



Republic of the Philippines

Civil Aviation Authority of The Philippines

Purchase/Installation of Distance Measuring Equipment (DME) for Basco Airport

CY2025

Bid No. 25-48-07 BRAVO

Government of the Republic of the Philippines

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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.333

Section I. Invitation to Bid

Invitation to Bid for
Purchase/Installation of Distance Measuring Equipment (DME)
for Basco Airport

Bid No. 25-48-07 (Bravo)

1. The **Civil Aviation Authority of the Philippines (CAAP)**, through the **CAAP Corporate Budget CY2024-2025** intends to apply the sum of **Php 23,918,352.70** being the Approved Budget for the Contract (ABC) to payments under the contract for the **Purchase/Installation of Distance Measuring Equipment for Basco Airport**. Bids received in excess of the ABC shall be automatically rejected at bid opening. The following are the ANFs/Airports considered for this project.
2. The **CAAP** now invites bids for the **Supply, Delivery, Installation/Integration, Training and Testing of Distance Measuring Equipment for Basco Airport**. Delivery of the goods is required *within 365 calendar days*. Bidders should have completed, within *ten (10) years* from the date of submission and receipt of bids, a contract similar to the Project. Bidders shall provide proof (e.g. certification issued by airport authority) that the offered equipment have been installed in airports from three (3) different countries other than the country of origin where the offered equipment is manufactured; and, the Original Equipment Manufacturer of the equipment shall have been in the manufacturing business of DME System equipment for at least the last ten (10) years. 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) 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 5183.

4. Interested bidders may obtain further information from CAAP and inspect the Bidding Documents at the address given during **8:00am to 5pm at the BAC Office – Civil Aviation Authority of the Philippines (CAAP), MIA Road, Pasay City, 1300**.
5. A complete set of Bidding Documents may be acquired by interested Bidders on **11 July 2025** from the address 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 **Php 25,000.00 (exclusive of any and all taxes imposed by relevant government agencies)**. The Procuring Entity shall allow the bidder to present its proof of payment for the fees presenting the Official Receipt.

It may also be downloaded free of charge from the website of the Philippine Government Electronic Procurement System (PhilGEPS) <https://www.philgeps.gov.ph/> 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 Civil Aviation Authority of the Philippines will hold a Pre-Bid Conference on **18 July 2025 @ 9:30 AM 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 **Civil Aviation Authority of the Philippines**, on or before **30 July 2025 @ 9:30 AM**. 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 at **30 July 2025 @ 9:30 AM** at **Civil Aviation Authority of the Philippines**. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.
10. The **Civil Aviation Authority of the Philippines** 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. Upon payment of the bid documents, bidders must provide their respective email addresses to the BAC Secretariat. All communications, including but not limited to Notices, Resolutions, and Replies, among others, will be sent to the email address provided by the bidder/s. The date when such email was sent shall be considered the date of receipt of the bidder/s for purposes of complying with the requirements under RA 9184.
12. Bidders must also check the PhilGEPS website, CAAP website, and BAC Secretariat for any bid bulletins and announcements related to the bidding.
13. For further information, please refer to:
ENGR. LEANDRO R. VARQUEZ
Head, Secretariat
3rd Floor Supply, Procurement Building
Civil Aviation Authority of the Philippines
MIA Road, Pasay City
Tel. No. (02) 8246-4988 loc. 2236
Email: bac@caap.gov.ph
www.caap.gov.ph

ATTY. DANJUN G. LUCAS
Chairperson, Bids and Awards Committee

Section II. Instructions to Bidders

1. Scope of Bid

The Procuring Entity, *Civil Aviation Authority of the Philippines* wishes to receive Bids for the **Purchase/Installation of Distance Measuring Equipment (DME) for Basco Airport**, with **Bid No. 25-48-07 BRAVO**.

2. Funding Information

2.1. The GOP through the source of funding as indicated below for **CY2025** in the amount of **Php 23,918,352.70**.

2.2. The source of funding is:

Corporate Operating Budget for 2025 APP item No. **10603050-2770**

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 and in the BDS.

4. Corrupt, Fraudulent, Collusive, and Coercive Practices

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

5. Eligible Bidders

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

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

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

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

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

7.2. The Bidder must submit together with its Bid the documentary requirements of the subcontractor(s) complying with the eligibility criteria stated in **ITB** Clause 5 in accordance with Section 23.4 of the 2016 revised IRR of RA No. 9184 pursuant to Section 23.1 thereof.

7.3. The Supplier may identify its subcontractor during the contract implementation stage. Subcontractors identified during the bidding may be changed during the implementation of this Contract. Subcontractors must submit the documentary requirements under Section 23.1 of the 2016 revised IRR of RA No. 9184 and comply with the eligibility criteria specified in **ITB** Clause 5 to the implementing or end-user unit.

- 7.4. Subcontracting of any portion of the Project does not relieve the Supplier of any liability or obligation under the Contract. The Supplier will be responsible for the acts, defaults, and negligence of any subcontractor, its agents, servants, or workmen as fully as if these were the Supplier's own acts, defaults, or negligence, or those of its agents, servants, or workmen.

8. Pre-Bid Conference

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

9. Clarification and Amendment of Bidding Documents

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

10. Documents comprising the Bid: Eligibility and Technical Components

- 10.1. The first envelope shall contain the eligibility and technical documents of the Bid as specified in **Section VIII (Checklist of Technical and Financial Documents)** and **BDS**.
- 10.2. The Bidder's SLCC as indicated in **ITB** Clause 5.3 should have been completed within *five (5) years* prior to the deadline for the submission and receipt of bids.
- 10.3. If the eligibility requirements or statements, the bids, and all other documents for submission to the BAC are in foreign language other than English, it must be accompanied by a translation in English, which shall be authenticated by the appropriate Philippine foreign service establishment, post, or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines. Similar to the required authentication above, for Contracting Parties to the Apostille Convention, only the translated documents shall be authenticated through an apostille pursuant to GPPB Resolution No. 13-2019 dated 23 May 2019. The English translation shall govern, for purposes of interpretation of the bid.

11. Documents comprising the Bid: Financial Component

- 11.1. The second bid envelope shall contain the financial documents for the Bid as specified in **Section VIII (Checklist of Technical and Financial Documents)** 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.
- 11.4. For Foreign-funded Procurement, a ceiling may be applied to bid prices provided the conditions are met under Section 31.2 of the 2016 revised IRR of RA No. 9184.

12. Bid Prices

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

14. Bid Security

- 14.1. The Bidder shall submit a Bid Securing Declaration or any form of Bid Security in the amount indicated in the **BDS**, which shall be not less than the percentage of the ABC in accordance with the schedule in the **BDS**.
- 14.2. The Bid and bid security shall be valid 120 calendar days from the date of the opening of bids and shall be callable on demand. Any Bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

15. Sealing and Marking of Bids

Each Bidder shall submit one copy of the first and second components of its Bid and as indicated in the **BDS**.

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 of 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 14 shall be submitted for each lot or item separately.

- 19.3. The descriptions of the lots or items shall be indicated in **Section VII (Technical Specifications)**, although the ABCs of these lots or items are indicated in the **BDS** for purposes of the NFCC computation pursuant to Section 23.4.2.6 of the 2016 revised IRR of RA No. 9184. The NFCC must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder.

- 19.4. The Project shall be awarded as follows:

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

- 20.2. Within a non-extendible period of five (5) calendar days from receipt by the Bidder of the notice from the BAC that it submitted the Lowest Calculated Bid, 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

Bid Data Sheet

ITB Clause	
5.3	<p>For this purpose, similar contracts shall refer to:</p> <p>Supply, Delivery, Installation/Integration, Testing and Commissioning of Distance Measuring Equipment (DME) or DVOR/DME or I-DME</p> <p>Completed within last 10 years prior to the deadline for the submission and receipt of bids.</p>
7.1	<p>Subcontracting of site preparation and incidental electrical works alone is allowed. Construction of the electrical/civil works component shall be done by a company with a valid PCAB Medium "A" Size Range, B License Category in General Engineering or General Building; and Electrical, and Navigational Aids Works Classification.</p>
10.1	<p>Bidders to submit the following documents as attachment to the Omnibus Sworn Statement:</p> <ol style="list-style-type: none"> 1. Certification, under oath, attesting that they have no pending case(s) against the Government, in addition to the eligibility requirements as prescribe under 2016 Revise Implementing Rules and Regulation (R-IRR) of RA 9184. 2. Legal Clearance to be issued by the CAAP Enforcement and Legal Service with respect to the non-pending cases of the prospective bidders against this Authority.
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.

