PHILIPPINE BIDDING DOCUMENTS

SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF THE SAFETY OVERSIGHT MANAGEMENT SYSTEM FOR THE CIVIL AVIATION AUTHORITY OF THE PHILIPPINES INCLUDING THE SOFTWARE AND HARDWARE COMPONENTS
Bid No.25-20-04 BRAVO

Government of the Republic of the Philippines

Sixth Edition
July 2020

Preface

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

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

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

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

a. All the documents listed in the Table of Contents are normally required for the procurement of Goods. However, they should be adapted as necessary to the circumstances of the particular Procurement Project.

b. Specific details, such as the "name of the Procuring Entity" and "address for bid submission," should be furnished in the Instructions to Bidders, Bid Data Sheet, and Special Conditions of Contract. The final documents should contain neither blank spaces nor options.

c. This Preface and the footnotes or notes in italics included in the Invitation to Bid, Bid Data Sheet, General Conditions of Contract, Special Conditions of Contract, Schedule of Requirements, and Specifications are not part of the text of the final document, although they contain instructions that the Procuring Entity should strictly follow.

d. The cover should be modified as required to identify the Bidding Documents as to the Procurement Project, Project Identification Number, and Procuring Entity, in addition to the date of issue.

e. Modifications for specific Procurement Project details should be provided in the Special Conditions of Contract as amendments to the Conditions of Contract. For easy completion, whenever reference has to be made to specific clauses in the Bid Data Sheet or Special Conditions of Contract, these terms shall be printed in bold typeface on Sections I (Instructions to Bidders) and III (General Conditions of Contract), respectively.

f. For guidelines on the use of Bidding Forms and the procurement of Foreign-Assisted Projects, these will be covered by a separate issuance of the Government Procurement Policy Board.

Table of Contents

Glossary of Acronyms, Terms, and Abbreviations

ABC – Approved Budget for the Contract.

BAC – Bids and Awards Committee.

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

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

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

BIR – Bureau of Internal Revenue.

BSP – Bangko Sentral ng Pilipinas.

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

CDA - Cooperative Development Authority.

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

CIF – Cost Insurance and Freight.

CIP – Carriage and Insurance Paid.

CPI – Consumer Price Index.

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

DTI – Department of Trade and Industry.

EXW – Ex works.

FCA – "Free Carrier" shipping point.

FOB – "Free on Board" shipping point.

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

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

GFI – Government Financial Institution.

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

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

GOP – Government of the Philippines.

GPPB – Government Procurement Policy Board.

INCOTERMS – International Commercial Terms.

Infrastructure Projects – Include the construction, improvement, rehabilitation, demolition, repair, restoration or maintenance of roads and bridges, railways, airports, seaports, communication facilities, civil works components of information technology projects, irrigation, flood control and drainage, water supply, sanitation, sewerage and solid waste management systems, shore protection, energy/power and electrification facilities, national buildings, school buildings, hospital buildings, and other related construction projects of the government. Also referred to as civil works or works. (2016 revised IRR, Section 5[u])

LGUs – Local Government Units.

NFCC – Net Financial Contracting Capacity.

NGA – National Government Agency.

PhilGEPS - Philippine Government Electronic Procurement System.

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

PSA – Philippine Statistics Authority.

SEC – Securities and Exchange Commission.

SLCC – Single Largest Completed Contract.

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

UN – United Nations.

Section I. Invitation to Bid

INVITATION TO BID FOR "SUPPLY, DELIVERY INSTALLATION AND COMMISSIONING OF SAFETY OVERSIGHT MANAGEMENT SYSTEM FOR THE CIVIL AVIATION AUTHORITY OF THE PHILIPPINES INCLUDING THE HARDWARE AND SOFTWARE COMPONENTS "

BID NO. 25-20-04 BRAVO

1. The CIVIL AVIATION AUTHORITY OF THE PHILIPPINES (CAAP), through the CAAP Corporate Budget CY 2025 intends to apply the sum of **THREE HUNDRED FIFTY MILLION PESOS (Php350,000,000.00)** being the ABC to payment under the contract for the **Supply, Delivery, Installation and Commissioning of Safety Oversight Management System for the Civil Aviation Authority of the Philippines including the Software and Hardware Components.** Bids received in excess of the ABC shall be automatically rejected at the bid opening.

2. The CIVIL AVIATION AUTHORITY OF THE PHILIPPINES now invites bids for theabove Procurement Project. Delivery of the Goods is required by **One Hundred Eighty (180) Calendar Days**. Bidders should have completed, within the last ten (10) years from the date of submission and receipt of bids, a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II (Instructions to Bidders).

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

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

4. Prospective Bidders may obtain further information from CAAP Bids and Awards Committee - Bravo and inspect the Bidding Documents at the address given below during Office Hours from 8AM to 5PM Philippine Time.

5. A complete set of Bidding Documents may be acquired by interested Bidders on **15 April 2025 until the deadline of submission of bid** from the given address and upon payment of the applicable fee for the Bidding Documents pursuant to the latest Guidelines issued by the GPPB, in the amount of **Php50,000.00 (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 by presenting the official receipt in person.

6. The Civil Aviation Authority of the Philippines will hold a Pre-Bid Conference on **April 25, 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 the office address indicated below on or before **May 09, 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 on **May 09, 2025 @ 9:30 AM** at the given address below and/or via Zoom/Google Meet. Bids will be opened in the presence of the bidders' representativeswho choose to attend the activity.

10. The CAAP reserves the right to reject any and all bids, declare a failure of bidding, ornot 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. Bidding Documents may also be downloaded free of charge from the website of the Philippine Government Electronic Procurement System (PhilGEPS) and the website ofthe Procuring Entity, provided that bidders shall pay the applicable fee for the BiddingDocuments not later than the submission of their bids.

12. For further information, please refer to:

ENGR LEANDRO VARQUEZ
Head, BAC Secretariat
BAC Office
3rd Floor Supply, Procurement Building
Civil Aviation Authority of the Philippines
MIA Road corner Ninoy Aquino Avenue
1300 Pasay City, Metro Manila
Telephone number – (02) 8246 4988 loc 2236
Email address – **bac@caap.gov.ph**
www.caap.gov.ph

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

Section II. Instructions to Bidders

1. Scope of Bid

The Procuring Entity, **Civil Aviation Authority of the Philippines** wishes to receive Bids for the **Supply, Delivery, Installation and Commissioning of Safety Oversight Management System for Civil Aviation Authority of the Philippines including Software and Hardware Components** with identification number **Bid No. 25-20-04 BRAVO.**

The Procurement Project (referred to herein as "Project") is composed one (1) lot, the details of which are described in Section VII (Technical Specifications).

2. Funding Information

2.1. The GOP through the source of funding as indicated below for COB 2025 in the amount of THREE HUNDRED FIFTY MILLION PESOS [Php 350,000,000.00].

2.2. The source of funding is:

a. GOCC and GFIs, the proposed Corporate Operating Budget.

3. Bidding Requirements

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

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

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

4. Corrupt, Fraudulent, Collusive, and Coercive Practices

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

5. Eligible Bidders

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

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

5.3. Pursuant to Section 23.5.1.3 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 at least fifty percent (50%) of the ABC; **OR** that the bidder should have completed at least two (2) similar contracts and the aggregate contract amounts should be equivalent to at least 50% of the ABC and the largest of these similar contracts must be equivalent to at least half of the 50% of the ABC.

For this purpose, the similar contract mentioned above must have been completed within the period specified in the Invitation to Bid.

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

Subcontracting is not allowed.

8. Pre-Bid Conference

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

9. Clarification and Amendment of Bidding Documents

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

10. Documents comprising the Bid: Eligibility and Technical Components

10.1. The first envelope shall contain the eligibility and technical documents of the Bid as specified in **Section VIII (Checklist of Technical and Financial Documents)**.

10.2. The Bidder's SLCC as indicated in **ITB** Clause 5.3 should have been completed within ten (10) years as provided in paragraph 2 of the **IB** prior to the deadline for the submission and receipt of bids.

10.3. If the eligibility requirements or statements, the bids, and all other documents for submission to the BAC are in foreign language other than English, it must be accompanied by a translation in English, which shall be authenticated by the appropriate Philippine foreign service establishment, post, or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines. Similar to the required authentication above, for Contracting Parties to the Apostille Convention, only the translated documents shall be authenticated through an apostille pursuant to GPPB Resolution No. 13-2019 dated 23 May 2019. The English translation shall govern, for purposes of interpretation of the bid.

11. Documents comprising the Bid: Financial Component

11.1. The second bid envelope shall contain the financial documents for the Bid as specified in **Section VIII (Checklist of Technical and Financial Documents)**.

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 in the **BDS.**

b. For Goods offered from abroad:

i. Unless otherwise stated in the **BDS**, the price of the Goods shall be quoted delivered duty paid (DDP) with the place of destination in the Philippines as specified in the **BDS**. In quoting the price, the Bidder shall be free to use transportation through carriers registered in any eligible country. Similarly, the Bidder may obtain insurance services from any eligible source country.

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

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[1] 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 until one hundred 120 days from the opening of bids. Any Bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

15. Sealing and Marking of Bids

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

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

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

16. Deadline for Submission of Bids

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

17. Opening and Preliminary Examination of Bids

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

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

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

18. Domestic Preference

18.1. The Procuring Entity will grant a margin of preference for the purpose of comparison of Bids in accordance with Section 43.1.2 of the 2016 revised IRR of RA No. 9184.

19. Detailed Evaluation and Comparison of Bids

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

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

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

20. Post-Qualification

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

21. Signing of the Contract

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

Section III. Bid Data Sheet

Bid Data Sheet

ITB Clause	
5.3	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 at least fifty percent (50%) of the ABC; **OR** The bidder should have completed at least two (2) similar contracts and the aggregate contract amounts should be equivalent to at least 50% of the ABC and the largest of these similar contracts must be equivalent to at least half of the 50% of the ABC. For this purpose, a similar contract for each major category of work, shall be: **a. SOFTWARE COMPONENT: Php300,000,000.00** **Installation and Implementation of Safety Oversight Management System for Aviation Authorities including the Cloud Hosting Services or its equivalent;** **and** **b. HARDWARE COMPONENT: Php50,000,000.00** **Supply and Delivery of ICT Equipment.** Completed within ten (10) years prior to the deadline for the submission and receipt of bids.
14.1	The bid security shall be in the form of a Bid Securing Declaration, or any of the following forms and amounts: a. The amount of not less than P7,000,000.00 [2% of ABC], 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 P17,500,000.00 [5% of ABC] if bid security is in Surety Bond.
15.0	1. Each and every page thereof shall be initialed/signed by the duly authorizedrepresentative/s of the Bidder. Submitted Eligibility, Technical and Financial documents shall be properly marked with index tabs (ear tab) and must be 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). Pagination should be sequential based on the entire span of the whole documents inside the envelope. 2. Each Bidder shall submit **one (1)** copy of the first and second components of its bid.
19.1	The Bidder must render its Statement of Compliance/Conformity with BiddingDocuments as enumerated and specified in Section VII. Technical Specifications
19.2	Partial bid is not allowed. The project is packaged 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	The Bidder with the Lowest Calculated Bid (LCB) that complies with and is responsive to all the requirements and conditions shall submit its: a) Latest income and business tax returns filed through the Electronic Filingand Payment System (EFPS); b) Business licenses and permits required by law (Registration Certificate, Mayor's Permit, & Tax Clearance); and c) Latest Audited Financial Statements d) Certificates of Satisfactory Performance from at least two (2) previous and/or existing civil aviation authority clients for which the proposed system/application was installed, and commissioned. The projects must have been awarded, completed, and promptly implemented within ten (10) years prior to the opening of the bids. e) Organizational chart with the detailed qualification of its personnel involved in the project which should have a technical background on developing an aviation safety oversight management system software. Subject matter experts shall have at least four (4) years' experience in developing an aviation related software (e.g. regulatory management, airmen licensing, certification, surveillance and resolution of safety concerns, aviation safety analysis) used by regulators in its safety oversight functions. Failure to submit any of the post-qualification requirements on time, or a finding against the veracity thereof, shall disqualify the bidder for award. Provided, that in the event that a finding against the veracity of any of the documents submitted is made, it shall cause the forfeiture of the Bid Security in accordance with Section 69 of the IRRT of RA 9184.

21.2	The attached Technical Specifications (Terms of Reference) for **Supply, Delivery, Installation and Commissioning of Safety Oversight ManagementSystem for the Civil Aviation Authority of the Philippines including the Hardware and Software Components** shall be an integral and inseparable part of the contract.

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 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 VII (Technical Specifications)** shall specify what inspections and/or tests the Procuring Entity requires, and where they are to be conducted. The Procuring Entity shall notify the Supplier in writing, in a timely manner, of the identity of any representatives retained for these purposes.

