		
C.3.	The preliminary Project Management Schedule		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	shall be as detailed as possible highlighting the following project component activities:		
C.3.1	Equipment Manufacturing;		
(a)	<i>Meteorological Weather Sensor</i>		
(b)	<i>Runway Visual Range (RVR) System</i>		
(c)	<i>Cloud Height & Vertical Visibility Measuring Systems</i>		
(d)	<i>Data Collection and Central Processing System</i>		
(e)	<i>Telemetry System</i>		
(f)	<i>Frangible 10 meters Mast with Lightning Protection and Obstacle Light</i>		
(g)	<i>Meteorological Equipment Power Source</i>		
(h)	<i>Maintenance/ Test Equipment and Spare Parts</i>		
C.3.2	Shipment and Delivery		
(a)	<i>Meteorological Weather Sensor</i>		
(b)	<i>Runway Visual Range (RVR) System</i>		
(c)	<i>Cloud Height & Vertical Visibility Measuring Systems</i>		
(d)	<i>Data Collection and Central Processing System</i>		
(e)	<i>Telemetry System</i>		
(f)	<i>Frangible 10 meters Mast with Lightning Protection and Obstacle Light</i>		
(g)	<i>Meteorological Equipment Power Source</i>		
(h)	<i>Maintenance/ Test Equipment and Spare Parts</i>		
C.3.3	Installations		
(a)	<i>Cable laying jobs</i>		
(b)	<i>Meteorological Equipment Power Source</i>		
(c)	<i>Erection of frangible aviation mast</i>		
(d)	<i>Meteorological Weather Sensor</i>		
(e)	<i>Data Collection and Central Processing System</i>		
(f)	<i>Telemetry System</i>		
(g)	<i>Runway Visual Range (RVR) System</i>		
(h)	<i>Cloud Height & Vertical Visibility Measuring Systems</i>		
C.3.4	Testing		
(a)	<i>Site (local testing)</i>		
(b)	<i>Factory Acceptance Testing</i>		
C.3.5	Training		
(a)	<i>Local On-Site</i>		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
(b)	<i>Factory Training</i>		
C.3.6	Final Configurations		
C.3.7	Site Acceptance Test		
C.3.8	Submission of As-Built Drawings /Plans		
C.3.9	Project Completion		
C.3.10	Defect Liability Period (1 year)		
C.3.11	Warranty Period (1 year)		
D.	SYSTEMS SUPPORT		
D.1.1	Quality Plan		
D.1.1.1	The Contractor shall be responsible for the quality assurance, configuration management, and acceptance testing being in accordance with known standards and procedures.		
D.1.2	Maintenance Plan		
D.1.2.1	The Contractor shall submit together with the Technical Proposal a plan on how the Contractor/OEM will conduct maintenance services during the warranty period and during the life cycle of the system. The plan shall detail the procedures:		
(a)	of repair/replacement of defective hardware components;		
(b)	of software maintenance and repair;		
(c)	of help desk support;		
(d)	management of components obsolescence		
D.1.3	Training Plan		
D.1.3.1	The Contractor shall submit together with the Technical Proposal a plan for each of the identified training courses that include a description of the following elements:		
(a)	Type of training;		
(b)	Course Title;		
(c)	Course Objectives;		
(d)	Course Contents;		
(e)	Duration in Days;		
(f)	Location;		
(g)	Maximum number of Trainees per course;		
(h)	Training Materials and Training Aids		
D.1.3.2	OEM training courses and materials shall enable the trainees to later instruct other technical staff according to the obtained knowledge.		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
D.1.3.3	Training courses shall be of a high standard and apply the latest teaching techniques.		
D.1.3.4	Trainings shall be conducted for the maintenance (hardware/software) and operation of the meteorological equipment (<i>Meteorological Weather Sensor, Data Collection and Central Processing System, Runway Visual Range (RVR) System, Cloud Height & Vertical Visibility Measuring Systems, Telemetry Systems, Frangible 10 meters Mast with Lightning Protection and Obstacle Light and, Meteorological Equipment Power Source</i>).		
D.1.3.5	All training materials and training aids utilized shall be provided by the supplier in softcopy and hardcopy		
D.1.4	Documentations		
D.1.4.1	Aside from training materials, the following documents shall be delivered for each site		
(a)	4 sets of operation manuals;		
(b)	4 sets of maintenance (hardware/software) manual;		
(c)	4 sets of software manual;		
(d)	4 sets of inventory list of equipment to include spare parts		
D.1.4.2	Softcopy of all delivered documents shall be provided in a CD or USB medium.		
E	INSTALLATION AND TESTING		
E.1	Delivery, Storage and Handling		
E.2.1	The Equipment shall be protected against extreme temperature, humidity, and shall be stored in a conditioned place to prevent corrosion and/or contamination.		
E.2.2	The Equipment shall be wrapped up in dust-tight covers and kept away from construction activities in order to be protected against dust and debris.		
E.2.3	Contractor shall be responsible for correct storage of the equipment under the conditions as specified.		
E.2.4	Contractor shall deliver, store, and handle the equipment and materials in accordance with the manufacturer's recommendations.		
E.2.5	Contractor shall be responsible for the delivery/shipment of equipment from the Contractor's premise up to the installation site.		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
E.2	Installation and Site Acceptance Testing		
E.3.1	A Site Acceptance Test shall be conducted after the completion of the installation. The Contractor shall be responsible for notifying the CAAP that the installation is complete and that a Site Acceptance Test is to be conducted.		
E.3.2	The Contractor shall submit for approval a detailed Site Acceptance Test (SAT) plan (4 sets) four weeks before the beginning of the Site Testing.		
E.3.3	The SAT plan shall consist of a set of functional and performance tests aiming at validating the compliance of the system with specification.		
E.3.4	SAT shall be performed for all hardware and software deliverables.		
E.3.5	At the beginning of the SAT, the contractor shall provide introduction/briefing and the baseline for the installed system.		
E.3.6	Each test executed at the SAT shall be described on one single page including at least the following information:		
(a)	test identifier and title;		
(b)	the procedure to follow for performing the test;		
(c)	the system configuration required for the test;		