	<p>4. Civil/Electrical Engineering Services and Installation costs.</p> <p>5. Training.</p> <p>6. Project Management Services.</p> <p>7. As-Built Plans and Drawings.</p> <p>8. Design Frangibility Certificate compliant to ICAO requirements (ICAO Doc. 9157, Part 6);</p>
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. 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. Installation, Operational, Maintenance and other forms of Manuals, System & Circuit Diagrams, Equipment As-Built Plans and Drawings. 9. Design Frangibility Certificate compliant to ICAO requirements (ICAO Doc. 9157, Part 6).
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 Php 478,367.05 if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit; or b. The amount of not less than Php 1,195,917.64 if bid security is in Surety Bond.
15	<ol style="list-style-type: none"> 1. Each and every page thereof shall be initialed/signed by the duly authorized representative/s of the Bidder. <p>Submitted Eligibility, Technical, and Financial documents shall be properly marked with index tabs (ear tab) and must be</p>

	<p>sequentially paginated in accurate order in the form i.e. "page 3 of 100". Page number of last page of the document (per envelope basis).</p> <p>Pagination should be sequential based on the entire span of the whole documents inside the envelope.</p> <p>2. Each Bidder shall submit one (1) original bid.</p>
19.2	Partial Bid is not allowed. The goods are grouped in a single lot and the lot shall not be divided into sub-lots for the purpose of bidding, evaluation, and contract award.
20.2	<p>A. The Contractor shall be responsible for securing all necessary permits and appropriate licenses (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.</p> <p>B. Additional documents relevant to the project required by the CAAP to be submitted during Post-Qualification:</p> <ol style="list-style-type: none"> 1. Project implementation schedule; 2. Cash Flow by quarter; 3. Certificate of Exclusive or Authorized Distributorship issued by the Original Equipment Manufacturer (OEM) of supplied equipment; 4. Valid ISO 9001 and 14001 OEM Certificates (or its internationally recognized equivalent) of Company and Product; 5. Latest Audited Financial Statement (AFS); 6. A Certificate under oath attesting that the bidder has no pending case(s) against the Government; and 7. 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.
21.1	No further instruction.

Section IV. General Conditions of Contract

1. Scope of Contract

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

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

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

2. Advance Payment and Terms of Payment

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

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

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

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

6. Liability of the Supplier

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

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

Section V. Special Conditions of Contract

Special Conditions of Contract

GCC Clause	
1	<p>Delivery and Documents –</p> <p>For purposes of the Contract, “EXW,” “FOB,” “FCA,” “CIF,” “CIP,” “DDP” and other trade terms used to describe the obligations of the parties shall have the meanings assigned to them by the current edition of INCOTERMS published by the International Chamber of Commerce, Paris. The Delivery terms of this Contract shall be as follows:</p> <p>The delivery terms applicable to the Contract are DDP delivered at sites defined in Section VI. Schedule of Requirements. In accordance with INCOTERMS.”</p> <p>The delivery terms applicable to this Contract are delivered <i>at sites defined in Section VI. Schedule of Requirements</i>. Risk and title will pass from the Supplier to the Procuring Entity upon receipt and final acceptance of the Goods at their final destination.”</p> <p>Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in Section VI. Schedule of Requirements. The details of shipping and/or other documents to be furnished by the Supplier are as follows:</p> <p><i>For Goods supplied from within the Philippines:</i></p> <p>Upon delivery of the Goods to the Project Site, the Supplier shall notify the Procuring Entity and present the following documents to the Procuring Entity:</p> <ul style="list-style-type: none"> (i) Original and four copies of the Supplier’s invoice showing Goods’ description, quantity, unit price, and total amount; (ii) Original and four copies delivery receipt/note, railway receipt, or truck receipt; (iii) Original Supplier’s factory inspection report; (iv) Original and four copies of the Manufacturer’s and/or Supplier’s warranty certificate; (v) Original and four copies of the certificate of origin (for imported Goods); (vi) Delivery receipt detailing number and description of items received signed by the authorized receiving personnel;

	<p>(vii) Certificate of Acceptance/Inspection Report signed by the Procuring Entity's representative at the Project Site;</p> <p>(viii) Design Frangibility Certificate compliant to ICAO requirements (ICAO Doc. 9157, Part 6); and</p> <p>(ix) Four copies of the Invoice Receipt for Property signed by the Procuring Entity's representative at the Project Site.</p> <p><i>For Goods supplied from abroad:</i></p> <p>Upon shipment, the Supplier shall notify the Procuring Entity and the insurance company by cable the full details of the shipment, including Contract Number, description of the Goods, quantity, vessel, bill of lading number and date, port of loading, date of shipment, port of discharge etc. Upon delivery to the Project Site, the Supplier shall notify the Procuring Entity and present the following documents as applicable with the documentary requirements of any letter of credit issued taking precedence:</p> <p>(i) Original and four copies of the Supplier's invoice showing Goods' description, quantity, unit price, and total amount;</p> <p>(ii) Original and four copies of the negotiable, clean shipped on-board bill of lading marked "freight pre-paid" and five copies of the non-negotiable bill of lading;</p> <p>(iii) Original Supplier's factory inspection report;</p> <p>(iv) Original and four copies of the Manufacturer's and/or Supplier's warranty certificate;</p> <p>(v) Original and four copies of the certificate of origin (for imported Goods);</p> <p>(vi) Delivery receipt detailing number and description of items received signed by the Procuring Entity's representative at the Project Site;</p> <p>(vii) Certificate of Acceptance/Inspection Report signed by the Procuring Entity's representative at the Project Site;</p> <p>(viii) Design Frangibility Certificate compliant to ICAO requirements (ICAO Doc. 9157, Part 6); and</p> <p>(ix) Four copies of the Invoice Receipt for Property signed by the Procuring Entity's representative at the Project Site.</p> <p>For purposes of this Clause the Procuring Entity's Representative at Project Sites are the respective CAAP-ANS Facility-In-Charge (or his designated authorized representative).</p> <p>Incidental Services –</p>
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	<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> <ul 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. Incidental Services (for Goods offered from within Philippines) include but are not limited to the following: <ul 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 g. Incidental Services (for Goods offered from abroad) include but are not limited to the following: <ul 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
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	<p>incidentals shall be incorporated to the equipment listed in the BOQ of the Schedule of Requirements to which it is primarily related.</p> <ol style="list-style-type: none"> 2. Export Licenses / Permits 3. Engineering Services required for design & configurations. 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. Installation, Operational, Maintenance and other forms of Manuals, System & Circuit Diagrams, Equipment As-Built Plans and Drawings. <p>The Contract price for the Goods shall include the prices charged by the Supplier for incidental services and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.</p> <p>Spare Parts –</p> <p>The Supplier is required to provide all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:</p> <ol style="list-style-type: none"> 1. such spare parts as the Procuring Entity may elect to purchase from the Supplier, provided that this election shall not relieve the Supplier of any warranty obligations under this Contract; and 2. in the event of termination of production of the spare parts: <ol style="list-style-type: none"> i. advance notification to the Procuring Entity of the pending termination, in sufficient time to permit the Procuring Entity to procure needed requirements; and ii. following such termination, furnishing at no cost to the Procuring Entity, the blueprints, drawings, and specifications of the spare parts, if requested. <p>The spare parts required are listed in Section VI. Schedule of Requirements and the cost thereof are included in the Contract Price</p> <p>The Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spares for the Goods for a period of <i>ten (10) years</i>.</p> <p>Other spare parts and components shall be supplied as promptly as possible, but in any case, within 60 days of placing the order.</p>
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Packaging –

The Supplier shall provide such packaging of the Goods as 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 (CAAP)**

Name of the Supplier

Contract Description

Final Destination

Gross weight

Any special lifting instructions

Any special handling instructions

Any relevant HAZCHEM classifications

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

Insurance –

The Goods supplied under this Contract shall be fully insured by the Supplier in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage, and delivery. The

	<p>Goods remain at the risk and title of the Supplier until their final acceptance by the Procuring Entity.</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 <i>force majeure</i>.</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>Patent Rights –</p> <p>The Supplier shall indemnify the Procuring Entity against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods or any part thereof.</p>
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:

	<p><i>A. Verification/Inspection of DME equipment and conformity to Contract Specification;</i></p> <p><i>B. Verification/Inspection of manhole construction, power cable within conduits laying, trenching and backfilling;</i></p> <p><i>C. Periodic inspections at site, FAT, Commissioning and SAT.</i></p>
5	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).