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

5. Warranty

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

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

6. Liability of the Supplier

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

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

Section V. Special Conditions of Contract

Special Conditions of Contract

GCC Clause	
1	**Delivery and Documents –** 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: [For Goods supplied from abroad, state:] "The delivery terms applicable to the Contract are DDP delivered [indicate place of destination]. In accordance with INCOTERMS." [For Goods supplied from within the Philippines, state:] "The delivery terms applicable to this Contract are delivered at the [indicate place of destination]. Risk and title will pass from the Supplier to the Procuring Entity upon receipt and final acceptance of the Goods at their final destination." Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in Section VI (Schedule of Requirements). For purposes of this Clause the Procuring Entity's Representative at the Project Site is the Information Technology Division.
	Incidental Services – The Supplier is required to provide all of the following services, including additional services, if any, specified in Section VI. Schedule of Requirements: 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. Integration cost of the existing system and databases g. additional requirements to be provided under the Contract shall includethose specified in the Terms of Reference The Contract price for the Goods shall include the prices charged by the Supplier for incidental services and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.
	Spare Parts – The Supplier is required to provide all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier: 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: i. advance notification to the Procuring Entity of the pending termination, in sufficient time to permit the Procuring Entity to procure needed requirements; and ii. following such termination, furnishing at no cost to the Procuring Entity, the blueprints, drawings, and specifications of the spare parts, if requested. The spare parts and other components required are listed in **Section VI (Schedule of Requirements)** and the costs thereof are included in the contract price. The Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spare parts or components for the Goods for a period of the warranty or as agreed by the parties. Service units for the supplied/delivered devices must be made available 24/7 during the warranty period. Spare parts or components and service units shall be supplied as promptly as possible during the warranty, but in any case, within a period agreed by the parties.

	Packaging – The Supplier shall provide such packaging of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in this Contract. The packaging shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packaging case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit. The packaging, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified below, and in any subsequent instructions ordered by the Procuring Entity. The outer packaging must be clearly marked on at least four (4) sides as follows: Name of the Procuring Entity 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.
	Transportation – 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.

	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. Where the Supplier is required under Contract to deliver the Goods CIF, CIP or DDP, Goods are to be transported on carriers of Philippine registry. In the event that no carrier of Philippine registry is available, Goods may be shipped by a carrier which is not of Philippine registry provided that the Supplier obtains and presents to the Procuring Entity certification to this effect from the nearest Philippine consulate to the port of dispatch. In the event that carriers of Philippine registry are available but their schedule delays the Supplier in its performance of this Contract the period from when the Goods were first ready for shipment and the actual date of shipment the period of delay will be considered force majeure. 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.
	Intellectual Property Rights – 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.
	Regular and Recurring Services – [In case of contracts for regular and recurring services, state:] "The contract for regular and recurring services shall be subject to a renewal whereby the performance evaluation of the service provider shall be conducted in accordance with Section VII. Technical specifications."
2.2	The terms of payment shall be as follows: The project shall be paid on the schedule indicated which shall not exceed the ceiling specified in Table 1. Progressive payments based on a milestone upon acceptance by the Procuring Entity of the deliverable/s. The final payment shall be made only after the finalreport and a final statement, identified as such, shall have been submitted and approved as satisfactory by the Procuring Entity.

Table 1

Project Activity / Milestone	Deliverables	Payment Schedule
Submission of the Inception Report	Signed-off Inception Report	10% of the Total Project Cost
Conduct of Process Flow Assessment Delivery of all hardware and software component	Signed-Off Report Delivery of all hardware and software components specified in the TOR	30% of the Total Project Cost
Customization and Testing of the Application	Guaranteed 100% completed Testing of the Application Accomplishment Report	45% of the Total Project Cost
Revision of Technical Guidance Materials Knowledge Transfer for Admin/End-users User's Acceptance Testing (UAT) Final Acceptance	Approved Technical Guidance Materials Conduct of Training Sessions Signed Off UAT Final Report	15% of the Total Project Cost
TOTAL		100% of the Total Project Cost

4	The inspections and tests that will be conducted shall include but not limited to the physical inspection and inventory, software testing and/or whatever additional tests that the Technical Inspection Team may require.

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	Delivery Days / Weeks / Months
1	**Customized Safety Oversight Management System Application**	As specified in Section VII. Technical Specification	180 calendar days after receipt of Notice to Proceed
2	**Cloud Services**	As specified in Section VII. Technical Specification	
3	**Tablet, pc and other IT equipment**	As specified in Section VII. Technical Specification	
4	**Revisions of Technical Guidance Materials and integration of databases and systems affectedby the new system**	As specified in Section VII. Technical Specification	
5	**Training:** **SOMS Application Administration** **SOMS Train-the-Trainor** **SOMS End-user**	As specified in Section VII. Technical Specification	
6	**Warranty and Support Agreement / Certificate**	3 years Contract Agreement	
	Nothing follows		
	TOTAL		**180 calendar days**

SIGNATURE OVER PRINTED NAME	POSITION	DEPARTMENT/DIVISION

Section VII. Technical Specifications

Technical Specifications

Item	Specification	Statement of Compliance
		[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 Bidder's statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the applicable laws and issuances.]

Item	Specification	Statement of Compliance
0	**GENERAL**	
0.1	The Civil Aviation Authority of the Philippines is looking for a commercial off the shelf solution (COTS) software designed for aviation regulators in managing safety and security oversight and the day-to-day task of the Authority and responses efficiently and effectively withCAAP stakeholders. The Safety Oversight Management System (SOMS) should create a standardized risk-based, data-supported oversight system across Flight Standards InspectorateService (FSIS), Aerodrome and Air Navigation Safety Oversight Office (AANSOO) and other CAAP offices engaged in aviation operations. SOMS shall serve as CAAP's oversight tool to certification, surveillance, and Continued Operational Safety (COS).	NA
0.2	SOMS shall include the policy, processes, and associated software that FSIS, AANSOO and other CAAP Offices shall use to capture data in conducting its oversight function. SOMS is not a separate safety standard and does not impose additional requirements on Certificate Holders. The SOMS shall help accomplish the following objectives: • **Standardizes** the work being accomplished across FSIS, AANSOO and other CAAP Offices • **Improves** efficiency and collaboration between CAAP and its stakeholders • **Helps** CAAP aviation safety inspectors determine risk-based, data-supported oversightdecisions • **Provides** a standardized system that will determine compliance with regulations • **Assists** in reducing aviation risks and by increasing safety oversight	
0.3	The SOMS shall provide professional support to the oversight functions of CAAP to effectively record the day-to-day execution of its regulatory functions which shall not be limited to the following: 1) Qualification of Personnel 2) Certification and Licensing 3) Surveillance; and 4) Resolution of Safety Concerns. This Section (Terms of Reference) details all requirements for CAAP's regulatory functions.	

	The SOMS shall continue to evolve, improve, and introduce additional enhancements to meetthe ever-evolving needs of the Authority.	
1.0	**COMMERCIAL ASPECT**	
	GENERAL	
1.1	The bidder is required to:	
	o Have the capacity of developing the required software and providethe services needed during the transition and continued use with the capability of modification depending on the operational needs of the Authority.	
	o Have an available standard software module that is configurable and with complete software licenses.	
	o Be able to develop a versatile and user-friendly software in order to cater the management of day-to-day tasks of the Authority in complying with the international and local regulations, national regulations and other regulatory compliances;	
	o Able to develop a system that is efficient in managing audits and compliances.	
	o Able to develop a user-friendly application and allows users to adopt with minimal training.	
	o Be able to fully implement the project within eighteen (18) months from the issuance of Notice to Proceed. There should be minimal to no interruption to the system used by the Authority during the transition period in the implementation of the project.	
	o Provide the after-sales maintenance service of 3 years. The maintenance service shall include updates in accordance with the ICAO requirements, system enhancements, new features, big fixes and support for error handling.	
	o Be capable of migrating and integrating the existing database of the different offices of the FSIS and AANSOO to the new system for the qualifications and trainings of the employees especially the technical personnel.	
	o Be capable to revise existing technical guidance materials that will be affected by the change of system. The tasks will include but not limited to technical writing and consulting services regarding the new system.	
1.2	The Winning Bidder is required to:	
	o Provide a detailed description of the following:	

	○ Project implementation ▪ Transition plan ▪ Migration and integration of data and system from the existing database to the new system ○ Project organization ▪ Project phases ▪ Project plan ▪ System of reporting ▪ Change request handling ▪ Test to live system ○ Customer Service Response	
1.3	The System should be:	
	○ Able to cater the operational needs of the different departments of the Flight Standards Inspectorate Service (FSIS) and Aerodrome and Air Navigation Safety Oversight Office (AANSOO) in order to comply with the international and local aviation regulations. Thus, the developed system should be a fully functioning modular system that is capable of supporting an individual office, service and address the safety oversight function of the Authority to able to cope up with future compliances.	
	○ Able to provide a platform wherein senior management may have visibility of emerging safety risks necessary for the Authority to control and develop a strategy to mitigate them.	
	○ Able to replace the present certification and verification of documents or minimize the use of paper to lessen our carbon footprint in line withour mission to have a green Philippine sky;	
	○ Able to show the status of each applicant at each office, the person handling the process, the date when it was transmitted, including the significant remarks made to minimize delay and persistent follow-ups from the applicant's end;	
	○ Capable of sending requests for verification and certification to other civil aviation authorities.	
	○ Capable of delegating tasks to other personnel and synchronize calendars across workstations in an organization for an efficient work distribution and monitoring.	
	○ Compatible with any mobile devices and capable of offline accessibility to accomplish inspection checklists and save collected evidence. All tasks accomplished offline should automatically be saved and synchronize with the system once online.	

	○ Capable of endorsing a completed task following the workflow;	
	○ Able to provide an analysis tool and generate a report and a comprehensive view of the safety and security risks from the data gathered in the system;	
	○ Able to create dashboards (tables, graphs, pie charts as needed)	
	○ Capable of producing data and statistics in relation to the different transactions, activities and information obtained during the use of the system for continued improvement of the Authority's operations;	
	○ Equipped with an online payment portal or capable of being linked with the existing online payment portal.	
	○ Able to provide onsite and offsite product support to address trainings/technical issues on the use of the system.	
	○ Completely configurable to meet the exact needs of each CAAP offices and its stakeholders malleable in terms of modules, features and aesthetics.	
	○ Able to continuously innovate and improve the developed software system in orderto efficiently and effectively meet the operational needs of the Authority in the conductof its safety oversight activities;	
1.4	The supplier should be able to develop the following portals:	
	Client Application Portal - The supplier shall be able to develop a stakeholder portal to giveclients ease in doing business with the Authority. The stakeholders should be able to manage appointments, receive notifications on their transactions, and track its progress which can aid in lessening the administrative burden of the Authority.	
	Employee Application Portal – The supplier should be able to develop a platform that can beused offline by CAAP employees, to perform their functions such as but not limited to audit, inspections, investigations, research. This shall include a read and review feature that allows the responsible personnel to read and review individual pages that are awaiting approval and act on it.	
2.0	**SOFTWARE COMPONENT**	
2.1	**GENERAL**	
	• The software provider shall ensure a project plan that includes the incorporation of existing and subsequent ICAO and other regulatory (national and international) compliances in the development of the system.	
	• Configurable standard software for aviation regulators in the performance of itsoversight functions and in the	

	management of daily tasks	
	• The supplier shall ensure that all data are secured by ensuring that the system isincorporated with layers of protection to manage data security and protection.	
	• All data should be synchronized to a single database which can be accessed only by the assigned system administrator.	
	• The supplier should be able to develop a system that will generate alerts on any unusual trends in the data that may affect aviation safety and security risks based on the data across the whole industry and insights in how the Authority is performing as well as generate repots and statistics.	
	• The software shall have the capacity to identify new entries or revisions.	
	• The system should be able to generate statistics and data reports and shall have the capability to of an online/offline availability for audit inspections	
	• The system should be able to store and secure necessary data, files, and documents used by the different departments of the Flight Standards Inspectorate Service and the Aerodrome and Air Navigation Safety Oversight Office in the performance of its oversight functions	
	• The system shall have a detailed tracking of user activities in its historical record and an option to show the entries and changes made by the previous user.	
	• The system shall have a Graphic User Interface (GUI) with windows look and feel.They system should have a typical windows element that is user friendly.	
	• The supplier should be able to develop a system that will enable the personnel to communicate and collaborate more efficiently. Setup custom workflows and standardize processes across all offices so that everyone knows what to do, how and when.	
	• The system should be able to securely store examination sheets and has the capability of an online checking and computation of scores of such examinations.	
2.1.1	**Technical Aspects**	
	The software shall have the following specifications:	
	• Automated software distribution	
	• Running in via intranet and internet	
	• Works online or offline (data will be uploaded or synchronized in the system upon availability of internet connection)	

	• Runs with a dependable and reputable server database	
	• Supports standard application server	
	• Multi-platform strategy for server	
	• Multi user application	
	• Scalability (load balancing, clustering of servers) and high availability has to be shown (concept and references)	
	• Multi-level logging via application server for error tracing	
	• Integrated report generator/print engine for issuing certificates, licenses and other documents with distinctive security marks or indicators	
	• Plausibility checks during data inputs to be performed on client site/side	
	• Online help/support through the whole duration of the completion of the system	
2.1.2	**Mobile Availability**	
	In order to have an effective and efficient workforce, the system should be capable of being used in mobile devices (e.g. smart phones, tablet, laptops) with or without an online connection. The data inputted during an offline activity should be uploaded and synchronized once online connection has resumed. The following features should be incorporated as part of the mobile features:	
	• The offline auditing tools should allow the FSIS and AANSOO personnel to conduct audits in their mobile devices. The data during offline audits should later be synchronized into the system	
	• The system should be able to generate at least but not limited to a PDF format of the report based on a configurable print template.	
	• There should be a secured link between the mobile device and the server in using the web service with data encryption	
2.1.3	**Central Contact and Address Database**	
	The supplier should be able to establish a hierarchical contacts database with the following essential features"	
	• Hierarchical management of organizational units	
	• Must be able to store contact data of a large amount within the organization unit	
	• Must be able to store the profile of a person within the organization	
	• Endless levels of hierarchies	

	• Any number of contact persons within an organization unit	
	• Assigning a person to more than one organization unit with different positions perorganization unit	
	• Any number of attributes assigned to an organization unit or person	
	• Any number of addresses assigned to an organization or contact person	
	• Classification of the usage per address type: standard, warning, etc.	
	• Navigation in the organization tree, e.g. from a contact person to the respectivedepartment and then to all the employees of this department, from there on to the organization and all its dispatch groups.	
	• Detailed tracking of history with storage of previous values and preferably a function to compare values of the historical record	
	• Export and Import Interface	
	• Central management and server storage of print templates.	
	• Export the result of an addressee list to XML or CSV to allow further external processing	
2.1.4	**Permission Management**	
	The Permission Management System should be capable of a flexible and customizable permissions to maintain the appropriate balance of collaboration and control to ensure that the data stored by the Authority is secure and protected.	
	The system should be capable of performing the following functions:	
	• Permission management is restricted to a few select users. The software account ownerand system admins can manage permissions within the project management software. This includes creating, customizing, and deleting roles.	
	• Manage permissions at the level of an individual user. For example, user managementenables you to select exactly what Juan Dela Cruz can see and edit.	
	• Capable of role management which allows you to manage permissions at the role level.	