(d)	the expected result(s) of the test;		
(e)	the way to control whether the test has succeeded or not;		
(f)	comments where appropriate		
E.3.7	A Reliability Test shall be conducted for a period of 2 days by the Contractor after a successful Site Acceptance Testing.		
E.3.8	After the conduct of a successful Reliability Test (no alarms of any type observed for 2 continuous days), the Contractor shall immediately inform CAAP of its completion and schedule/conduct a Commissioning of the new meteorological equipment (<i>Meteorological Weather Sensor, Data Collection and Central Processing System, Telemetry Systems, Frangible 10 meters Mast with Lightning Protection and Obstacle Light and, Meteorological Equipment Power Source</i>).		
F	PROJECT COMPLETION		
F.1	A Certificate of Project Completion shall be issued by CAAP to the Contractor upon successful		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	completion of the Project.		
F.2	The following documents (submitted in a binder with corresponding tabs) shall be the attachment for the approval of the Certificate of Project Completion:		
F.2.1	Copy of approved Contract including the Terms of Reference;		
F.2.2	Training Report including photocopy of the training certificates issued;		
F.2.3	Site Acceptance Test Report;		
F.2.4	Operation/User and Service Manuals;		
F.2.5	As-Built Drawings;		
F.2.6	Inventory of decommissioned/dismantled equipment;		
F.2.7	Inventory of newly installed equipment;		
F.2.8	Reliability Test Result;		
F.3	The Defect Liability Period (DLP) shall start after the date of issuance of the Certificate of Project Completion by CAAP, wherein all of the works were executed, completed by the Contractor as per contract.		
F.4	A Facility Availability report shall be submitted by the Contractor to CAAP after the end of the Warranty to determine if the system installed is within the required availability requirements of 99.99%.		
F.5	A Certificate of Final Acceptance shall be issued by CAAP after the end of the DLP period (i.e. 1 year after completion/commissioning).		
G	DEFECT LIABILITY PERIOD AND WARRANTY		
G.1	The CAAP requires one (1) year Defect Liability Period for both software and hardware components and after which a one (1) year Warranty Period for both software and hardware components.		
G.2	The Contractor shall be responsible for the shipment of defective parts to the Manufacturer and vice-versa. Cost of which shall be borne by the Contractor for the duration of the DLP and Warranty periods.		
H	ENGINEERING PERSONNEL		
H.1	The CAAP requires that only OEM-qualified personnel will do the installations/commissioning		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	of all equipment. CAAP requires submission of Certificate of Authorization from the OEM.		
H.2	The Bidder shall submit together with its Technical bid resumés of qualified installers/personnel who will be involved in the Project. The Bidder shall specify/describe the responsibilities of these` personnel as regards to the implementation of the project.		
I	OTHER REQUIREMENTS		
I.1	Permits		
I.1.1	The Contractor shall be responsible for securing all necessary permits (i.e. Electrical/Civil work Permits, Permit to Import, NTC, Security Pass, other local permits, etc.) from respective offices that may be necessary for the installation of the tower equipment at site. The cost of acquiring such permits including its processing shall be borne by the Contractor.		
I.2	MOS for Aerodromes/Method of Working Plan (MOWP)		
I.2.1	The Contractor shall comply with the latest provisions of the Civil Aviation Authority of the Philippines (CAAP) Manual of Standards (MOS) for Aerodromes. A Method of Working Plan (MOWP) shall be submitted to CAAP prior to project implementation. The MOWP shall be in accordance with Section 10.11 of the CAAP MOS.		
I.3	ICAO Compliance		
I.3.1	The supplied meteorological equipment shall be in accordance with ICAO Standards and Recommended Practices.		
I.4	CERTIFICATE OF SITE INSPECTION		
I.4.1	The Contractor shall secure a Certificate of Site Inspection from the ANS Facility In-Charge of Old Legazpi Domestic Airport (<i>or his designated authorized representative</i>) as proof of the conduct of survey/inspection of the site.		
I.4.2	The Certificate of Site Inspection form found in this bidding document shall be used.		
I.4.3	The prospective bidders shall submit their Site Inspection/Survey schedule to CAAP End-User. For this purpose, it shall be sent to Air Navigation Operations Department (ANOD) at		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	anod_caap@ymail.com and the contact number is 7944-2191. Schedule and names of the persons to conduct the site survey/inspection shall be submitted for proper coordination of ANOD with the concerned Air Navigation Facility (ANF).		
I.4.4	The bidder may conduct site survey prior to the purchase of the bidding document provided, the site survey schedule has been coordinated with ANOD.		
I.4.5	The bidder can directly contact the ANS Facility In-Charge of Old Legazpi Airport, Mr. Leoncio Gomez, at +63 949-709-8965 or (052) 483-2961 (<i>or his designated authorized representative</i>) prior to proceeding to the site.		
I.4.6	Previously issued site inspection certificate from the concerned project site relative to the MET equipment project is acceptable. CAAP accepts the certificate in the assumption that the Bidder already have all the site inspection data or information necessary to prepare for the Bid.		
I.4.7	Photocopy of the company ID of the bidder/bidder's representative who conducted the site inspection shall be attached.		
I.4.8	Photocopy of the visitor's logbook from the ANF inspected shall be submitted as an attachment for the bid proposals.		
I.4.9	The bidder/bidder's representative who conducted the site inspection shall be photographed together with the ANS FIC (or his authorized representative at site) inside the tower where the equipment be installed and outside the tower building during the conduct of site inspection.		
I.4.10	Bids not complying with the above site inspection instructions shall be automatically disqualified.		
	END OF SPECIFICATIONS		