Section VI. Schedule of Requirements

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	DME Equipment and subsystem			365 calendar days upon receipt of NTP. (Project Site: Basco Airport)
	DME Equipment 1 kw (dual system) to include antenna with:	1	set	
	supporting mast and tandem obstruction lights, Operation, Maintenance, Technical Manuals in English			
	Language including as-built plans and diagrams			
II	System Monitoring and Control Equipment			
	RCMS for DME including:	1	set	
	Network Link/Modems and configuring items			
	Coaxial/cabling including mechanical protection			
	Terminal Board with Communication Cabling			
	Power distribution board and Power Cabling			
	Workstation (OEM Approved PC, at least 19" Monitor and basic Inkjet Printer)			
III	DC Power Supply System			
	Emergency DC Power Supply System	1	set	
	Battery Capacity 30 mins for DME operation			
IV	DME Spare parts			
	Transmitter Group	1	set	
	Receiver Group (DME)			
	Control & Monitoring Group (local)			
	Antenna Assembly Group			
	Back-up and Power Supply Group			
V	Test Equipment and Tools			
	Oscilloscope dual trace 500Mhz, portable (Digital)	1	unit	
	Digital Multi-meter	2	units	
	Peak Power Meter (for DME) w/ 50, 250- & 2500-Watt plug-in elements	1	set	
	Extended boards	1	set	
VI	On-Site Training, FAT and Travel Costs			
	Training and Factory Acceptance detailed as:	1	lot	
	On-site Test Equipment Training (2-person for 5 days)			
	On-site Training (4-person for 5 days)			
	Factory Training (4-person for 5 days)			
	Factory Acceptance Test (2-person for 5 Days)			
VII	Commissioning Flight Check			
	6 Hrs Commissioning Flight Check including Support	1	lot	

NOTE: Refer to Technical Specifications for details requirement.

Section VII. Technical Specifications

Technical Specifications

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 provisions of **ITB Clause 4**.

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 install a brand new, of latest model, complete dual system DME, including its subsystems, antennae, switchover units, DC Power Supplies and ancillaries, Remote Control and Monitoring System (RCMS) and communication links, spare parts, lightning and surge protection systems, provision of new power system, and its commissioning flight check within the published budget at Basco Airport.		
A.2	Construction design drawings and installation plans shall be submitted after the receipt of Notice-to-Proceed (NTP) for approval of CAAP (design review) prior to its installation/implementation. As-built drawings		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	shall be submitted prior to commissioning flight check.		
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 DME equipment with after-sales support capability agreement with the OEM.		
A.4	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.5	The contractor shall assure that the supplied DME equipment (including its subsystems) are operational & functional and that no equipment/spare parts is/are left non-operational or subject for replacement. Non-compliance to this provision shall subject to non-acceptance of the project.		
A.6	<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>Mast and Cable Layout plan</i>) and shall indicate their distance with respect to the runway centerline and control tower/FSS Building. The document shall be <i>signed and sealed by a Professional ECE (PECE)</i>; 3. Detailed equipment room layout plan of DME Equipment & other subsystems and shall be <i>signed and sealed by a Professional ECE (PECE)</i>; 4. Power/Electrical/Grounding and Cabling System Design Plan including electrical system single line diagram signed by Professional Electrical Engineer (PEE); 		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	5. Project Work Schedule/Plan (365 calendar days); 6. Original latest versions of OEM Equipment Technical Characteristics/Specifications, Manuals and Brochures of proposed products; 7. Copy of the PRC Certificate or a 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 an Accredited Professional Organization of the signing PECE/PEE; 10. Item A.10 of Section VII. Technical Specifications - Certificate of Site Inspection as prescribed in the BDS.		
A.7	The scope of the project shall be supply, delivery, installation, integration, configuration and testing of Distance Measuring Equipment (DME) including the supply of its necessary subsystems and components as specified in <i>Section VI. Schedule of Requirements</i> .		
A.8	The contractor shall facilitate and shoulder the cost of facilitation, registration and permits/license of frequency license as per NTC regulation under the name of CAAP.		
A.9	The Bidder shall refer to published ATC procedures of Basco Airport; and Reference Drawings for this Project as installation/design reference of proposed systems.		
A.10	The Contractor shall secure a Certificate of Site Inspection from the ANS Facility-In-Charge of Basco Airport.		
A.11	The contractor shall provide all the necessary connectors, mounting accessories and other ancillaries for the entire system.		
A.12	Proper cable management and cable tagging shall be strictly enforced. The contractor shall provide documentation indicating the label and		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	locations/terminations of the cables after the completion of installation activities.		
A.13	<p>The contractor shall provide a (sticker) nameplate attached to the body of the equipment which clearly states the following labels:</p> <ol style="list-style-type: none"> 1. <i>Civil Aviation Authority of the Philippines (CAAP)</i> 2. <i>Name/type of Equipment</i> 3. <i>Date Installed (mm/dd/yyyy format)</i> 4. <i>Location/Site/Facility</i> 5. <i>Name of Contractor</i> 		
A.14	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.15	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.16	The Bidder shall be issued with the approved reference drawing/s upon presentation of the official receipt (OR) as proof of payment of the applicable fee for the Bidding Document for this project.		
A.17	The DME equipment shall conform to the standards and recommendations in ICAO Annex 10, Volume I (Para 3.5 DME/N).		
A.18	The DME equipment shall be fully solid state and composed of modules, units and printed circuit boards.		
A.19	The DME equipment shall not contain any continuously rotating parts, except cooling fan.		
A.20	The DME shall be contained in cabinet to operate as main and stand-by equipment. Maintenance on one equipment shall be accomplished without disturbing the operation of the other equipment/system.		
A.21	The DME equipment shall be designed to be		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	fully remote controlled and all necessary interface equipment shall be supplied and installed.		
A.22	The DME system shall be brand new consists of dual transmitters, dual power supply, dual local monitoring unit, local control and status monitor, and antenna system.		
A.23	The DME equipment shall be equipped with Built-In Test Equipment (BITE) function to minimize the lead time required to repair and to carry out the system checking / monitoring functions for fault reporting to the local status monitor unit at site and Remote Maintenance Monitoring System (RMMS) at remote site.		
A.24	The CAAP shall have the full authority to inspect, recommend, accept and reject materials and workmanship that will be found to be below the required minimum specifications and Philippine Standards, as reflected in the Section VII. Technical Specifications.		
B.	DESIGN CONDITIONS		
B.1	Distance Measuring Equipment (DME)		
B.1.1	The DME equipment shall meet the standards and recommendations of the ICAO Annex 10, Volume 1, related to the DME facility.		
B.1.2	The Contractor shall include in its works the integration of the DME power supply system to the power system of the Airport. Grounding cables and its ancillaries shall be supplied and installed by the Contractor.		
B.1.3	Electrical installations shall be in accordance with the latest provisions of the Philippine Electrical Code.		
B.1.4	DME with its ancillaries shall be connected with separate Electrical Connections.		
B.1.5	Electrical as-built plan with splices shall be submitted as part of documentation.		
B.1.6	Surge and lightning protection devices shall be supplied/installed by the Contractor. The system shall be designed and rated so as not		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	to incur damage to Equipment during occurrences of surges/lightning strikes.		
B.1.7	Data/Control and Power cables shall be correctly spaced to avoid interferences.		
B.1.8	All electrical devices installed shall be of high standard, designed and used for the purpose, UL listed or compliant to equivalent standard.		
B.2	Grounding System		
B.2.1	The Contractor shall provide new grounding systems. With considerations to local terrain, the ground resistance for the equipment shall not be greater than 5 ohms.		
B.2.2	Ground conductor configuration shall be in accordance with the Original Equipment Manufacturer (OEM) standard specification.		
B.2.3	Equipment grounding shall be separate from the grounding system of the counterpoise/shelter/mast and/or in accordance with OEM standards/requirements.		
B.2.4	Connections to grounding rods shall be exothermic.		
B.2.5	The Power Supply System performance shall be in accordance with the 99.99% availability requirements.		
B.2.6	The main power source shall be supplied from the Main Power Plant with appropriate conversion to meet power requirements of the equipment. Termination of electrical power supply to the Airport Power Plant shall be done by the Contractor.		
B.2.7	The parts (i.e. component units of the equipment) shall be compatible / interchangeable as much as possible and integrated to provide functions and operations as intended.		
B.2.9	All electrical installations shall be in accordance with the provisions of the latest edition Philippine Electrical Code, the laws and ordinances of the local code enforcing authority and requirements of the local power		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	company.		
B.2.10	The DME frequency allocation and station identification shall be provided by CAAP after design review stage.		
B.2.11	The central equipment shall be solid state, duplicated, equipped with automatic and manual normal/standby switchover and can operate from a D.C. Power Supply System in case of mains power failure.		
B.2.12	The facility will operate as an enroute nav aids and operates 24 hours a day.		
B.2.13	The modules shall be compatible/interchangeable (common) as much as possible and integrated to provide functions and operations as intended.		
B.3	Equipment and Subsystems		
	The Contractor shall supply and install the following equipment:		
B.3.1	Distance Measuring Equipment		
B.3.1.1	System of transmitting and monitoring antennas with frangible masts and tower installed on concrete steel-reinforced bases, platform, standard markings and lighting (LED) for denoting obstacles;		
B.3.1.2	Dual transmitting system (one is normal operation, other standby);		
B.3.1.3	Dual monitoring system;		
B.3.1.4	Control and normal/standby switchover unit;		
B.3.1.5	Remote control and monitoring unit;		
B.3.1.6	Provision of Grounding System (Equipment & System);		
B.3.1.7	Distribution cables including connectors;		
B.3.1.8	Lightning and surge protection system;		
B.3.1.9	Related ancillaries for the complete operation of the system;		
B.3.2	Nav aids Remote Control and Status Monitoring System		
B.3.2.1	The DME navigational aids systems shall be equipped with a Nav aids OEM Remote Control and Status Monitoring System (RCMS). The system shall be PC based		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	terminal.		
B.3.2.2	The PC terminal shall be of latest model and a product of an ISO 9001 certified manufacturer or its internationally recognized equivalent.		
B.3.2.3	The PC based terminal shall be capable of generating event logs for the DME systems.		
B.3.2.4	The Nav aids RCMS terminal shall be protected by user password security feature with different access levels.		
B.3.2.5	The Nav aids RCMS shall be GUI based and shall have menu-driven interface.		
B.3.2.6	The Nav aids RCMS shall be GUI based and shall have menu-driven interface.		
B.3.2.7	The Nav aids RCMS shall be provided with but not limited to the following basic functions:		
B.3.2.8	Color coded visual indication of the operational status of navigational aids equipment;		
B.3.2.9	An aural and visual indication of a subsystem of abnormal monitor condition, and an abnormal power supply condition;		
B.3.2.10	Alarm silence;		
B.3.2.11	Capability to start or stop or changeover the system;		
B.3.2.12	Capability to select either the main or stand-by system;		
B.3.2.13	Setting of all relevant data and parameters		
B.3.2.14	The Nav aids RCMS shall be capable of reading and logging of all parameters of the equipment including its BITE data, alarm history, and remote trend analysis and remote fault analysis via PC terminal.		
B.3.2.15	<i>Smoke alarm;</i>		
B.3.2.16	Setting and /or changing of parameters shall only be possible under a Maintenance Level/Mode.		
B.3.3	Distribution		
B.3.3.1	CAAP requires the following distribution and setup for the Nav aids RCMS:		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)												
B.3.3.2	<table border="1"> <thead> <tr> <th>Equipment</th><th>Location</th><th>Control</th><th>Status Monitoring</th></tr> </thead> <tbody> <tr> <td>RCMS Master Unit</td><td>ANS Equipment Room</td><td>Yes</td><td>Yes</td></tr> <tr> <td>RCMS Station</td><td>Control Tower</td><td>No</td><td>Yes</td></tr> </tbody> </table>	Equipment	Location	Control	Status Monitoring	RCMS Master Unit	ANS Equipment Room	Yes	Yes	RCMS Station	Control Tower	No	Yes		
Equipment	Location	Control	Status Monitoring												
RCMS Master Unit	ANS Equipment Room	Yes	Yes												
RCMS Station	Control Tower	No	Yes												
B.3.4	DC Back-up Power Supply														
B.3.4.1	The DME and Facility RCMS shall be equipped with a backup DC power supply.														
B.3.4.2	The batteries shall have the capacity to supply power and operate the above-cited equipment for at least three 30 minutes in case of AC power failure.														
B.3.4.3	The battery charger shall be capable of charging batteries from a completely discharged condition.														
B.3.4.4	Automatic protection against battery over-charging shall be incorporated in the power supply unit														
B.3.4.5	In the event of AC power failure, the batteries shall automatically take over the power supply without disrupting the operation of the DME and Facility RCMS.														
B.3.4.6	Charger shall be equipped with indicating instruments, switches and indication lamps for maintenance purposes. The instruments and switches shall indicate and control at least the following items:														
a.	<i>Voltage monitoring meter of DC output</i>														
b.	<i>Current monitoring meter of DC output</i>														
c.	<i>Switches for AC input and DC output</i>														
B.3.5	Approval Requirement														
B.3.5.1	The Contractor shall submit together with the Technical Proposal a proposed Project Management Schedule taking into consideration equipment downtime and activities described in Section 10.														
B.3.5.2	Prior to implementation/installation, the Contractor shall meet with CAAP representatives to discuss the proposed location of the DME, scheduling/ work stages,														