	• Capable of managing permissions tied to a specific folder or project.	
	• A registration for an unlimited number of users	
	• Establish a decentralized group administrator	
	• Provide a customized structure of access to information for a user depending in the levelof permission	
	• Capable of creating a role based right and permission management	
	• Equipped with a user management chart that allows you to view all users associatedwith your software account, including users with pending invitations.	
	• The Permission Management System should be equipped with data catalog which mustinclude access and input control mechanisms	
	The system shall offer:	
	• Any number of registered users	
	• Establishment of decentralized group administrators	
	• Structure of users into groups and/or roles	
	• Role based rights and permission management	
	• Collection of roles in groups	
	• Should be basis for all application modules	
	• Roles gather rights on workflows, menus and input fields within the applicationmodules	
	• Definition of: edit, add, view, create and delete rights	
2.1.5	**Integrated Reporting Tool**	
	The system must be able to generate data visualization tools that may be used in inquiriespertaining to the data fields present in the different modules:	
	• The data can be defined freely by graphically adding fields from different tables.	
	• The result may be controlled by setting filters in certain fields.	
	• Must be capable of connecting all data in a single trusted source	
	• Must be capable of analyzing and cascading aviation data	
	• Must be able to generate data visualization tools by merging data from different modules or database linked in the system	
	• Must be able collate data across different modules	

	• Must be equipped with communication tools for collaborative reporting	
	• Capable of providing several layers or security for data protection	
	• Must have a user-friendly interface	
	The system shall be capable of searching data and generating reports from the data available across all modules. The system should be capable of the following:	
	• The queries can be defined freely by graphically adding fields from different tables.	
	• The query result can be controlled by setting constraints on certain fields.	
	• Collation of data from different tables. It shall also support merging of data in a certaincontext that only "joinable" tables can be selected selectable.	
	• Queries can be implemented on data spread over all modules (cross module reporting).	
	• The information (results) shall be protected by the permission management system;	
	• Hierarchy structures such as organization trees shall be supported too.	
	• The queries can be stored for later reuse and being made available to other modules by dynamically inserting them as menu items in designated "Report" menus.	
	• Typical reports can be assigned to user groups, which ensure an easy usage by non- experts.	
	• The result data can be exported for further treatment in external programs. The standardexport formats shall be MS-Excel and MS-Word, for instance. We like to define templates to adjust the layout accordingly.	
	• Querying by groups is possible.	
	• Results of queries can be linked to print templates	
	• The user shall be able to configure the automated execution of queries (time interval, time of execution etc.)	
	• The query tool shall allow the creation of serial e-mails with variable fields. This shall give the CAAP the possibility to send automatically e-mails, for example to all licenseholders where a rating or license will expire in	

	a given period of time.	
	• Queries can be linked to modules to make them available. A query must respect the permissions of the user defined in permission management module.	
2.1.6	**Alerts**	
	• The system should be capable of providing different alert notifications that can beassociated to persons, organizations, or aircrafts.	
	• The system should manage the details of the different kind of alerts (open findings, open enforcements, planned audit and inspection etc.).	
	• The system should be capable of providing alert notification for any unusual data changes or delays in process or transaction	
	• The system should show clear alert symbols in the header information of persons, organizations, and aircraft, and in result lists.	
2.1.7	**Security**	
	Security is one of the crucial aspects of using technology. As such, the system should be capable of tracking audit trails for each user accessing the system, their tasks, actions, edits and the date and time of each activity. • The system should be able to provide accountability and evidence-based data.	
	• All data should be synchronized to a single database which can be accessed only by the assigned system administrator.	
	• To ensure check and balance the users shall have different access levels.	
	• The system shall have the capability of providing a multi-user environment with administrative privileges and user reporting features designed to meet individual systemusers' compliance.	
	• The system should be capable of performing a two-factor security authentication.	
	• The system shall include a process for identifying, testing, and deploying security patches/updates to	

	ensure the continued security and integrity of the system.	
2.1.8	**Confidentiality and Non-Disclosure**	
	• The CAAP will provide various data, records and including sensitive or criticalinformation relevant to the different regulatory offices' duties and functions but the confidentiality and/or disclosure thereof shall be maintained and cannot be disclosed and/or disseminated by any CAAP personnel and the supplier / contractor including itsemployees without the written permission of the Director General or his duly authorized representatives.	
	• Access to any and all data contained in the system to be developed shall be given onlyto those personnel and individual authorized by the Director General.	
	• Disclosure of the data without the required permission shall be a ground for the cancellation / rescission of the project and/or filing of the appropriate cases against theviolators.	
2.1.9	**Ownership**	
	• Once developed, the ownership of the data base/system shall be retained by the CAAP. The winning bidder shall provide a perpetual license certificate for the continuous use of the developed system.	
2.2	**GENERAL REQUIREMENTS**	
2.2.1	**FLIGHT STANDARDS INSPECTORATE SERVICE**	
2.2.1.1	**A. AIRMEN EXAMINATION BOARD (AEB)**	
	In view of the AEB's aim to streamline its data process flow to improve productivity and efficiency, the AEB proposes to replace the old examination system and address the issues on system security, capacity limitations, system performance, and location dependency.	
	Security Features	
	▪ The system shall be equipped with an Activity Tracking log that shall record criticaluser inputs such as the creation, modification or deletion of records.	
	▪ All examination questionnaires should be	

	synchronized to a single database which can be accessed only by personnel authorized by the Department Manager of the AEB.	
	▪ Examination results should be generated immediately after completion of the exam and recorded to the profile of the examinee.	
	• The digital copy of the questionnaires shall not be in any way downloadable.	
	Airmen Examination Module	
	• The system shall be able to execute a search, create, update, read, delete (SCRUD)operations.	
	• Updating or deleting records shall require the override password of the SOMSAdministrator.	
	• The system shall be accessible to offsite examination centers.	
	• The module should contain the following information:	
	Airmen Information This module shall be able to capture the following examinee information: • PEL • Full name and Photo • License type • School/Company • Course/Degree • Address • Contact number • Email • Date of birth • Sex • Nationality	
	License Type	
	This module will have the list of license type (Pilot, Mechanics, etc.) to be used in filing theAirmen information form	
	Subjects	
	Each subject shall have specific subject area (e.g. Airframe Rating has subject areas"Rigging, Sheet metal, Propeller etc.,)	

	Each subject shall have the following fields: • Subject code • Subject name • Subject area • Number of items • Time limit (in minutes) • Date created • Created by • Dates of Revision • Revised by	
	Functionalities	
	The system should be equipped with the following functions:	
	Question Bank	
	A database of questions with a minimum of two (2) and maximum of four (4) choices for the correct answer	
	Dashboard Analytics	
	The Dashboard Analytics serves as the default page of the user after logging in. This shall contain a quick view of the status and statistics needed by the department such as but not limited to:	
	• Number of subjects taken • Number of examinees scheduled every day • Number of certificated issued which can be grouped in different categories • Number of examinations conducted grouped in different categories.	
	Reporting	
	The system should be able to generate a detailed report of information on the database which is needed by the department in the performance of its functions.	
	Monitoring	
	The system should be able to record the status of the Test Report Application from theinitial stage until the results are released.	
	Verification	
	The AEB Staff should be able to verify the authenticity of the Test Report either by cross checking in the database or through the security features imbedded in the printed or digital copy of the test result.	
	Modules for Examinees	
	• All activities shall be logged including the user name,	

	the time of activity, and themodification made.	
	• The system should be capable or compatible with any third party application for thepayment of the required fees.	
	• The examinees account should be able to view and monitor the status of their examination, their examination history, fees paid and its progress.	
	• The examinees account should be able to receive notifications from CAAP of any announcements related to the examination.	
	Examination Module	
	• The system should be able to give each examinee an account with their corresponding passwords. Each account should contain the examinees personal, professional and academic details;	
	• The system should not be able to proceed with the processing of the examination should there be any incomplete requirements that the examinee has to comply;	
	• The interface should be user friendly and contain a full instruction of the examinationsystem;	
	• The system should be capable of displaying the status of the exam;	
	• The system should be capable of skipping questions, marking a certain item, returning to unanswered questions, etc.,	
	• The system should automatically terminate and save the answers upon reaching the time limit of the examination	
	• The system should be capable of modification/customization that shall include updates in accordance with the ICAO requirements, system enhancements and new features, if needed	
2.2.1.2	**AIRWORTHINESS DEPARTMENT**	
	The service provider should be able to cater the functions of the Airworthiness Department (AWD) in ensuring that the office conforms to the applicable regulations for aircraft type certification, aircraft registration and their continuing airworthiness and AMO.	
	• The system should be capable of catering online applications from stakeholders and detect the completeness of the application requirements based on the presence or absence of the documents. In	

	addition (for AMO), a readily available list of procedures, requirements, and references (ACs, Guidance Materials, applicable PCAR's, references) for original/initial, renewal, modification (additional or deletion of ratings/capabilities).	
	• The system should provide a standard AMO application form (e.g. capability of havinga drop-down list of AMO ratings/capabilities). Likewise, a standard, controlled and secured AMO certificate (for original issuance, renewal, modifications, etc.) should also be provided by the system.	
	• A system that monitors (real-time) status of AMO applications and certifications (original – 5 phases of certification, renewal, additional/deletion ratings). Also monitoring of the status of approvals of nominated post holders and manuals (MOPM, training program, quality manual, capability list, etc.)	
	• The system should be able to provide data that will aid in aircraft registration and/or iscapable validation to other civil aviation authorities. And availability of current list of local and foreign AMO (active/inactive) and respective ratings/capabilities.	
	• The system should be able to record any non-conformance or safety issues in relation to the registration or continuing airworthiness and AMO and trigger an alarm or notification to the concerned personnel. Moreover, an alert system for overdue SI's oradmin tracking (for observations), AMO certificate due for renewals (60 days prior to expiration) and/or surveillance (subject to the CSP). (or The system should be capable of providing alerts on areas of non-conformance.	
	• The supplier shall ensure that the system can aid the AWD in ensuring that it complieswith the applicable regulations for aircraft type certification and their continuing airworthiness	
	• The aircraft's model and serial number should also show historical safety occurrences reported by other CAA (Civil Aviation Authority) organizations.	
	• Such other specifications necessary as determined by the end user that requiresmodification or alteration of the existing system upon procurement.	
2.2.1.3	**FLIGHT OPERATIONS DEPARTMENT**	
	It is the responsibility of the Flight Operations Department to ensure that operations of airworthy aircraft are conducted by qualified and current flight crews in	

	compliance with international operating rules and practices adopted by the Authority which should be ensured by the supplier.	
	• The system should be able to adopt the previous/existing digital system contents and all feature requirements for migration.	
	• The system should be capable of modification / customization that shall include updates in accordance with the ICAO requirements, system enhancements and new features, if needed	
	• The system should be able to view business letters/correspondence format inputs ready for printing.	
	• The system should be able to provide a surveillance work plan, recording andtracking/alerting.	
	• The system should be able to provide a data storage capacity enough to accommodate for the next 20 years.	
	• The system should include AOC, RPAS Certification, Checklists, surveillance and riskassessment.	
	• The system should have a comprehensive, regular and dedicated/trained personnel maintenance and trouble shooter.	
	• The system should be capable of aiding the CAAP personnel in the periodic inspectionwith regard to the operator's compliance with the existing regulations with regard to: o The system should be capable of providing alerts on areas of non-conformance. o The system should be able to aid in the confidential conduct of investigations/inspection o The system should be capable of issuing certificates with security features o The system should be able to track compliance with the qualification requirements and currency of the flight crew and aircraft dispatchers. o Such other specifications necessary as determined by the end user that requires modification or alteration of the existing system upon procurement.	
2.2.1.4	**LICENSING AND CERTIFICATION DEPARTMENT**	
	As the office responsible for the Authority's compliance with the applicable regulations on personnel licensing, the supplier shall ensure that it shall cater the needs of the Licensing and Certification Department with regard to applications, recommendations for testing and coordination of the skill tests. It shall ensure that the	

	integrity and security of the data in the system.	
	The system will be used for managing all safety oversight activities, applying for aviation security certification concern, and applying for personnel license and certificate. The Authorityaims to provide an efficient means of submitting applications, managing all safety audit findings, and administering invoices and receipts.	
	• The system developed should be able to aid in the review of the applicant's compliancewith the applicable PCAR provisions on personnel licensing	
	• The software is capable of providing or linking to reference materials that may be applicable in the performance of the functions of the LCD	
	• The software should be capable of securely accommodating online transactions for license application, verification, and issuance.	
	• The system should be securely accessible by the public to verify the authenticity of a CAAP issued airman license	
	• The software should be capable of sending notifications to stakeholders such as but notlimited to the status of their transactions, in case of any non-compliance, renewal and etc.,	
	• The system should be capable of archiving/uploading oversight records of Airmen and Training Organizations.	
	• The system should be capable of managing of data of RPA Certificate, EnglishLanguage Certificate.	
	• The system should have the capability of having a drop-down list of the following in encoding licenses: ○ Ratings ○ Endorsement ○ Limitation ○ Automatic encoding of issue date and expiration date	
	• The system should be capable of complying with ICAO requirements on other types oflicenses such as but not limited to: ○ Ground Instructor ○ Flight Instructor ○ Flight Dispatcher ○ Aeronautical Station Officer ○ Flight Engineer	
	• The system should be capable of migrating data of licenses and training organizationsfrom old database system to new database system.	