Section VIII. Checklist of Technical and Financial Documents

Notes on the Checklist of Technical and Financial Documents

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

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

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

Checklist of Technical and Financial Documents

I. TECHNICAL COMPONENT ENVELOPE

Class “A” Documents

Legal Documents

- ☐ (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
- ☐ (d) Tax clearance per E.O. No. 398, s. 2005, as finally reviewed and approved by the Bureau of Internal Revenue (BIR).

Technical Documents

- ☐ (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; **and**
- ☐ (g) 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**
- ☐ (h) 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**
- ☐ (i) Conformity with the Technical Specifications, which may include production/delivery schedule, manpower requirements, and/or after-sales/parts, if applicable; **and**
- ☐ (j) 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.
- ☐ (k) Technical Documents required in Item A.7 of Section VII (Technical Specifications) - use Certificate of Inspection attached
- ☐ (l) Accomplished Revised Annex A –ITB 10.1 Form (use the attached form)
- ☐ (m) Bid Bulletin (if applicable)

Financial Documents

- ☐ (n) The Supplier's audited financial statements, showing, among others, the Supplier'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; **and**
- ☐ (o) 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

- ☐ (p) 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.

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

- ☐ (q) *[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.
- ☐ (r) Certification from the DTI if the Bidder claims preference as a Domestic Bidder or Domestic Entity.

25 FINANCIAL COMPONENT ENVELOPE

- ☐ (a) Original of duly signed and accomplished Financial Bid Form; **and**
- ☐ (b) Original of duly signed and accomplished Price Schedule(s).



CERTIFICATE OF SITE INSPECTION

This is to CERTIFY that *(Bidder's Name/Bidder's Representative)*, *(Position)* of *(Company Name)*, has conducted the required Site Inspection for the bidding of the project “*(Name of Project)*” at *(Airport/Address)*.

Issued this *(date)*.

Facility In-Charge/Authorized Representative