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	personnel and equipment safety and security at site and other concerns for the projects.		
B.3.5.3	The CAAP has the right to inspect and/or reject workmanship and/or materials used in the project (e.g. transformers, switches, connectors, power cables, air-conditioning, ancillaries) to ensure compliance with Philippine electrical standards and National Building Code.		
B.3.6	Other Requirements/Compliance to Standards		
B.3.6.1	The Contractor shall be responsible for securing all necessary permits (i.e. Electrical/Civil work Permits, Permit to Import, applicable NTC permit/license, Security Pass, Occupancy permits, other local permits, etc.) from respective offices for the installation of the navigational equipment at site. The cost of acquiring such permits including its processing shall be borne by the Contractor.		
B.3.6.2	The Contractor shall comply with the latest applicable 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.		
B.3.6.3	The supplied equipment (DME) shall be compliant to ICAO. The Bidder shall include in their Technical Proposal a compliance statement on the relative provisions of the ICAO Annex 10 Volume 1 Standards and Recommended Practices (SARPs) for DME.		
B.3.7	Airport Safety and Security		
B.3.7.1	The Contractor including its authorized personnel shall strictly comply/adhere with the Safety and Security requirements of the airport specially when entering the airport premises and near vital navigational aids systems.		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
B.3.7.2	The Contractor shall be responsible for the establishment of temporary facilities and cost of utilities at sites approved by CAAP.		
B.3.7.3	The Contractor shall be liable for the safety and security of its personnel during the installation/construction period.		
B.3.8	Quality Certification		
B.3.8.1	The equipment (DME system, Power System) and its manufacturer shall be ISO Certified or its internationally recognized equivalent. The Bidder shall include in their Technical Proposal certified true copy of ISO Certification of their proposed equipment and its manufacturer.		
B.3.9	Test Standards		
B.3.9.1	The equipment shall be compliant to internationally recognized test standards when obtaining values given in the technical specifications. The Bidder shall include in their Technical Proposal copy of the certification of the equipment (DME) complying to the test standards (e.g. <i>EN, FCC, ASTM, UL, or internationally recognized equivalent</i>) for the testing of equipment such as but not limited to:		
a.	<i>Transmitter system;</i>		
b.	<i>Receiver system;</i>		
c.	<i>RCMS;</i>		
d.	<i>Antenna system;</i>		
e.	<i>Power Supply system</i>		
B.3.10	Performance Requirements		
B.3.10.1	Distance Measuring Equipment (DME)		
B.3.10.1.1	<i>Transponder</i>		
a.	<i>Capacity: 100 interrogators</i>		
b.	<i>No. of Channels: 252 (X and Y)</i>		
c.	<i>Frequency range: 960 to 1,215 MHz</i>		
d.	<i>Reply Delay:</i>		
e.	<i>X Channel: 50 μsec, adjustable</i>		
B.3.10.1.2	<i>Transmitter</i>		
a.	<i>Operating Frequency: 960 to 1,215 MHz</i>		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
b.	<i>Frequency Stability: $\pm 0.002\%$</i>		
c.	<i>Peak Output power: 1000W</i>		
d.	<i>Transmission rate: 2700\pm90pps</i>		
e.	<i>Spurious radiation: 80dB below the peak pulse power output</i>		
f.	<i>Pulse width: 3.5 (± 0.5) μsec</i>		
B.3.10.1.3	<i>Receiver</i>		
a.	<i>Operating Frequency: 1025-1150 MHz</i>		
b.	<i>Frequency Stability: $\pm 0.002\%$ or better</i>		
c.	<i>Sensitivity: -90dBm (-120dbW) or better</i>		
d.	<i>Blanking or Dead time: within 60 μsec</i>		
e.	<i>Recovery time: within 8 μsec</i>		
f.	<i>Echo suppression: Long and Short</i>		
B.3.10.1.4	<i>DME MTBF</i>		
	OEM to submit MTBF calculations / values for the Model/Type of equipment offered including recommended number of spare parts to maintain availability of 99.99%.		
B.3.10.1.5	DME model/type offered:		
B.3.10.1.6	DME MTBF value (in hours):		
B.3.10.2	Monitoring System		
B.3.10.2.1	The DME equipment shall be provided with dual local monitors for parallel operation.		
B.3.10.2.2	Local monitors shall furnish full indications of all parameters together with their associated local alarm indications and selected remote alarm indications. The monitor system shall be based on digital signal processing.		
B.3.10.2.3	Local monitors shall be capable of operation with the local or remote control and status unit arrangements providing aural and visual indications of the DME status.		
B.3.10.2.4	Provision shall be included for continuous monitoring and execution of changeover from selected transponder to stand-by, or to shut down if the performance is beyond specified tolerance.		
B.3.10.2.5	Monitor data shall be maintained to indicate the existence of an out-of-limit condition, to transfer automatically after a programmable		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	delay to the stand-by transponder or to shut down all radiation in case of malfunction. In addition, any indication given or action taken shall be memorized or stored in a database.		
B.3.10.2.6	Failure of one monitor assembly shall not affect the operation of the DME. An alert warning shall be provided in case of failure of either of the monitor assemblies.		
B.3.10.2.7	The Monitoring System shall monitor the following DME parameters and shall be set to alarm limits as per ICAO standards.		
B.3.10.2.8	Reply delay (<i>0.8 plus or minus 0.2 microsecond, adjustable</i>)		
B.3.10.2.9	Pulse spacing (<i>0.8plus or minus 0.2 microsecond, adjustable</i>)		
B.3.10.2.10	Reply efficiency (<i>10% below nominal, adjustable</i>)		
B.3.10.2.11	Power (<i>minus 3 dB, adjustable</i>)		
B.3.10.2.12	Transmitter pulse rate (<i>Less than 900 plus or minus 50 pps, more than 2,790 plus or minus 100 pps, adjustable</i>)		
B.3.10.2.13	Identification (<i>Absence: 45 plus or minus 5 seconds, adjustable; Continuous: 5 plus or minus 0.5 second, adjustable</i>)		
B.3.10.2.14	Pulse width (<i>3.5 plus or minus 0.5 microsecond, adjustable</i>)		
B.3.10.2.15	Pulse rise time (<i>Exceed 3.5 microseconds, adjustable</i>)		
B.3.10.2.16	Receiver sensitivity (<i>minus 6 dB, adjustable</i>)		
B.3.10.2.17	Failure of monitor (<i>Self-check on monitoring system</i>)		
B.3.10.2.18	Associated power supply (<i>Outside tolerance</i>)		
B.3.10.3	Local Control and Status Monitor		
B.3.10.3.1	Means shall be provided to disable monitor and control function actions during equipment calibration (monitor bypass, local / remote control).		
B.3.10.3.2	The control and status display unit associated with the transponder cabinet shall be provided with the following functions:		
a.	Control Items		
i.	<i>Local / Remote selection</i>		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
ii.	<i>Transponder ON/OFF</i>		
iii.	<i>No. 1 Transponder/ No. 2 Transponder selection</i>		
iv.	<i>Shutdown</i>		
v.	<i>Transfer Reset</i>		
vi.	<i>Alarm Silence</i>		
vii.	<i>Alarm Bypass</i>		
viii.	<i>Equipment parameters</i>		
b.	Display Items		
i.	<i>Local / Remote</i>		
ii.	<i>No. 1 Transponder ON/OFF</i>		
iii.	<i>No. 2 Transponder ON/OFF</i>		
iv.	<i>Shutdown</i>		
v.	<i>Transfer</i>		
vi.	<i>Equipment parameters</i>		
B.3.10.4	Automatic Changeover and Measurement Functions		
i.	The changeover circuits shall provide the function of interchange between the working transponder and stand-by transponder, when an alarm signal is detected. When the alarm condition continues after the transponder is automatically changed over, the equipment shall shutdown.		
ii.	Measurement functions shall be built into the transponder circuitry to check waveforms and power levels of the DME signals for alignment and maintenance purposes.		
iii.	Test points shall be provided for necessary measurements of different parameters with controls for calibration of all alarms.		
iv.	RF dummy loads shall be provided to terminate the unused transponder outputs.		
v.	When AC input source fails, the battery shall automatically take over the load without interrupting the operation of the equipment		
vi.	During normal operation, the battery shall be float charged, ready for back-up operation.		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
B.3.10.5	Built-In Test Equipment (BITE)		
i.	All replaceable units and cards shall have BITE function.		
ii.	The BITE function shall be kept completely independent from the monitoring operation.		
B.3.10.5	Operational Status Monitor Unit		
B.3.10.5.1	The operational status monitor unit shall be provided with the visual indication of the operating status of the DME equipment and shall be installed at the following areas:		
i.	One (1) at ANS Equipment room;		
ii.	One (1) at Control Tower Cab room		
iii.	The operational status monitor unit shall be provided with the following functions		
iv.	Operation / failure indication		
v.	Alarm for failure and shut down		
vi.	Alarm silence control		
B.3.10.5.2	DME Antenna System Characteristics:		
i.	<i>Type: Omni-directional antenna equipped with dual obstruction lights</i>		
ii.	<i>Polarization: vertical</i>		
iii.	<i>Gain: 8dB or better</i>		
iv.	<i>Impedance: 50 ohms</i>		
v.	<i>Operational VSWR: 2:1 or better</i>		
vi.	<i>Protection from weather: Fiberglass radome</i>		
vii.	<i>Wind Load: $\geq 150\text{km/hr}$</i>		
B.3.11	SITE REQUIREMENTS		
B.3.11.1	The Contractor shall be responsible for the site preparation of the facility that is necessary for the installation of the new DME		
B.3.11.2	CAAP requires the following: a. Provision of new Power Line, Communications cable, and Ancillaries; b. Provision of new grounding system, lightning/surge protection, cable trays, cable management and other DME facility ancillaries.		