	Licensing Module	
	• The system should be capable of accommodating online transactions for the different licenses and certifications issued by the LCD.	
	• The system should be capable of safety and securely storing submitted documents forprocessing	
	• The system should be capable of cross checking and validating data from otherModules.	
	• The system should be able to accommodate requests for validation from other modules	
	• Such other specifications necessary as determined by the end user that requiresmodification or alteration of the existing system upon procurement. • Such other specifications necessary as determined by the end user that requiresmodification or alteration of the existing system upon procurement.	
	Approved Training Organization Module	
	Based on the requirements you mentioned, here are the key functionalities that the Approved Training Organization (ATO) Module should have in order to cater to the regulatory needs of the Flight Standards Inspectorate Service:	
	• User Access Control: The system should have role-based access control to ensure that only authorized personnel can access and manage ATO-related information.	
	• ATO Registration and Management: The module should allow for the registration and management of ATOs, including their contact information, approval status, and associated personnel.	
	• Document Management: The system should provide a centralized repository for storing and managing ATO-related documents, such as training manuals, syllabi, and procedures.	
	• Certification Process: The module should facilitate the certification process for ATOs, including the submission and review of required documentation, evaluation of trainingprograms, and issuance of ATO certificates.	
	• Training Program Approval: The system should support the review and approval of ATO training programs, ensuring compliance with regulatory standards and guidelines.	
	• Monitoring and Surveillance: The module should enable ongoing monitoring and surveillance of ATOs,	

	including periodic inspections, audits, and assessments to ensure continued compliance with regulatory requirements.	
	• Incident and Non-Compliance Reporting: The system should allow for the reporting and tracking of incidents and non-compliance issues related to ATO operations, ensuring timely investigation and corrective actions.	
	• Incident and Non-Compliance Reporting: The system should allow for the reporting and tracking of incidents and non-compliance issues related to ATO operations, ensuring timely investigation and corrective actions.	
	• Compliance Monitoring: The module should provide tools for monitoring ATO compliance with regulatory requirements, including tracking of training records, instructor qualifications, and course updates.	
	• Performance Metrics and Reporting: The system should generate reports and performance metrics related to ATO oversight activities, allowing for data-driven decision-making and identification of trends or areas of concern.	
	• Communication and Collaboration: The module should facilitate communication and collaboration between the Flight Standards Inspectorate Service and ATOs, allowing for secure messaging, document sharing, and notifications.	
	• Integration with Other Modules: The ATO Module should integrate with other modules of the Safety Oversight Management System (SOMS), such as the Document Control Module and Audit Management Module, to ensure seamless data exchange and process integration.	
2.2.1.5	**OFFICE OF THE FLIGHT SURGEON AND AVIATION MEDICINE (OFSAM)**	
	• As the office responsible in conducting and evaluating the medical fitness of the airmen and make recommendations in relation to those findings, the supplier should be able to ensure that the Authority can securely and efficiently comply with the existing regulations.	
	• The supplier should be able to develop a fully functioning modular software that is configurable to meet the regulatory needs of the Authority, ready to use and integrate with the current systems on place.	
	• The software must be capable of accommodating online appointments, payment system, uploading of	

	medical forms, approvals and issuance of appropriate certificates with securityfeatures.	
	Medical Examinations	
	CAAP needs to use a module handling the requirements according to PCAR Part 2 (medical provisions) and/or applicable regulations.	
	Medical Examiners perform medical fitness checks, for airmen should be capable to fill out the applicable forms electronically or offline and should be able communicate and submit the documents with the CAAP - Office of the Flight Surgeon and Aviation Medicine (OFSAM) using the workstation. OFSAM should be able to evaluate and act on the examinations submitted.	
	The supplier should be able to develop a software with the following features:	
	• Calculation of all necessary examinations and computation the validity of the medicals (even for different kind of examinations of each person at a certain examination date)	
	• Modeling an airman's Entire medical examination history	
	• Multi-user application: several persons can work on a pool of applicants via a shared"to-do-list"	
	• System rights to model different end-user roles with dedicated permissions within thesystem	
	• Access to complete history for authorized personnel as well as grant read rights to other personnel to give access to historical data.	
	• Numerous plausible checks for completeness and dependency of the medical forms	
	• Re-use availability of old / previous data prior examination	
	• Pilot can fill in own application form electronically	
	• Integration of data from external equipment (files like PDF etc.)	
	• Automatic data transfer from extended forms to medical examination report	
	• Printout of all forms and certificates completely filled in	
	• Printout of several different medical certificates per person	

	• Modeling specific work flows: expert consultation, temporary unfitness, unfitness, interim, allocating read-rights on certain examinations to other physicians, further transfer, transfer back (reject), etc…	
	• Integration of experts. Experts can execute special examinations prior to a medical fitness check. Aviation medical supervisor can decide to use expert examinations at a later medical examination	
	• Encrypted saving of all medical data	
	• Warning system via screening report	
	• Automatic screening including pre-sorting the examinations for the medical examiner based on a configurable threshold value model	
	• Aviation medical supervisor can declare applicants as fit, unfit, suspicious, reject cases, forward cases for evaluation	
	• Aviation medical supervisor can also change limitations of an applicant and can re-printthe medical certificate with changed data	
	• "Red alert flag" for suspicious applicants (message of the medical examiner to the useropening a suspicious candidate)	
	• Ability to import or scan documents as part of the examinee file	
	• Export of statistical data (anonymous medical data)	
	• Interface to flight crew licensing, air navigation services and address management module.	
	• Aviation medical supervisor can "shift" examinations from one medical examiner toanother	
	• Such other specifications necessary as determined by the end user that requiresmodification or alteration of the existing system upon procurement.	
2.2.1.6	**REGULATORY STANDARDS DEPARTMENT (RSD)**	
	The system should be able to cater the needs of the different divisions of the RSD in performingits primary function in the development and maintenance of regulations and othe aviation issuances, reporting and analyzing aviation trends that may affect safety, and managing and preserving aviation records:	
	• Comprehensive system to meet the needs of all divisions	

	of the RSD.	
	• Ability to develop and maintain regulations, analyze aviation trends, and manage aviation records.	
	• Robust reporting and analytics capabilities for efficient decision making.	
	Aviation Records Management Division	
	• The system should be compatible with the existing one used by the ARMD for a moreefficient transfer of data.	
	• The system should be equipped with security features for the safe keeping of aviationrelated documents	
	• Such other specifications necessary as determined by the end user that requiresmodification or alteration of the existing system upon procurement.	
	• The system should be able to handle online transactions for retrieving or verifying records, as well as issuing a certificate of authenticity with an integrated security andauthenticity feature.	
	Technical Library	
	The Technical Library is a vital part of the FSIS. It is responsible for maintaining reference materials and audit documents that FSIS personnel need for their daily operations. Suppliers should be able to develop a software that:	
	• Capable of offline accessibility;	
	• Capable of assigning different levels of access and security feature depending on theclassification of the document.	
	• Capable of securing and encrypting voluminous aviation related data;	
	• Capable of being linked into the official website of the Authority;	
	• Capable of being linked in other 3rd party service providers or website that may be used as reference materials and technical guidance	
	• The system can upload/download manuals, notices and forms that can be used for cross-referencing.	
	Aviation Safety Analysis Division	
	• The system should be capable of risk profiling from the encoded Safety Reports of theSDCPS and Safety Issue found during audits and inspection as part of the oversight function of CAAP	
	• The system should preferably be compatible with	

	ECCAIRS II of the ICAO	
	• System needs to have an SDCPS (Safety Data Collection and Processing System) Reporting gatekeeper	
	• The system should be capable of being securely linked/shared to service providers or other offices performing oversight functions for them to input data.	
	• The system should be equipped with electronic forms that could enable an efficientcollection of data.	
	• The system should be capable of extensively tracking incidents and near miss reporting, investigation, and action tracking	
	• The system should be capable of classifying and categorizing the different risks as per SMICG Hazard Taxonomy	
	• The system should be capable of generating statistics and other data driven facts out ofthe collated aviation safety related data	
	• The system should be capable of creating a notification or alert on threshold breachesto prevent or mitigate events.	
	• The system's risk management should have a wide ranging intuitive and highly visual risk management capability.	
	• The system should be able to securely store the voluminous data stored in the SDCPS.	
	• The system should be capable of reporting, business intelligence (BI) Anticipative risk and performance management. Able to generate automatic tables, graphs and pie chartsas dashboards with regard to any possible queries for summary analysis reports.	
	For Safety Issues Database	
	• The system should be able to be link, integrate with any existing system and utilize data archived with the organization	
	• System should be capable of integrating options of the SDCPS in ASAD	
	• The system should be capable of performing Audit Management from scheduling toClosure	
	• The system should be capable of managing non-conformance, corrective and preventiveactions	
	• The system should be able to store Audit and Inspection findings made by FSIS Inspectors	
	• The system should be able to generate risk profile from amongst the Service Providersaudited and inspected	
	• The system should be able to generate trends and	

	Analysis (Tables, graphs) dashboards	
	Regulatory Standards Development Division	
	• The system should come up with a module capable of online collaboration within the division in the development of the regulation. The module should: a) Clearly indicate the PCAR Parts with a subject overview. b) Convert the State Letter/Petition from PDF to Word file. c) Provide a portion for the specific provision of the State Letter/Petition, which will be used as a reference for the suggested/affected PCAR provision. d) Automated identification of suggested / affected provision/s of PCAR. e) Provide portions for; (i) specific PCAR Provision to be amended, (ii) RSDD proposed text, (iii) TWG input, and (iv) Final Text. f) Be able to generate printable Working Document and Memorandum Circular. g) Have the capability to store all documents related to the amendment of PCAR.	
	• The module shall serve as a project management tool for RSDD and TWG.	
	• The system should be able to track changes made in the working document whichincludes all actions taken in every use of the working document.	
	• Such other specifications necessary as determined by the end user that requiresmodification or alteration of the existing system upon procurement.	
2.2.2	**AERODROME AND AIR NAVIGATION SAFETY OVERSIGHT OFFICE**	
2.2.2.1	**AERODROME REGISTRATION, CERTIFICATION AND INSPECTORATE DIVISION (ARCID)**	
	Safety Regulatory Audit and Inspection	
	Introduction Aerodrome Registration Certification and Inspection Division (ARCID) is the division in the Aerodrome and Air Navigation Safety Oversight Office (AANSOO)responsible for the oversight of all aerodromes in the Philippines. ARCID is in charge of ensuring the safety oversight function of CAAP on the effective implementation of safety related standards through evaluation and assessment of aerodrome engineering and design specifications,	

	obstacle control and height clearance requirements and permits, aerodrome safety management systems and safety programs, monitoring of aerodrome operational hazard reports, development of regulations and standards and conduct of associated inspections and surveillance, and collection and analysis of safety data in accordance with CAAP regulations and ICAO SARPs. It also ensures the safety oversight function of CAAP's effective implementation and surveillance of safety requirements for aerodrome licensing through aerodrome certification, registration and permit-to-operate including promulgation of aeronautical data in the AIP in accordance with CAAP regulations and ICAO SARPs.	
	Documentations ARCID-AANSOO develops an annual Surveillance Plan for implementation on the coming calendar year ARCID-AANSOO issues notices to the respective service providers to be audited/inspected ARCID-AANSOO uses the following documents to facilitate an audit/inspection: a. Checklist/Audit Questionnaire for evaluation; b. Forms for reporting on audit/inspection observation or non-compliances; c. Findings Forms for the audited/inspected party to respond to auditor/inspector's observation or non-compliance; d. Documentation or recording of evidence to support conclusions reached by theauditors/inspectors e. Feedback forms to be filled-up by the auditee/inspectee for improvement of ARCIDaudit/inspection processes from pre-activity up to submission of outputs(reports)	
2.2.2.2	**AIR TRAFFIC MANAGEMENT SAFETY INSPECTORATE DIVISION (ATMSID)**	
	Safety Regulatory Audit and Inspection	
	Introduction ATMSID-AANSOO shall oversee the compliance of safety regulatory requirementsand Standards provided by the ATM service providers (ATS, MET, SAR, AIS and PANS-OPS) through regular audits/inspections and announced or unannounced surveillance inspections.	