B.3.11.3	All materials to be used shall be brand new and installed in applications for which they are intended and complies with Philippine		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	Electrical and Building standards. CAAP reserves the right to reject materials and/or workmanship that are not industry standard.		
B.3.11.4	The Bidder shall provide equipment Nameplates (waterproof sticker or metal engrave) for each equipment/systems supplied DME, and Test Equipment) that will indicate the following information: The name Civil Aviation Authority of the Philippines and Logo; Equipment Name; Date Installed; Name of Contractor; Airport/ANF.		
B.3.11.5	The Bidder shall refer to Schedule of Requirements (Item VIII-Site Works) for minimum requirements; and Reference Drawings for the Project.		
B.3.12	DEVIATIONS TO THE SPECIFIED REQUIREMENTS		
B.3.12.1	If the Bidder's proposed configuration differs from the stated specifications but are within the specified minimum performance requirements in order to employ new technology, the Bidder shall explain the rationale/benefit of offering such in the Technical Proposal. The explanation shall be detailed as possible and supported by references. The deviation shall not be of lesser or lower quality/performance and that it shall meet the objectives of the Project. The following items are primary areas of concern:		
a.	<i>Reliability and Maintainability;</i>		
b.	<i>Status Monitoring and Self-Diagnostics;</i>		
c.	<i>Transmitter Group;</i>		
d.	<i>Receiver Group (DME Only);</i>		
e.	<i>Monitoring Group;</i>		
f.	<i>Antenna Assembly Group;</i>		
g.	<i>Back-Up Power Supply Group;</i>		
h.	<i>Convenience for flight inspection</i>		
B.3.12.2	The flight inspection shall be conducted in accordance with the Philippine Flight Inspection Procedures. If there are any		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	functions or features intended to promote the convenience of flight inspection, the Contactor should describe them in detail in the Technical Proposal, in the same order as the Philippine Flight Inspection Procedures.		
B.3.13	ELECTRICAL and AIR CONDITIONING SYSTEM		
B.3.13.1	General Requirements		
B.3.13.1.1	Brand new power and grounding cables and its ancillaries shall be supplied and installed by the Contractor.		
B.3.13.1.2	Electrical installations shall be in accordance with the latest provisions of the Philippine Electrical Code.		
B.3.13.1.3	Electrical as-built plan with splices shall be submitted as part of documentation.		
B.3.13.1.4	Surge and lightning protection devices shall be supplied/installed by the Contractor. The system shall be designed and rated so as not to incur damage to Equipment during occurrences of surges/lightning strikes.		
B.3.13.1.5	Data/Control and Power cables shall be correctly spaced to avoid interferences.		
B.3.13.1.6	All electrical devices installed shall be of high standard, designed and used for the purpose, UL listed or compliant to equivalent standard.		
B.3.13.2	Grounding System		
B.3.13.2.1	The Contractor shall provide new grounding systems. With considerations to local terrain, the ground resistance for the equipment shall not be greater than 5 ohms.		
B.3.13.2.2	Ground conductor configuration shall be in accordance with the Original Equipment Manufacturer (OEM) standard specification.		
B.3.13.2.3	Equipment grounding shall be separate from the grounding system of the mast and/or in accordance with OEM standards/requirements.		
B.3.14	SYSTEMS SUPPORT REQUIREMENT		
B.3.14.1	Quality Plan		
B.3.14.1.1	The Contractor/Manufacturer shall be responsible for the quality assurance,		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	configuration management, safety and acceptance testing being in accordance with known standards and procedures.		
B.3.14.1.2	The CAAP has the right to reject workmanship and materials supplied/installed related to the project that is not in accordance to standards.		
B.3.14.2	Maintenance Plan		
B.3.14.2.1	The Contractor shall submit <i>together with the Technical Proposal</i> 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		
B.3.14.3	Training Plan		
B.3.14.3.1	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.	<i>Type of training;</i>		
b.	<i>Course Title;</i>		
c.	<i>Course Objectives;</i>		
d.	<i>Course Contents;</i>		
e.	<i>Duration in Days;</i>		
f.	<i>Location;</i>		
g.	<i>Maximum number of Trainees per course;</i>		
h.	<i>Training Materials and Training Aids</i>		
B.3.14.3.2	Training courses and materials shall enable the trainees to later instruct other technical staff according to the obtained knowledge.		
B.3.14.3.3	Training courses shall be of a high standard and apply the latest teaching techniques.		
B.3.14.3.4	Trainings shall be conducted for the maintenance (hardware/software) and operation of the DME and RCMS systems		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
B.3.14.3.5	The Contractor or OEM shall provide the trainees with OEM standard training documents in soft and hard copies.		
B.3.14.3.6	The OEM shall issue a Training Certificate to ANS personnel who attended the training. The Certificate shall indicate the following:		
a.	<i>Name of the trainee;</i>		
b.	<i>Course title;</i>		
c.	<i>Place of training;</i>		
d.	<i>Date and duration of the training with the OEM company logo on the Certificate.</i>		
B.3.14.4	Factory Training (FT)/Factory Acceptance		
B.3.14.4.1	Factory Training (FT) and Factory Acceptance, each for a minimum of five (5) days for DME system shall be scheduled for six (6) personnel:		
a.	DME system (4 personnel for Factory Training)		
b.	2 personnel for DME system (Factory Acceptance)		
B.3.14.4.2	The Training course shall be designed to bring up the trainees to a sufficient level for the proper operation and maintenance of the delivered systems.		
B.3.14.4.3	CAAP requires that the Factory Training be conducted first prior to the installation of the navigational aids equipment and the conduct of site training.		
B.3.14.4.4	All training materials and training aids utilized shall be provided by the supplier in softcopy and hardcopy		
B.3.14.4.5	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. Cost of the travel expenses shall be included/reflected in the Contractor's Financial Bid Proposal.		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
B.3.14.5	Site Training (ST)		
B.3.14.4.5	Site Training (ST) for DME systems shall be scheduled for six (6) personnel:		
a.	2 personnel for Test Equipment Training		
b.	4 personnel for On-Site Training		
B.3.14.4.5	The Training course shall be designed to bring up the trainees to a sufficient level for the proper operation and maintenance of the delivered systems.		
B.3.14.4.5	The training cost shall be reflected in the Contractor's Financial Bid Proposal.		
B.3.14.5	Documentations		
B.3.14.5	Aside from training materials, the following documents shall be delivered for each site:		
a.	<i>2 sets of operations manual (DME, RCMS and its ancillaries)</i>		
b.	<i>2 sets of maintenance (hardware/software) manual (DME, RCMS and its ancillaries)</i>		
c.	<i>2 sets of software manual (DME, RCMS and its ancillaries)</i>		
d.	<i>2 sets of inventory list of equipment to include test instruments, tools and spare parts (DME, RCMS and its ancillaries)</i>		
e.	<i>2 sets of as-built drawings. (As-built drawings shall be submitted on or before the commissioning of the equipment)</i>		
f.	<i>2 Softcopy of all delivered documents shall be provided to CAAP in a USB / thumb drive.</i>		
B.3.14.5	Qualified Installer / Systems Engineer		
B.3.14.5.1	The CAAP requires that only OEM qualified personnel will do the installations/commissioning of the DME equipment. CAAP requires submission of Certificate of qualification of installer from the OEM.		
B.3.14.5.2	The Bidder shall submit <i>together with its Technical Proposal</i> resumés of qualified installers/personnel who will be involved in the Project. The Bidder shall specify/describe the responsibilities of these` personnel with regards to the implementation of the project.		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
B.3.15	SPARES AND TEST EQUIPMENT		
B.3.15.1	The Contractor shall supply/deliver the required spare units/modules to attain the required DME operation and attain the required performance requirements based on submitted MTBF.		
B.3.15.2	The Contractor shall provide an appropriately sized lockable metal cabinet for the storage of Spares and Test Equipment at the Radar Equipment Room.		
B.3.15.3	The Contractor shall supply critical system spare parts and quantities defined in the proposal to operate the installed dual system DME equipment at least 99.99% availability.		
B.3.15.4	The contractor shall add spares at their own cost if the availability 99.99% of equipment is not attained at the end of Defect Liability Period.		
B.3.15.5	<i>Spares</i>		
B.3.15.5.1	Spare units/modules are defined as repairable items which are kept in store to be exchanged for the same items in case of failure.		
B.3.15.5.2	The Contractor is required to supply DME recommended spare units/modules for each system of equipment.		
B.3.15.5.3	The spare parts list shall be submitted with the Technical Proposal and shall be certified by the OEM that the standard spare parts to be supplied are designed/quantified for DME operation and in accordance with respective Availability and submitted MTBFs requirements. This certification shall be included as part of the Technical Proposal document.		
B.3.15.5.4	The Contractor must indicate the turnaround time for different types of spares during the lifetime of the supplies, and shall not be more than what is stated in previous <i>Section</i> .		
B.3.15.5.5	The spare parts shall be brand new and quantity of spare units/modules must be		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	balanced against the maintenance philosophy, cost and probability of situations of spare shortage.		