	Audit and inspection are techniques employed by the ATMSID of AANSOO to verifycompliance with applicable safety regulatory requirements and standards by the ATM services providers in conformance to ICAO SARPs. Audit and inspection are tools for evaluating the performance of the ATM services providers with a view to ensuring ATM system safety. ATMSID-AANSOO carries out various safety survey activities including surveillance (audits/inspections) on a regular basis (periodically) as part of its regulatory function and as a means of proactive safety management. For this periodic surveillance activities, ATMSID-AANSOO develops annual safetyregulatory audit/inspection plans based on the ATM Services/Units risk profiles to cover all possible areas of safety concern, while prioritizing activities to where safety risk is determined to be of utmost concern-(Risk-Based Surveillance) Surveillance activities may also be conducted consequent upon significant changes inthe ATM service providers' system, follow-up on corrective actions which have been imposed in previous audit or inspection and safety investigations. ATMSID also monitors the safety performance of service providers' Safety Management Systems (SMS). To accomplish this task, ATMSID relies on accurate, validated safety data/ information appropriately sorted using ICAO recommended taxonomies. The safety data/information includes, but not limited to, hazards, accidents andincidents, safety risk assessments, safety recommendations, Safety Performance Targets (SPTs) and Safety Performance Indicators (SPIs). The task aims to provide data-driven recommendations to the Director General as to actions to be undertaken to ensure or enhance safety in aircraft operations. PANS-OPS Inspectorate, under the ATMSID, also provides recommendations to the DGregarding issuance of Authorizations for Instrument Flight Procedure Design Organizations intending to provide services within the Manila Flight Information Region (FIR) including aerodromes operating in the Philippines.	

	Lastly, all air routes (Airways, Arrival Routes, Departure Routes, Final Approach Paths, Missed Approach Paths and holding Patterns) to be used for air operations in the Philippines needs to be assessed by the AANSOO prior to approval by the DG for use and/or publication.	
	Documentations ATMSID-AANSOO develops an annual Surveillance Plan for implementation on thecoming calendar year at least 3 months before current year ends. ATMSID-AANSOO issues notices to the respective service providers to be audited/inspected, at least 1 month prior the scheduled activity for audit and at least 2 weeksprior inspection. ATMSID-AANSOO uses the following documents to facilitate an audit/inspection: a. Checklist/Audit Questionnaire for evaluation; b. Forms for reporting on audit/inspection observation or non-compliances; c. Forms for the audited/inspected party to respond to auditor/inspector's observation or non-compliance; d. Documentation or recording of evidence to support conclusions reached by the auditors/inspectors e. Feedback forms to be filled-up by the auditee/inspectee for improvement of ATMSID audit/inspection processes from pre-activity up to submission of outputs (reports).	
	For audits, ATMSID-AANSOO normally provides the audited party with a copy of the checklists two weeks before the first day of audit or during a pre-audit meeting during the first day of audit (Entry Meeting), and takes measures to protect any working documents that involve confidential or proprietary information. After audit/inspection or safety investigation, ATMSID prepares audit/inspection or inspection report. An interim audit report, containing findings form should be submitted at least be provided to the auditee, 10 working days after the conclusion of the on-site/remote audit activity. 10 working days, after that, the same findings form should be submitted by the auditee with details on the corrective action plans to be undertaken to address	

	the findings with the position/name of the person responsible for implementation and target date of completion. Another 10 working days after which, the final audit report form should be submitted by the audit team containing comments or acceptanceof the auditee's corrective action plans. This final report shall be the basis of the subsequent audit/inspection activity for the auditee with the aim to verify effective implementation ofthe agreed/accepted corrective action plans. For Procedure Design Organization Authorizations, a checklist for evaluation of the applicant's suitability to provide services in accordance to national regulations is required. Upon submission of complete documentary requirements (letter of intent, Manuals, evidence of appropriate aviation experience, certificates issued by other States or international organizations, training records, etc.) a Certificate of Authorization with/without imposed conditions will be issued by the DG upon recommendation of ATMSID-AANSOO. For Instrument Flight Procedure (IFP) approval, a checklist focusing on the required quality assurance processes conducted by the design organization is employed to assess suitability for the use and/or publication of the IFP.	
2.2.2.3	**AIR NAVIGATION SAFETY INSPECTORATE DIVISION (ANSID/CNSSID)**	
	Safety Regulatory Audit and Inspection	
	Introduction ANSID/CNSSID-AANSOO oversees the compliance of safety regulatory requirements and standards provided by the CNS service providers through regular audits/inspections and surveillance inspections. Audits and inspections are oversight activities conducted by ANSID/CNSSID to verify whether the CNS service provider complies and is able to maintain compliance withthe applicable regulatory requirements and standards in consonance to ICAO International Standards and Recommended Practices (SARPs). Audits and inspections are a means for evaluating the performance of CNS services in order to ensure aviation safety.	

	ANSID/CNSSID carries out various safety oversight activities including air navigation facility certification audits and surveillance inspections as part of its regulatory function. Further, this is to ensure that requirements for flight inspection are established and periodic flight inspections are provided for radio navigation aids, communications systems, and surveillance systems, and that the result of these flight inspections are verified. ANSID/CNSSID develops annual surveillance audit/inspection plan for the periodic inspection of all ground-based air navigation facilities operated and maintained by CNS service providers within the country. Surveillance activities may also be conducted whenever an air navigation facility is suspected to have contributed to an aviation accident or incident, or whenever significant operational changes of an air navigation facility occur, or whenever a corrective action implemented by the CNS service provider to address regulatory noncompliance needs to be validated. ANSID/CNSSID also monitors the safety performance of the CNS service providers'Safety Management Systems (SMS). To accomplish this task, ANSID/CNSSID relies on accurate, validated safety data/ information appropriately sorted using ICAO recommended taxonomies. The safety data/information includes, but are not limited to, hazards, accidents and incidents, safety risk assessments, safety recommendations, Safety Performance Targets (SPTs), and Safety Performance Indicators (SPIs). The monitoring aims to provide data-driven recommendations to the Director General to determine the actions to be undertaken to enhance and ensure aviation safety.	

	Documentations ANSID/CNSSID develops an annual Surveillance Plan for implementation on the preceding calendar year. ANSID/CNSSID issues notices to the respective service providers to be audited/inspected prior to the schedule of the activity except during unannounced inspections. ANSID/CNSSID uses the following documents to facilitate an audit/inspection: a. Certification Checklist/Surveillance Checklist for evaluation; b. Forms for reporting non-compliances with the regulation or regulatory standard; c. Forms for the audited/inspected party to respond to auditor/inspector's non-compliance; d. Documentation or recording of evidence to support conclusions reached by the auditors/inspectors e. Feedback forms to be filled-up by the audited party to evaluate an inspector'sperformance and improve ANSID/CNSSID audit/inspection process. ANSID/CNSSID normally provides the audited party with a copy of the checklists prior to the audit/inspection. Whenever it is determined that there are no means of providing the checklist in advance, a copy is provided only during the Entry Briefing/Meeting on the first day of the inspection/audit activity. ANSID/CNSSID takes measures to protect any document that contains confidential or proprietary information. A final report is prepared by ANSID/CNSSID after each audit/inspection activity. The report includes the findings form within which the audited party is required to indicate the proposed corrective action plans that will address non-conformance with theregulation as well as the targeted time frame to implement the action plan. This report shall be the basis of the subsequent audit/inspection activity with the aim to verify whether the agreed/accepted corrective action plan has been effectively implemented.	
2.2.2.4	**REGULATORY SAFETY STANDARDS DIVISION (RSSD)**	

	The Regulatory Safety Standards Division (RSSD) is mandated to ensure that ICAO Standards and Recommended Practices (SARPs) stipulated in Annexes 2, 3, 4, 5, 10, 11, 12, 14, 15, and 19 are regularly monitored so that applicable provisions are adopted and incorporated in the Civil Aviation Regulations - Air Navigation Services (CAR-ANS) and Civil Aviation Regulations governing Aerodromes and Manual of Standards.	
2.2.2.5	**EXPECTED OUTPUT AND FEATURES OF THE SYSTEM**	
	ANSID, ARCID & ATMSID	
	Basically, the system should aid the ANSID, ARCID & ATMSID inspectors in managing safety oversight activities and processing collected data and information (e.g. audit and inspection reports, safety occurrence reports, safety assessments, and investigation reports) and effective monitoring of the three Divisions' surveillance activities, Aerodromes, ATM & ANSfacilities' safety performance and safety risk profiles.	
	In addition, the system should aid the said three (3) Division with the safety audit/inspection activities during (1) audit/inspection planning; (2) implementation of audit/inspection activities; (3) analysis of inspection/audit result data; (4) managing corrective actions plans; and (5) submission of feedback over the corrective actions and closure of any finding through the following functionalities:	
	• Aerodrome and ANS Facility Registration: The system should facilitate the registration and management of aerodromes and air navigation service (ANS) facilities, including their contact details, operational information, and regulatory compliance status.	
	• Safety Assessment and Auditing: The module should support the conduct of safety assessments and audits of aerodromes and ANS facilities to ensure compliance with safety standards and regulatory requirements.	
	• Inspection Planning and Scheduling: The system should enable the planning and scheduling of inspections for aerodromes and ANS facilities, including assigning inspectors, defining inspection criteria, and tracking inspection status.	
	• Safety Occurrence Reporting: The module should provide a mechanism for the reporting and tracking of safety occurrences related to aerodromes and ANS facilities,ensuring timely investigation and appropriate	

	follow-up actions.	
	• Compliance Monitoring: The system should allow for monitoring and tracking the compliance of aerodromes and ANS facilities with safety regulations, standards, and recommended practices.	
	• Corrective Action Management: The module should facilitate the management and tracking of corrective actions resulting from safety assessments, audits, inspections, or safety occurrence investigations, ensuring timely resolution and closure of identified issues.	
	• Safety Performance Monitoring: The system should enable the monitoring and analysis of safety performance indicators and trends for aerodromes and ANS facilities, providing insights for proactive safety improvement measures.	
	• Documentation and Record Management: The module should provide a centralized repository for storing and managing relevant documents, manuals, reports, and records related to aerodrome and ANS oversight activities.	
	• Communication and Collaboration: The system should support secure communication and collaboration between the Aerodrome and Air Navigation Safety Oversight Officeand the relevant stakeholders, including aerodrome operators, ANS service providers, and regulatory bodies.	
	• Reporting and Analysis: The module should generate comprehensive reports and analysis on safety oversight activities, including audit findings, inspection results, safety occurrence trends, compliance status, and overall safety performance of aerodromes and ANS facilities.	
	• Integration with Other Modules: The SOMS should integrate with other modules within the Safety Oversight Management System, such as the Training and Certification Module and Regulatory Compliance Module, to ensure data consistency and streamlined processes across different functions.	
	Hence, the following features should be available in the SOMS:	
	1. The system should be available online and offline. System access must be controlledaccording to user levels in CAAP.	
	2. The system should be able to view business	

	letters/correspondence format ready for inputsof details and printing.	
	3. The system should be able to provide AANSOO's Division' work plan, recording andtracking/alerting:	
	a. The system should be able to generate the audit schedule where the status of each activity is shown whether it was conducted or cancelled to ensure that the inspectors are kept updated on the upcoming audit activities and for history tracking.	
	b. The system should also have the capability to provide tracking information on sent/acknowledged notices, submitted Corrective Action Plans (CAPs), safety assessment reports, and audit/inspection reports and should have an alarm feature or notification system to ensure timely submission of notices/reports and to prevent missing reports.	
	c. The system should be capable of providing alerts on areas of non-conformance, compliance and adherence as appropriate.	
	d. The system should be able to track approved Instrument Flight Procedures (IFPs) that have reported issues during implementation, the year the IFP have been effective and send alerts at least 6 months before its required periodical review, 5 years after date ofeffectivity.	
	4. The system should be able to provide a data storage capacity enough to accommodate forthe next 20 years.	
	The system should have a page that contains graphical presentation of the audit compliances, findings and OHRs; statistics of audit/inspection report status, surveillanceplan updates, notices sent/acknowledged, CAPs status, safety recommendation implementation status, safety assessment report status; aeronautical studies report status; tabular presentation of top performing facilities, for AANSOO Division's and AANSOO management. The findings and deficiencies identified per audit/inspection areas should also be collated for better analysis and informed insights on which areas have the most findings and make data-driven decisions to resolve such issues.	
	5. The system should be able to allow service providers on-line submission of CAPs/ safety recommendations and progress of CAPs/ safety recommendations and may attach evidence to be assessed by the inspectors.	
	6. The system should have a separate page for access by the service provider responsible personnel, for on-line	

	self-assessment checks.	
	7. The system should have a Performance Monitoring capability where the status of the safetycompliance as well as the safety occurrences reported are prioritized for action.	
	8. The system should be able to generate standard form audit/inspection reports showing all the necessary information on audit/inspection/occurrence reports. It should aldo be capableof generating a summary report containing all the important information so that the inspectors can save time from reading the entire report and there should also be an option to view the entire report and print, download or email it in accordance with user level authorization. There should be search button/option to easily locate the report needed and to track all the surveillance activities conducted for a particular facility.	
	9. The system should also be capable of prompting among the AANSOO divisions (ARCID, ATMSID, CNSSID and RSSD) whenever the identified finding is connected to their division for collaborative resolution of safety issues.	
	10. The system should be capable of generating statistics and trends of frequently reported OHRs for better analysis.	
	11. The system should be capable of issuing AANSOO Divisions' certificates, approvals, acceptance and authorizations (ex. Certification, Registration Type 1 and 2, PTO, SMS, third-party approvals….) with security features	
	12. The system should also have contact details of the Aerodrome Operators, ATM and CNS Facilities' key personnel and library of the updated versions of Audit and Inspection Checklists (inspector's toolkit containing checklists and forms used on audits/inspections),related documents (CAR-Aeroromes, CARANS, MOS Aerodromes/ATS..., Handbook and Manuals, ACs, MCs, Safety Directives and ICAO references).	
	13. The system should also have an archive page where records of schedules and trackers of the previous years can be generated for monitoring and history tracking purposes. This canbe used as evidence to ICAO audits to easily show that surveillance activities are conducted according to the surveillance plan and it can also aid the inspectors in designing the surveillance plan in a way that cancelled activities are easily identified. The system shouldalso have an archive page where all versions of	

	aerodrome operators manuals and submanuals , OLS, safety assessments and other documents.	
	14. The system should be capable of archiving/uploading and updating training records of Inspectors, and inspectors' profile....	
	15. The system should have dedicated trained personnel (from system provider) for the regular comprehensive maintenance and troubleshooting assistance.	
	16. The system should be capable of modification/customization that shall include updates in accordance with the ICAO requirements, system enhancements and new features, if needed	
	RSSD	
	Standards and Regulation Development and Amendment or Revision	
	The system should come up with a module capable of online collaboration with the concernedTechnical Working Group (TWG) and the Regulations Review Committee (RRC) in the development and amendment or revision of regulations and standards. The module should:	
	a. Clearly indicate the Civil Aviation Regulations (CAR) and Manual of Standards (MOS) with a subject overview.	
	b. Convert the State Letter/Petition from PDF to Word file format.	
	c. Provide a portion for the specific provision of the State Letter/Petition, which will be used as a reference for the suggested/affected CAR and MOS provision.	
	d. Automated identification of suggested/affected provision/s of CAR and MOS	
	e. Provide portions for; (i) specific CAR and MOS Provision to be amended, (ii)RSSD proposed text, (iii) TWG input, and (iv) Final Text.	
	f. Be able to generate printable Working Document, Memorandum Circular andAdvisory Circular.	
	g. Have the capability to store all documents in a consolidated version or edition/issue related to the amendment and/ or revision of CAR and MOS.	
	• The module shall serve as a project management tool for RSSD, TWG and RRC.	
	• The system should be able to track changes made in the working document whichincludes all actions taken in every use of the document.	
	• Such other specifications necessary as determined by the end user that requires modification or	

	alteration of the existing system upon procurement.	
	Aviation Data Management	
	Safety Data Collection and Analysis	
	• The system should be capable of risk profiling from the encoded Safety Reports of theSDCPS and Safety Issue found during audits and inspection as part of the oversight function of CAAP	
	• The system should preferably be compatible with the latest and applicable version of ECCAIRS of the ICAO	
	• System needs to have an SDCPS (Safety Data Collection and Processing System) Reporting gatekeeper	
	• The system should be capable of being securely linked/shared to service providers/operators or other offices performing oversight functions for them to input data.	
	• The system should be equipped with electronic forms that could enable an efficient collection of data.	
	• The system should be capable of extensively tracking incidents and near miss reporting,investigation, and action tracking	
	• The system should be capable of classifying and categorizing the different risks as perSMICG Hazard Taxonomy	
	• The system should be capable of generating statistics and other data driven facts out of the collated aviation safety related data	
	• The system should be capable of creating a notification or alert on threshold breachesto prevent or mitigate events.	
	• The system's risk management should have a wide ranging intuitive and highly visualrisk management capability.	
	• The system should be able to securely store the voluminous data stored in the SDCPS.	
	• The system should be capable of reporting, business intelligence (BI) Anticipative risk and performance management. Able to generate automatic tables, graphs and pie chartsas dashboards with regard to any possible queries for summary analysis reports.	
	• The system should be capable to accept Operational Hazard Reports (OHRs), safety observations and	

	reports including Wildlife Hazard issues and management and consolidate all this information, generate search options, tracking, statistics, trending and summary reports	
	Technical Library	
	The technical library is an important office of the AANSOO. This office is responsible for storing reference materials and audit documents used by AANSOO personnel in their daily tasks. The supplier should be able to develop a software that is:	
	• Capable of offline accessibility; Capable of offline accessibility;	
	• Capable of assigning different levels of access and security feature depending on theclassification of the document.	
	• Capable of securing and encrypting voluminous aviation related data;	
	• Capable of being linked into the official website of the Authority;	
	• Capable of being linked in other 3rd party service providers or website that may be usedas reference materials and technical guidance	
	• The system should be capable of instant end-to-end publishing of manuals, notices andforms. The CAAP personnel should be able to navigate large documents using visual chapter overviews and smart modules for cross-reference links, revision highlights, as well as a table of contents and alphabetical indexes.	
	• The system should be capable of Automatic Compliance Monitoring.	
	• The system should have the capacity to efficiently transfer data.	
	• The system should be equipped with security features for the safe keeping of aviation related documents	
	• Such other specifications necessary as determined by the end user that requires modification or alteration of the existing system upon procurement.	
	For Safety Concerns Database	
	• The system should be able to link, integrate and utilize data archived within the organization	
	• System should be capable of integrating options of the SDCPS	
	• The system should be capable of performing Audit	

	Management from scheduling toClosure	
	• The system should be capable of managing non-conformance, corrective and preventiveactions	
	• The system should be able to store Audit and Inspection findings made by AANSOOInspectors	
	• The system should be able to generate risk profile from amongst the Service Providers/Operators audited and inspected.	
	• The system should be able to generate trends and Analysis (Tables, graphs) dashboards	
	• The system should be capable of modification/ customization that shall include updates in accordance with the ICAO requirements, system enhancements and new features, if needed	
2.3	**DETAILED SPECIFICATIONS**	
2.3.1	**Licensing- Flight Crew**	
	Background Definition Data The system should be able to handle following background definition data:	
	• The examinations (theoretical and flight examinations) and the conditions fortheir assignment	
	• Text modules (e.g. for flexible usage when printing a license)	
	• The components and the conditions for their assignments. A component is described by its type (extension, license), rating, level of license, category	
	• The assignment of ratings (class or type ratings), text modules, free texts and check list to components	
	• The ratings and the conditions for their assignment. Ratings are described by their types (class or type), number of pilots, number of engines and a category. Ratings can have a validity, whereas we distinguish between the VFR and IR- validity.	
	• The Rating groups	
	• The flight experiences (defined by the respective activity and the minimal requirements)	
	• The layout of a license within a well-defined frame	
	• Charges (for automatic assignment of activities of the end user to charges for the pilot)	
	• Examiner authorizations	
	The background data are the basis for assigning entries to	

	a pilot's license. The possibility of creating specific – configurable - rule trees for ratings and components is a much-desired feature. These condition trees should model ICAO and national regulations (on flight crew / examiners / instructors) rules. Thecondition trees are defined per type of application (initial, renewal, conversion, etc ….) and should be checked when assigning the respective type of application to the pilot. A warning should be displayed in case not all conditions have been met.	
	The following items should be defined within a condition tree: o The pilot's age limits o Necessary medicals o Necessary flight experiences o Necessary examinations o Necessary flight examinations o Necessary instructor components o Necessary examiner components o AND-conditions, which can include various conditions themselves too o OR- conditions, which can include any conditions too	
	Also, the system may be able to define relevant data for billing, such as: o Theoretical examinations o Practical examinations o The initial acquisition of components / ratings o The renewal or revalidation of components / ratings o Etc…	
	The fees shall be defined through the background definition data of thecorresponding component or rating.	
	Management of Flight Crew	
	The application should model the complete life cycle of a flight crew member. CAAP needs to use a module handling the requirements according to PCAR Part 2 and/or applicable regulations. A person (to whom we refer as "License holder") may have several licenses, one of each type. Assigning individual entries occurs byselection of the various subjects of the background definition data.	

	The data managed for each flight crew member should comprise: o The basic data from the address and contact data base (personal data such as name, address, picture, signature ...) o The basic data from the licensing system (pilot status, authority / examiner / authority status,..) o The examinations (e.g. with date and result. For theoretical examinations score, for flight examination rating data, IR data, pilot function, etc.) The flight instructor and examiner should be specified. These entries should be checked for plausibility and a connection to the flight school should be implemented in order to check the authorization. Further rules may be checked during the assignment of examinations (such as maximum time passed betweenexaminations, maximal number of repetitions, maximal waiting period, examiner and flight instructor being the same person, etc.) o The medicals. The basic data should be for instance date of examination, class, name of the physician, diagnosis, validity, visual aid. The data can be taken over manually and automatically from the medical examination module. o The flight experiences. The requirements for the experiences will be defined inthe background definition data and the system controls that the requirements are fulfilled. o The components (licenses and extensions). Name, date, status, validity, limitations and license remarks are collected. The rules tree will be checked when assigning a component. It should also be possible to assign a component or a rating without checking the rule tree. The system has to calculate the validity dates as well. o The ratings (class- and type authorizations). The rule tree shall be checked uponassignment of a rating as well. Ratings shall be auto-revalidated when possible and the cross-crediting should be implemented too. o The license history (displaying the issued licenses through the whole life cycle) o Other criteria specified by the CAAP. By means of a rule tree we shall be able to define which pre-	

	conditions a pilot must fulfil in order to qualify as a flight instructor or examiner for an examination.	
	Rule Checks	
	The system should check several items during the work. o Check of flight schools (if applicable) during entry of pilot examinations o Check of flight instructors during entry of pilot examinations o Check of examiner during entry of pilot examinations o Check of aircraft registration during entry of pilot examination o Check of national regulation / rules (numbers and timing) during entry of pilot examinations (especially theoretical examinations) o Check of groups of persons or organizations who have the permission to approve flight experiences o Automatic assignment of a rating if the rating is part of a components examination and the component was performed on a rating and the condition tree of the rating is fulfilled o Automatic question if component-rating combinations come up	
	Internal Cross-Check o The system shall check cross referenced data. o During pilot data entry - the examiner and instructor may be checked in thesystem. o Same for flight school within the approval module for flight schools o For skill test: aircraft in aircraft register or Flight Simulation Training Device (FSTD) in the appropriate module	
	Billing	
	The following features may be integrated in billing preparation: o Automatic and manual creation of a billing statement o Export of billing statement information to an external billing system o Listings of open invoice/billing statement o Feedback about invoice/billing statement status o Configuration of rates for activities in the background	

	definition data o List of billing statements o Groups of persons without charges	
	History	
	The user shall be able to view the history of changes on the background definition data. He can evaluate the data according to a range of filter criteria, which will sortthe data accordingly.	
	The change history of a pilot's data can be traced as well. A whole range of filter criteria (type of change, date of change, user name, and action) is available to sort the history data accordingly.	
	The history function shall register all data changes (also the previous content), both address data and pilot specific data.	
	Reporting and Printing	
	The system shall allow searching for specific fields (user configurable). These are for example: pilots' examinations, components, ratings etc. The result lists can be printed or exported (as PDF files, template letter, Excel-list or label print).	
	Licenses should be printed directly and viewed in a preview first. The same appliesfor license confirmations. We should be able to configure license layout on our own.	
	Also, we expect a report tool to generate and store own queries on the database.	
	Interface to Examination System	
	Once an examinee has booked an examination, it can be transmitted automaticallyto the system.	
	Management Information	
	The system should store important information about the license information of a person at the database. Example: Basic data of the license, validity of the medical,ratings and special authorizations.	
	WEB-Client	
	Access for license stakeholders	
	• External Persons shall be able to self-register • Access to the licensing personal information should be possible (configurable content) • Download of applications shall be possible (PDF) format, partially pre- populated with data of the applicant	

	• Uploading of applications (PDF) and attachments shall start a configurableworkflow within the CAAP • The web user shall be able to see the status of the workflow via WEB client	
	Add Endorsements:	
	The system should support the ability of an authorized examiner to endorse a pilot's license via the WEB client. For this purpose, the authority defines whichprivileges can be endorsed by examiners. The examiner enters the results of assessments that are required prior granting the endorsement.	
	The software checks whether the examiner is entitled to confirm each assessment and whether the pilot has met all the requirements for the endorsement. The endorsement is granted only when all the above checks weresuccessful.	
	Flight Test Management:	
	The system shall support the ability of an authorized examiner or other privileged persons (e.g. Designated Check Airman) to notify flight tests and report their results via the WEB client.	
	For this purpose, the authority configures the flight tests with their prerequisitesand any additional privileges to be granted to the candidate once he passed the flight test.	
	The candidate will be informed via e-mail about the notification of a flight test.The examiner enters the results of flight experience that is required prior to taking the flight test and subsequently the results of the flight test itself.	
	The software checks whether the examiner is entitled to act as an examiner for the flight test and whether the pilot meets all the requirements for being granted any of the privileges. Only then, the pilot is granted the type of rating he took the flight exam on and any additional privileges the authority configured and the examiner decides to grant in addition. Workflows are being started to inform the authority of success or failure.	
2.3.2	**Licensing - Maintenance Personnel**	
	CAAP needs to use a module handling the requirements according to PCAR Part 2and/or applicable regulations. The whole management of the relevant data (life cycle) of maintenance personnel shall be kept. A person (to whom we refer as "License holder") may have several licenses, one of each type. Just like the flight licensing module this application should implements rules checks as well.	