B.3.15.5.6	A brief description of the calculations associated with the proposed spares supply and probability value used in the calculations must be included in the Technical Proposal.		
B.3.15.5.7	The Contractor shall submit together with its Technical Bid a certification from the Manufacturer ensuring the availability of spare parts for <i>at least the next ten (10) years after the Warranty Period</i> .		
B.3.15.5.8	The delivered spare units/modules for the Project shall not be used within the <i>DLP and Warranty</i> periods. In cases where the delivered spare units/modules were used <i>within the DLP and Warranty periods</i> , the Contractor is obliged to replace the used spare units/modules with a new spare set. This is to maintain the exact spare parts stock level after the Warranty period.		
B.3.15.5.9	The Contractor/Manufacturer shall be able to supply the required spare parts after the warranty up to the period specified.		
B.3.15.5.10	A Spare Provision Conference, if necessary, may be held for the contractor to present basis for spare allocation in order to make the final selection of all spares.		
B.3.15.5.11	The Contractor/OEM shall provide minimum spare parts for the following sub-systems based on submitted MTBF:		
a.	<i>Transmitter Group</i>		
b.	<i>Receiver Group (DME only)</i>		
c.	<i>Control & Monitoring Group(local)</i>		
d.	<i>Antenna Assembly Group</i>		
e.	<i>Back-up and Power Supply Group</i>		
B.3.15.5.12	Spares must be of the same quality as the originally installed parts and equipment, and must be subject to the same parts selection criteria, quality control, testing and burn-in as the original equipment.		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
B.3.15.5.13	Turn-around time if a unit is returned to the Contractor for repair shall be sixty (60) days.		
B.3.15.5.14	A brief description of the calculations associated with the proposed spares supply and probability value used in the calculations must be included in the proposal.		
B.3.15.5.15	If the equipment performance and quantity of spare parts supplied was found to be insufficient to achieve the required 99.99% availability requirements within the DLP, the Contractor is responsible to augment the system design, and deliver additional necessary spare parts to meet the availability requirement without cost to CAAP.		
B.3.15.5.16	The Contractor shall secure a certification from the Manufacturer ensuring the availability of spare parts for at least the next ten (10) years after the Warranty Period.		
B.3.15.5.17	The delivered spare units/modules for the Project shall not be used within the Warranty period.		
B.3.15.5.18	In emergency cases where the delivered spare units/modules were used within these periods, the Contractor is obliged to replace the used spare units/modules with a brand-new spare set. This is to maintain the exact spare parts stock level/status after the end of the Warranty period.		
B.3.15.5.19	The Contractor/Manufacturer shall be able to supply the required spare parts after the warranty up to the period specified.		
B.3.15.5.20	The CAAP shall not be exclusively limited to the Contractor for the procurement of spare parts. The Procuring Entity shall have the option to procure spare parts of supplied DME systems at other authorized distributors and/or direct to the Original Equipment Manufacturer (OEM).		
B.3.15.5.21	The bidder shall also include in their Technical Proposal a list of spare parts necessary for the maintenance of the equipment with		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	corresponding cost in US\$ including price validity. The spare parts costing shall not be evaluated as part of the bid but shall be used by CAAP for budgetary purposes in future procurement of spare parts.		
B.3.15.6	<i>Test Equipment and Tools</i>		
B.3.15.6.1	All test and fault location facilities which are built-in and form an integral part of the equipment must be listed and described in the Proposal.		
B.3.15.6.2	Test Instruments shall have the appropriate compliances to internationally accepted standards for test instruments (e.g, CE certified, UL certified, EN certified and/or its equivalents)		
B.3.15.6.3	All applicable test equipment shall be calibrated prior to delivery.		
B.3.15.6.4	The Contractor shall provide the original certificate of calibration for the Oscilloscopes, and the PIR instruments upon delivery to the site.		
B.3.15.6.5	The equipment (DME) shall be equipped with a complete set of OEM-approved standard tools necessary for the conduct of corrective and preventive maintenance of the equipment (1-set for DME).		
B.3.15.6.6	Standard and special instruments/test equipment (<i>of latest model</i>) which are necessary for fault location, testing, maintenance and major overhaul of DME such as but not limited to the following (minimum requirement):		
a.	<i>One (1) unit Oscilloscope (dual trace) 500 MHz, Portable (digital)</i>		
b.	<i>Two (2) Unit Digital Multimeter</i>		
c.	<i>One (1) set Peak Power Meter with 50, 250, 2500-Watt plug-in elements</i>		
d.	<i>One (1) set Extender Boards</i>		
B.3.15.6.7	All test instruments to be supplied shall include the necessary interfaces/connectors,		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	cables, cases, power supplies and probes for its complete operation.		
B.3.15.6.8	Test Instruments not identified above but are necessary for the operation and maintenance of the supplied DME systems shall also be supplied as identified by the OEM.		
B.3.16	DELIVERY, STORAGE AND HANDLING		
B.3.16.1	Equipment shall be protected against extreme temperature and humidity, and shall be stored in a conditioned place to prevent corrosion and/or contamination.		
B.3.16.2	Equipment shall be wrapped up in dust-tight covers and kept away from construction activities in order to be protected against dust and debris.		
B.3.16.3	Contractor shall be responsible for correct storage and safety of the equipment under the conditions as specified.		
B.3.16.4	Contractor shall handle the equipment and materials in accordance with the manufacturer's recommendations.		
B.3.16.5	Contractor shall be responsible for facilitating the delivery/shipment including security of equipment from the supplier's premise up to the installation site.		
B.3.16.6	All dismantled equipment/items shall be packaged in a standard wood crate designed to accommodate the equipment of each system for ready transport. A duplicate copy of the inventory list shall also be attached in front of the crate to identify its contents. Handling instructions and crate identification number shall also be included.		
B.3.17	PROJECT MANAGEMENT SCHEDULE		
B.3.17.1	The Bidder shall include in their proposal a project activity schedule for the project starting from the Notice of Proceed.		
B.3.17.2	CAAP specifies that the project be completed within 365 calendar days exclusive of DLP and warranty period.		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
B.3.17.3	For Force Majeure, Section 22 of the General Conditions of the Contract applies.		
B.3.17.4	The Contractor shall submit as detailed as possible together with the Technical Proposal preliminary project management schedule highlighting the following project component activities:		
B.3.17.5	Equipment Manufacturing; Shipment/Delivery, Installation, Power System, Training (Factory/Site), Acceptance (Factory/Site), Test Equipment, Final Configuration, Reliability Test (2-CD), Submission of As-Built Drawings/Plans. Flight Commissioning, Project Completion (Defect Liability Period for 1 year/Warranty Period for 1 year)		
B.3.17.6	The Project Management Schedule shall be in accordance with the approved contract time.		
B.3.17.7	The Contractor shall submit a final Project Management Schedule to CAAP as part of the Methods of Working Plan (MOWP) requirement prior to implementation of the project.		
B.3.17.8	Disbursement Schedule to be submitted with the bid proposal and to be updated during & every quarter in the implementation stage by the contractor.		
B.3.18	TESTS		
B.3.18.1	Factory Acceptance Test		
B.3.18.1.1	Prior to delivery, the Contractor shall conduct a Factory Acceptance Test in order to ensure that their equipment operates as intended and meets all the contractual requirements.		
B.3.18.1.2	The CAAP requires that the DME equipment and subsystems have passed all tests in the factory (OEM) prior to shipment to the site.		
B.3.18.1.3	The factory tests shall be witnessed by CAAP personnel for the equipment (DME). The conduct of all test procedures shall be for 5 days.		
B.3.18.1.4	The Bidder shall provide in their proposal information on:		
a.	<i>the place;</i>		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
b.	<i>the schedule;</i>		
c.	<i>activities for the equipment testing;</i>		
d.	<i>The result of Internal Factory Test.</i>		
B.3.18.1.5	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. Cost of the travel expenses shall be included/reflected in the Contractor's Financial Bid Proposal.		
B.3.18.2	Site Acceptance Test		
B.3.18.2.1	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.		
B.3.18.2.2	The supplier shall submit for approval of CAAP a detailed Site Acceptance Test (SAT) plan (2 sets) four weeks before the beginning of the SAT.		
B.3.18.2.3	The CAAP requires submission of a proposed Site Acceptance Test plan for the DME and RCMS prior to commissioning. The Site Test plan may be revised by CAAP as necessary.		
B.3.18.2.4	The SAT plan shall consist of a subset of functional tests, plus specific tests taking into account the site environment.		
B.3.18.2.5	The SAT plan shall consist of a set of functional and performance tests aiming at validating the compliance of the system with this specification.		
B.3.18.2.6	SAT shall be performed for all hardware and software deliverables.		
B.3.18.2.7	At the beginning of the SAT, the contractor shall provide introduction/briefing and the baseline for the installed system.		