	This application shall also differentiate between two areas: management of background definition data and the personnel's data.	
	Searching and assigning attributes to a license holder should be the same as described for flight crew licensing module.	
	A license holder can have the following features: o Address data from the address management o Examinations o Skill Test o Billing Management o Licenses, which include but not limited to: o Personal data including picture and signature o Categories, to which ratings and even limitations can be assigned o Limitations applied on the whole license	
	Reporting, printing and web-client features should be similar to flight crew licensing module. The interface to the examination system should be implemented for exchanging address data and examination results.	
	Also, the history function and billing shall be identical as flight crew license.	
2.3.3	**Licensing – Others including Air Navigation Services**	
	CAAP needs to use a module handling the requirements according to PCAR Part 2and/or applicable regulations. The whole management of the relevant data (life cycle) of air navigation personnel (ATC – air traffic controller and ATSEP – Air Traffic Safety Electronic Personnel) shall be kept. A person (to whom we refer as "License holder") may have several licenses, one of each type. Just like flight crew licensing and maintenance personnel this application shall implement rules check too.	
	This application shall also differentiate between two areas: management of background definition data and the personnel's data.	
	Searching and assigning attributes to a license holder shall be the same approach asdescribed for flight licenses.	
	A license holder can have the following features: • Address data from the address management • Skill Test	

	• Licenses, which include but not limited to: • Personal data including picture and signature • Ratings • Experiences • Endorsements • Unit Endorsements • Language Endorsements (if applicable) • Print history of the license • Etc.	
	As with the maintenance personnel module, this application shall be able to manage multiple licenses (national and international) for each person in parallel.	
	Printing, reporting, web-client features, billing and history should be identical toflight crew licensing.	
2.3.4	**Medical Examinations**	
	CAAP needs to use a module handling the requirements according to PCAR Part 2 and/or applicable regulations. Medical Examiners perform medical fitness checks for airmen. They should be able to fill out the applicable forms electronically and communicate with the CAAP - Office of the Flight Surgeon and Aviation Medicine(OFSAM). OFSAM should be able to screen and decide finally about the examinations.	
	CAAP expect the following features of the medical application to leave the following features:	
	o Calculating all necessary examinations and computing the validity of the medicals (even for different kind of examinations of each person at a certain examination date)	
	o Modelling an airman's Entire medical examination history	
	o Multi-user application: several persons can work on a pool of applicants via ashared "to-do-list"	
	o System rights to model different end-user roles with dedicated permissionswithin the system	
	o Access to complete history for authorized personnel as well as grant read rights to other personnel to give access to historical data.	
	o Numerous plausible checks for completeness and dependency of the medicalforms	
	o Re-use availability of old / previous data prior examination	

	○ Pilot can fill in own application form electronically	
	○ Integration of data from external equipment (files like PDF etc.)	
	○ Automatic data transfer from extended forms to medical examination report	
	○ Printout of all forms and certificates completely filled in	
	○ Printout of several different medical certificates per person	
	○ Modelling specific work flows: expert consultation, temporary unfitness, unfitness, interim, allocating read-rights on certain examinations to other physicians, further transfer, transfer back (reject), etc…	
	○ Integration of experts. Experts can execute special examinations prior to a medical fitness check. Aviation medical supervisor can decide to use expert examinations at a later medical examination	
	○ Encrypted saving of all medical data	
	○ Warning system via screening report	
	○ Automatic screening including pre-sorting the examinations for the medical examiner based on a configurable threshold value model	
	○ Aviation medical supervisor can declare applicants as fit, unfit, suspicious,reject cases, forward cases for evaluation	
	○ Aviation medical supervisor can also change limitations of an applicant and canre-print the medical certificate with changed data	
	• "Red alert flag" for suspicious applicants (message of the medical examiner tothe user opening a suspicious candidate)	
	○ Ability to import or scan documents as part of the examinee file	
	○ Aviation medical supervisor can "shift" examinations from one medicalexaminer to another	
	○ Interface to flight crew licensing, air navigation services and addressmanagement module.	
	○ Export of statistical data (anonymous medical data)	
2.3.5	**Approval and Certification of Organizations**	

	A vital part of the desired solution is the integration with the address and contact database, allowing to access data of available organizations, or exchanging data with other modules. One feature will be the system's ability to model organizationhierarchies and distributed locations of companies. The module for approval should handle auditing aspects as well as the relevant information for different certificatesand the management of these.	
	The certification of organizations can be viewed from different aspects: • Project Handling / Project Management • Different application areas • Views on organization specific data • Types of supported tasks for inspectors and office workers • Certificates and approvals • Audits • Background definition data	
	Certification Project Management	
	We expect the support of the structured application process with the system.	
	The system shall have: o Hierarchical checklist templates to define a typical certification process like theICAO 5 Step approach with unlimited sub-steps o Team definition with competencies o Due dates for each step and sub-steps o Document management integrated o Hyperlinks to certificates, persons, companies, audits etc. o Clearance needs to be documented o Workflows should be triggered (configurable workflows, configurablesituations)	
	Different Application Areas	
	We expect handling of the different certificates, approvals and certification processwith audits and inspections. The modelling of the history of all certificate-relevantdata (in revisions); and audits and inspections play a main role. The system shouldbe modular, allowing potential extensions to other certification activities.	
	We expect the handling of following application areas: o Air Operator Certificate (AOC) and Operations Specification	

	○ Approved Maintenance Organizations ○ Flight Schools ○ Maintenance Training Organizations ○ Dangerous Goods handlers ○ Aerodrome Certification, registration and permits-to-operate ○ PANSOPS approval ○ Air Navigation Facilities Certifications ○ Etc.... (in accordance with the Philippine Civil Aviation Regulations, CAR Aerodromes and CAR-ANS)	
	Specific Data of an Organization ○ Audit and Inspection reports ○ Approvals and Authorizations from CAAP ○ Foreign approvals (if applicable) ○ Document repository ○ Directory with amendments of expositions ○ Special management view on staff of a company (competent persons in variouspositions) ○ Hierarchical view of organization/sub-organizations (departments) and their appending certificates, audits ... in a tree. This tree can be filtered to hide irrelevant data. ○ The tree view should be switchable for different certificate types as documentednecessary ○ Technical data of the certificate based on different certificate configurations (based on hierarchical rating system or special data screens for operations Specifications	
	Tasks of Inspectors and other safety personnel	
	○ Planning by schedule, company and personnel (planning calendar) ○ Assignment of staff to specific organization ○ Assignment of CAAP personnel to projects and relevant organizations (inspectors may attend to a fixed set of organization; inspectors are configuredas users within	

	permission management module). o Assignment of organization representative and CAAP inspectors to audits. Appointments shall be synchronized with appropriate email platform. o Management of to-do lists with expiration date for inspectors (periods ofcertificates, deadlines of findings, views within the case management system) o Planning and corrective overview of audits on a timeline (affected organizations, inspectors, location, etc...) o Different filters to certain tasks may be searched by, but not limited to: o Organization o Inspector o Audit/Inspection o Aircraft M/M/S o Location o Dates o Recommendation o Certificate o Projects o Findings o Others (if necessary)	
	Certificates	
	Certificates for organizations must be administered and printed.	
	Supported certificates shall be, but not limited to:	
	• Air Operator Certificates (AOC) with (Operation Specifications, Aircraft Register Mark, AOC Extract per aircraft model), Maintenance System Approval Statement etc. Link of aircraft fleet with special authorizations / limitations to Aircraft Register. The system must cross-check aircraft register data and make problems visible. Fleet must be supported (standard configuration) or special configuration per aircraft. Also handling of related certificates like continuing airworthiness management organization.	
	• Flight and Maintenance Training Organizations: Approval Certificates, Curriculums, Approvals and Recommendation Report,	

	• Approved Maintenance Organizations: Approval Certificate, Approval andRecommendation reports	
	• Aerodrome (Certification, Registration and Permit to Operate), PANSOPS, • ANF Certificates	
	• Certificate of Registration	
	• Aircraft Material Distributor Certificate	
	• Type Certificate/Validated Type Certificate	
	• Noise Certificate	
	• Others (in accordance with the PCAR, CAR Aerodromes and CAR-ANS) and other rules mandated by the Authority)	
	• Supported functions on certificates shall be: o Mapping of print templates (from a central template repository) to the specific application areas o Generation of certificate documents o Support for periods and certificates limited in duration o Possibility to link certificates to projects (including definition of project team) o Management of interdependencies of certificates (e.g. schedules to main certificate) and required certificates o Management of complete certificate history (renewal, variations, changes, …) o Linking of audits to certificates o Interconnection with data from other application modules (Type Certification, Aircraft Registration, Flight Schools (FCL)…)	
	Audit Management	
	An essential part of the solution is planning, carrying out and documenting audits/inspections and to track the findings. The following functions must be implemented for this purpose:	
	• Detailed planning of audits and inspections (hierarchical regulations with articles, exposition chapters, aviation sectors or topic based), schedules and inspectors	
	• Distributed / partial audits with different scope but	

	linked to one certificate	
	• Determination of participants on either / or both side (organization and CAAP)	
	• Categorization by “audit”, “inspection”, “follow-up audit” depending on the nature (and step) of the organization surveillance program	
	• Generation of cover letters (e.g audit initial letter, follow up letters, reports)	
	• Creation of an audit report after completion of audits, reflecting all events of theaudit. The report is processed in a template. Each application area can use its own templates	
	• Creation of audit plan.	
	• Preparation of check list or job aids, containing questions relevant to the plan. This setting must be done for each audit. A view of all possible questions is displayed, the user has an option to approve or deny the questions	
	• This check list can be exported, where the user can fill in the results with an offline client and re-load the data into the organization certification system (support of offline documentation)	
	• Assistance for corrective action plans and corrective actions (also available as web solution for the industry stakeholders)	
	• Automatic combination of several audit results into recommendation	
	• The responsible inspector and industry participant shall get notifications when certificates are due to expire or closing dates for findings are due.	
	• The software shall have a web-based solution where responsible persons from industry can log in and upload corrective action plan / corrective action handlingwith documents attached. This activity shall trigger a task for the CAAP inspector to confirm or reject the action from the industry. E-mail notifications must be evident when CAAP made decisions.	
	Background Definition Data	
	• Easy extensibility to new application areas and new kind of certificates	
	• The certificates shall extend the function of the respective application area	

	• In an administration task, the application may define the inspectors working on the different application areas.	
	• To define which law articles and chapters of manuals from industry are relevantfor the application areas.	
	• Definition of organization personnel filters; filter by positions that are of specific interest to an application area, e.g. quality manager, accounting manager…	
	• Setup and configuration of laws/regulations for different application areas	
	• Laws and regulations: a law can have a hierarchical structure by articles (paragraphs) with their titles and texts. This data will not be deleted; instead, it will be versioned (by changes) or set inactive (by removing without replacement).	
	• Global question catalogue: we like to define the relation a question will have later on to a law's directive and regulations' chapter.	
	• Import/Update interface for laws, regulations and questions	
	nagement of print templates	
	• Set up and configure central print templates from the central repository	
	• The system shall support certificates and their appendices, audit reports,recommendations and cover letters	
	• The (super) user shall be able to adapt the print templates with ease	
	• The user can select the respective print templates per application area	
	• Printing should generate PDF files which cannot be modified by end users	
	Reports	
	There are many different requirements on queries for the daily work of inspectors and the requirements will vary over time. Rather than building a fixed set of predefined reports, the application should be able to use the functionality of the integrated modules and create filters to generate appropriate reports. Pre-defined reports shall be determined by CAAP upon implementation.	