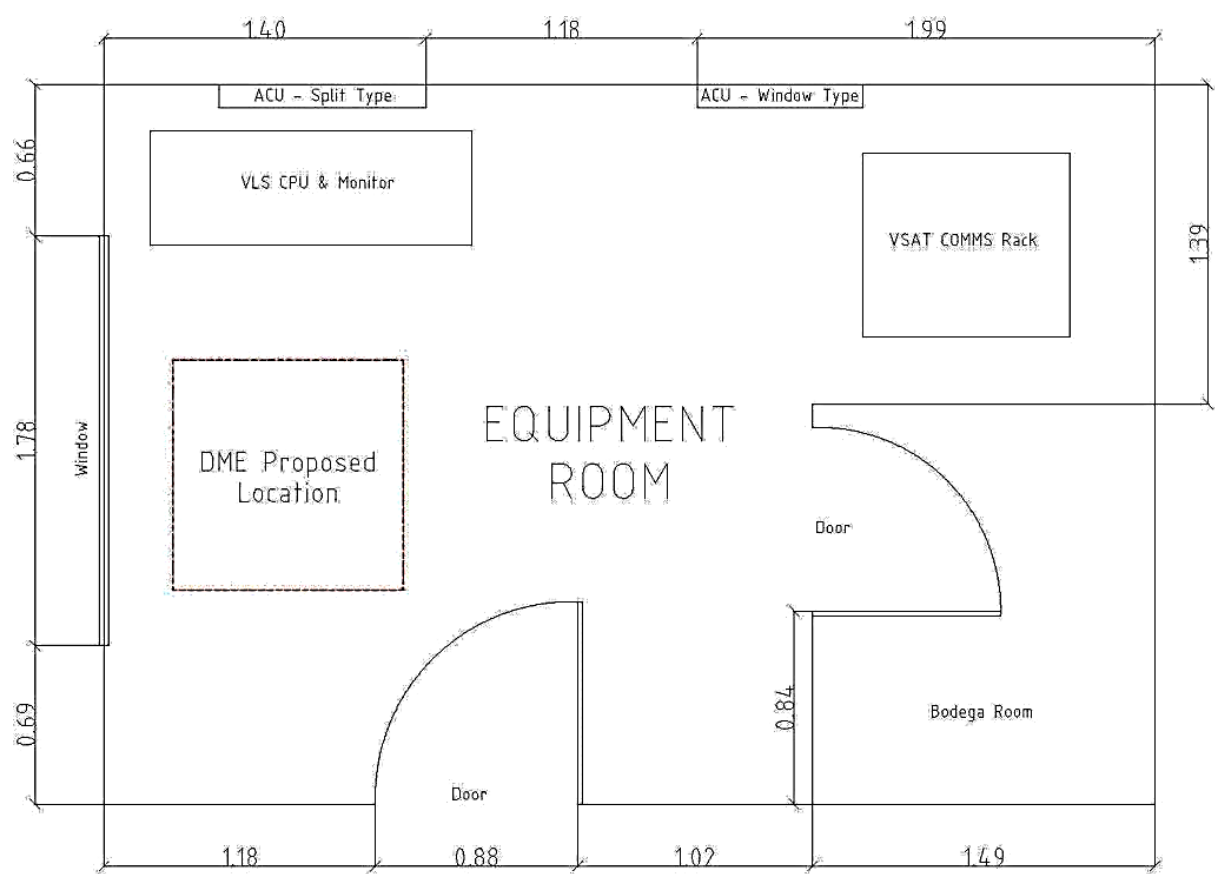
Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
B.3.18.2.8	Each test executed at the SAT shall be described at least with the following information:		
a.	test identifier and title;		
b.	the procedure to follow for performing the test;		
c.	the system 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		
B.3.18.3	Reliability Test		
B.3.18.3.1	Prior to conducting the commissioning flight test, a Reliability Test shall be conducted by the Contractor. The start of the test shall be announced by the Contractor.		
B.3.18.3.1	A Reliability Test shall be conducted for a period of 2 days (DME) by the Contractor after a successful Site Acceptance Testing.		
B.3.18.3.2	A Reliability Test Check List shall be prepared by the Contractor/Manufacturer for documentation of the results of the daily tests. If the equipment passes the Reliability Test, a Commissioning Flight test shall follow.		
B.3.18.3.3	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 Flight Test for the new equipment.		
B.3.18.4	Commissioning Flight Test		
B.3.18.4.1	A Commissioning Flight Test shall be conducted by the Contractor for the DME systems. The test shall be in accordance with the Philippine Flight Inspection Procedures and ICAO Manual Doc. 8071, Annex 10 and Annex 14.		
B.3.18.4.2	The Contractor shall make arrangements for the aircraft and personnel necessary for the conduct of the flight test. Cost of the		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	commissioning Flight Test shall be included in the Contractor's Financial Bid Proposal.		
B.3.18.4.3	The aircraft to be used in the Commissioning Flight Test including its flight check equipment shall be authorized/ certified for the purpose by the Civil Aviation Authority of the Philippines (CAAP).		
B.3.18.4.4	Flight Check activities shall be attended by authorized Flight Inspection and Calibration Group (FICG) personnel of CAAP.		
B.3.18.4.5	Costs related to flight check shall be borne by the Contractor. In the event that the Flight Check of the DME systems were not completed within the specified flight, the Contractor shall be responsible of any additional cost that may incur until the DME system completes and passes the Commissioning Flight Check.		
B.3.18.4.6	Original Flight Test result document in "Passing Marks" shall be given to the CAAP upon completion of the test and certified by FICG before Final acceptance of the Project.		
B.3.19	PROJECT COMPLETION		
B.3.19.1	A Certificate of Project Completion shall be issued by CAAP to the Contractor upon successful conduct of Commissioning Flight Check of the system (DME) is completed.		
B.3.19.2	The following documents shall be the attachment for the approval of the Certificate of Project Completion:		
B.3.19.3	Copy of approved Contract including the Terms of Reference;		
B.3.19.4	Factory Acceptance Test Report;		
B.3.19.5	Project Progress Report;		
B.3.19.6	Training Report including photocopy of the training certificates issued;		
B.3.19.7	Site Acceptance Test Report;		
B.3.19.8	Reliability Test Report;		
B.3.19.9	Operation/User and Service Manuals;		
B.3.19.10	As-Built Drawings;		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
B.3.19.11	Inventory of newly installed equipment including test instruments, special tools, spare parts;		
B.3.19.12	Inventory of newly dismantled equipment/items for CAAP storage;		
B.3.19.13	Commissioning Flight Test Report		
B.3.20	DEFECTS LIABILITY AND WARRANTY PERIODS		
B.3.20.1	All hardware and software components to be delivered, including the RCMS (Remote Control Monitoring System), Workmanship, Ancillaries, shall have a Defects Liability Period (DLP) of One (1) year. All components to be delivered shall be brand new and of latest model.		
B.3.20.2	The DLP shall start after the date of issuance of the Certificate of Project Completion by the CAAP, wherein all of the works were executed, completed by the Contractor as per Contract.		
B.3.20.3	A Facility Availability Report shall be submitted by the Contractor to CAAP after the end of the DLP to determine if the system installed is within the required availability requirements of 99.99%.		
B.3.20.4	A Certificate of Final Acceptance shall be issued by CAAP after the end of the DLP period.		
B.3.20.5	In addition to the Defect Liability Period (<i>parts and service</i>), a Warranty Period of One (1) year for the hardware/software components (parts and service) is required.		
B.3.20.6	All software components to be delivered, including the operating system, shall have a minimum of two (2) years complete support services.		
B.3.20.7	Software and/or hardware licenses shall be valid for the entire lifetime of the system.		
B.3.20.8	All spare parts delivered for this purpose shall not be used under the Defect Liability and Warranty period as replacements of defective parts. If so ever, it shall be replaced by the Contactor to maintain the spare parts stock level of the facility and its turnaround time		

Section	Specification	Compliance Statement	Reference to support statement (also INDICATE PAGE No.)
	shall be in accordance as stated in Spares Section.		
	END OF SPECIFICATIONS		

Equipment Room Layout:



BASCO FSS EQPT ROOM
(NOT SCALED)

ANNEX A – ITB 10.1 Form

Name of the Project _____

Name of Bidder: _____

Calendar Year: _____

(1)	(2)	(3)	(3.1)	(3.2)	(4)	(4.1)
Item	Country of Origin	Description	Brand	Type / Model / Version	Quantity	Unit

(signature)

(in the capacity of)

Duly authorized to sign Bid for and on behalf of _____

Date _____.

*NOTE: All equipment/items offered must be reflected in this form. Columns 3.1 & 3.2 for applicable items.
Provide additional sheets when necessary.*



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 the Project)*" at *(Airport Address)*.

Issued this *(Date)*.

Facility In-Charge/Authorized Representative

Section VIII. Checklist of Technical and Financial Documents

Checklist of Technical and Financial Documents

I. TECHNICAL COMPONENT ENVELOPE

Class "A" Documents

Legal Documents

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

Technical Documents

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

Financial Documents

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

Class "B" Documents

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

II. FINANCIAL COMPONENT ENVELOPE

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

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

- ☐ (k) *[For foreign bidders claiming by reason of their country's extension of reciprocal rights to Filipinos]* Certification from the relevant government office of their country stating that Filipinos are allowed to participate in government procurement activities for the same item or product.
- ☐ (l) Certification from the DTI if the Bidder claims preference as a Domestic Bidder or Domestic Entity.