2.3.6	**Airworthiness**	
	Type Certification	
	This system shall contain the complete management of data sheets and type certificates, the environmental certificates (noise and pollution) belonging to the type certificates and airworthiness directives referencing the type certificates.	
	TCs/Validated TCs and TCDS	
	The management of data sheets and type certificates is primarily based on some general data in the same way that other modules are based on their background definition data. Because of the large number of type must certificates, the first step must be arranging them in a hierarchically order, called group tree hereafter. In this group tree the different types of aircrafts – airplanes, helicopters, gliders … -, aircraft engines – pistons, turbines, jets - and propellers form the most upper level.Under these have any number of levels in the different groups and subgroups. The lowest level typically contains the current type certificates even though the assignment of type certificates is allowed in all levels.	
	Further basic data shall be: o the holders of the type certificates o the holders of supplementary type certificate's o the supplementary type certificates themselves o the manufacturers of aircrafts o the manufacturer of parts and appliances o the parts and appliances themselves o a configurable list of text modules for various tasks	
	The two main business objects data sheets and type certificates are generated by means of these basic data. The data sheet contains only few data like the identification number, the TC holder, issue number and date, issuing country … The type certificate shall contain essentially more data. Beside the general data likename, type (aircraft, engine,	

	propeller), category (airplane, glider, piston engine, jet engine, …), serial number, ICAO identification, maximum , etc…. (Assigned basicdata and life cycle data) that should be easy to manage. If the handled type certificate concerns a motorized aircraft (airplane, helicopter, motor glider…) it shall be possible to define the corresponding engines. And if the defined engines are not jet engines, it shall be possible to define the corresponding propellers.	
	Environment Certification	
	The generation of environmental certificates shall be possible.	
	Airworthiness Directives	
	The airworthiness directives shall contain some basic data like national ID, originalID, revision type and number, the description of the problem, the responsible authority, issue dates, etc. Furthermore any groups of type certificates may be assigned to an airworthiness directive so that it is determined which airworthiness directives belong to which group of type certificates. These data shall be used to generate reports through the system.	
2.3.7	**<u>Aircraft Registration</u>**	
	The system shall contain the complete management of all aircrafts registered in thePhilippines including the whole life cycle of these aircraft.	
	Like in most other modules several data should be configured in the background definition tables by few authorized administrators:	
	• all possible aircraft with addresses within the registered under the Philippines are predefined and potentially linked to the allowed amount of registration marks	
	• all inspectors of the authority with their specified inspection scope and intervalof responsibility	
	• all inspectors and/or organizations (delegates) authorized by the authority with their specified inspection scope and interval of responsibility	
	• inspection cycles should determine the interval of	

	inspections in the different inspection scopes	
	• tool to plan and execute (checklist/findings) ramp checks	
	• predefined lists of checklist for inspections	
	• signatures of all users authorized to sign the board documents	
	• rate configuration for the determination of the yearly fee to be paid by the holderof an aircraft	
	The whole life cycle of an aircraft shall be managed: o Start of the life cycle by: reservation of a registration mark o Official full registration o Control of execution of all necessary inspections o Completion of all necessary inspections and take-over to an official fullregistration o Any suspensions, with or without reactivation o Deletion o Restart of life cycle	
	The main business object of this module shall obviously be the reserved or registered aircraft. This object shall contain a large bunch of own and assigned data including: o Registration mark o Some dates of reservation, registration, deletion, … o Type of ownership o Current and previous location o Aircraft address o Responsible inspectors o Complete history of all inspections o Administrative suspensions o Complete history of all owners ever involved (main and part) and holders (mainand part) o Complete history of all suspensions, their reasons and their date of start and end. o The assigned data from module Type Certification: o All-important data of the type certificate of the	

	aircraft o The environmental certificate o The serial numbers and years of construction of all contained type certificates(the aircraft body, potentially the engines and propellers) o Data about standard category and special category (if applicable) o Complete history of all board documents. o Certificate of Registration o Temporary airworthiness certificate (if applicable) o Certificate of Airworthiness o Noise certificate o Confirmation of inspection o Permit to Fly o Environment Certificate o Export Certificate of Airworthiness	
	It shall be easy to determine who has created which certificate on which date, when it was last printed. Furthermore, it shall be possible to generate a duplicate certificateif the original document was lost.	
	All printed board documents shall be saved as PDF documents and can be easily reviewed and reprinted.	
	Complete history of all accidents an aircraft had, including: o Date and location of accident o Flight crew involved o Consequences like damages on aircraft, injuries or death of passengers and/orcrew o Inspections executed thereafter o Information about insurances: o Insurance of aircraft o Insurance of passengers	
	User may execute the calculation of the fees for all registered, active aircrafts in the database. After the calculation the user gets a list containing all computed fees andthe data of the aircrafts the fees are based on. The user can check this listing and release it. As consequence of release all calculated data will be formed to the	

	corresponding billing statements. The system will then print the billing statement.	
	The module must be able to generate various report as may deemed necessary.	
	Aircraft Ownership	
	This module shall contain the complete management of the aircraft ledger including primarily the whole life cycle of these aircrafts within the ledger, the management of mortgages and hire contracts.	
	It shall be easily configurable in the database which documents have to be printed for each activity. Furthermore, there shall be a configuration in the database which addressees will get which type of documents.	
	The main data view shall be concerned with the life cycle of aircraft within the ledger. Normally each aircraft passes the steps such as: "notification of entry", "application of entry", "notification of cancellation" and "application of cancellation".	
	After the entry of an aircraft into the ledger the technical and owner data of the aircraft (all these data are delivered by the module Aircraft Registration) can be checked by the user.	
2.3.8	**Flight Simulation Training Devices**	
	We expect to handle the organizational and technical hierarchy and distributed locations of a flight simulator operator. This hierarchy shall include: o the operator itself o the various sites (locations), where the flight simulators are operated o the flight simulators o the variants of flight simulators simulating distinct ratings (e.g. A300, …	
	We expect to manage the audit of the operator like described in "organization approval requirements" with underlying laws, expositions, topics, questions, findings …	
	The authority shall be able to perform a technical evaluation of all variants of the flight simulator when the operator bought a flight simulator and applied for the evaluation.	
	The system should support the documentation of findings, if any problems during the evaluation are found. The system has to be able to document due dates and to remind CAAP inspectors of upcoming due dates close or	

	already overdue.	
	The system has to support the printout of the certificates	
	The system should be able to track the complete history of a flight simulator (including selling and moving of the device).	
	To ease the operation the system should be able to handle various types of flight simulators and support the end user in copying migrating/transmitting the data between them.	
	The system has to keep the relevant data of the flight simulator, also the necessarytechnical data.	
	The evaluations of a flight simulator shall be handled in projects. The project consists of basis data, participants and several timetables. Each timetable can consist of basic data and participants. The user can attach projects to operators, sites,flight simulators or variants.	
	The system has to generate the evaluation report (via a template)	
2.3.9	**Workflow Management**	
	The system shall have built in workflow management system. Each user shall havetask lists gathering individual and group tasks. The system shall have a graphical designer tool to create and modify workflow templates and the possibility to execute the workflows directly after design.	
	The workflow tool shall have the functionality to be triggered from external sources,from document uploads (via web client), manually or via a web service (external triggers). The system shall work as data storage for documents and data (configurable content of data fields) till the workflow finishes. The history of eachworkflow with all steps performed shall be documented.	
	The workflow shall have an import / export interface to transfer workflow templatesbetween test and production environment.	
	Workflow can help to establish well defined processes guiding people to accomplish recurring tasks in a reproducible way.	
	Workflow designers shall create workflow templates by defining a chain of tasks /or parallel tasks that need to be accomplished by an assignable group of people. Thetasks can contain branches with condition checks. It can or should a non- negotiablefunction contain automatic tasks like sending e-mails with predefined texts completed by	

	data taken from the workflow. It is also possible to call sub workflows. Sub processes occurring often do not have to be defined in every workflow and can be re-used. In each task the person working on the task can enterdata being stored related to the workflow. In case the workflow deals with data fromthe CAAP solution like persons or license holders, the workflow user can easily view the related data from within the workflow (workflow integrated into the solution).	
	While a workflow is in process it shall always be possible to add documents to theworkflow or to make notes to keep track of information related to the workflow.	
	All the users participating in a workflow can view their open tasks in a personal task list. From this list they can pick tasks they want to work on. The tasks list is highly configurable to only show tasks and data the user is currently interested in.	
	It shall also be possible for a user to temporarily postpone a task so it is not shownin his task list for an amount of time, automatically appearing again after that timeperiod.	
	Supervising officers shall easily keep track about tasks requiring their attention. They can reassign tasks to other officers.	
	Workflows can implement a supervisor check so the work of an officer will alwaysbe checked by his supervisor before continuing in the predefined flow.	
	A workflow designer can define due dates a workflow must be finished within (timeperiods).	
	The workflow tool shall allow the modelling of automated decisions (based on configurable business logic) using the underlying data.	
	At the end of a workflow the tool shall allow the automation of tasks (storage of data and documents) in the different application areas of the backend systems.	
	In case a workflow is not completed before the due date, automatic e-mails can be sent (internally and to the stakeholders) or other workflows can be triggered (escalation management)	
	It shall be possible to integrate the workflow into an enterprise infrastructure by exchanging data with other systems than the CAA enterprise system. Other systemscan send requests to workflow system triggering a workflow to start. After the bespoke workflow is finished it sends a response back to the other system containing data defined by the workflow designer.	

	Using the WEB together with Workflow shall enable pilots, mechanics and among others to hand in electronic application forms defined by the authority or to be integrated in feedback loops via the web client. An incoming electronic form or aninput screen of workflow data shall start a workflow containing the form or input data. The status of the application can be tracked by the applicant in the WEB clientas well. The status information given to the application is defined by the workflow designer. The applicant can also upload additional documents in electronic form completing his application.	
	The history of ongoing and completed workflows can be reviewed any time answering the "What happened when caused by whom" questions. The history of ongoing and completed workflows can be reviewed any time answering the "What happened when caused by whom" questions.	
2.3.10	**Interfaces**	
	Web Service interfaces should be available to connect to an external DMS/archive system (transfer of documents and meta data about the document). The document is retrieved later from the external DMS if needed within the application.	
	A Web Service for Query Tool shall be available to connect query data into other 3rd party systems	
2.3.11	**Risk and Performance Based Surveillance**	
	CAAP likes to follow and observe the risk and performance-based surveillance service providers' conformities. This, CAAP want to ensure the availability of the:	
	○ Multipurpose Tool for inspectors, analysts and decision makers - Risk-based Oversight Checklist planning (content and cycle) andassessment - Risk Profile of Service Provider, Ranking - Interconnected dashboards, switch from one view to another (browse mode, drill-down).	
	○ Suitable for all regulated aviation areas (different categories of serviceproviders)	
	○ Tool properties: - Integration in bespoke main solution	

	- Data collection, processing, representation, storage (revision safe, timelinetrends) - Reproducible result + comprehensible setup and usage + traceable	
	o Indicators: Derive indicators from raw data (reuse raw data in differentindicators)	
	o Different types of raw data - Facts (e.g. number of employees, fleet-size) - Assessed and rated surveillance elements (checklist) - Extract existing data from database	
	Evaluation	
	• The system must provide the user with the ability to present the indicators that were calculated on the values entered per Service Provider. • The system must provide the user with the ability to present the results of an evaluation in a scatter chart.	
	• The system must provide the user with the ability to present the results of an evaluation in a (stacked) bar chart.	
	• The system must present the trend of an indicator over time.	
	• The system must ensure that only authorized users can create an evaluation.	
	Structure of master data	
	• The system must provide the user with the ability to define and use a hierarchical structured system. This system must consist of surveillance elements that are aggregated into indicators. The indicators must be aggregated into evaluations.	
	• The system must provide the user with the ability to reuse the data structure for each surveillance and evaluation.	
	• The system must provide the user with the ability to aggregate indicators in evaluations using pre-defined mathematical methods such as but not limited to:sum, squared sum and percentage.	
	• The system must provide the user with the ability to	

	aggregate indicators in evaluations using combinations of mathematical methods by using a script language editor.	
	• The system must provide the user with the ability to set the status of the master data elements to ensure inactive or draft elements are not used by an evaluation.	
	• The system must provide the user with the ability to see, in which other elements of the hierarchy, a certain element is used.	
	• The system must ensure that only authorized users can manage the master data.	
	Gathering of data	
	• The system must provide the user with the ability to create checklists forsurveillance audits, based on the master data (surveillance elements).	
	• The system must provide the user with the ability to create a checklist for a surveillance audit based on categories. Service providers can be linked to these categories as well as surveillance elements. The system must suggest a checklist based on the matches regarding these categories between service provider and surveillance elements.	
	• The system must provide the user with the ability to answer surveillanceelement questions of the checklist by entering a value manually.	
	• The system must provide the user with the ability to answer surveillance element questions of the checklist either by selecting from a pre-defined set of values or word pictures.	
	• The system must provide the user with the ability to manually encode the data,even without a surveillance activity (ad hoc)	
	• The system must ensure that only authorized users can create a checklist.	
	• The system must ensure that only authorized users may add, edit and delete values of a service provider.	
	• The system must provide the user with the ability to generate demo data fortesting purposes	
	Interface/s	
	• The system must provide the user with the ability to export the master data toxml-files.	
	• The system must provide the user with the ability to	

	import the master data from(previously exported) xml-files.	
2.3.12	**Examination System**	
	Functional Requirements	
	• The Examination System shall be a software-based system capable of providing theoretical knowledge examinations via the Internet.	
	• The Examination System must support all stages of the examination process from online application for an examination through scheduling, setting, running, marking of the examination, and notification of the result to the examination candidates.	
	• The Examination System must be able to generate reports of various types suchas pass rates, question analysis etc.	
	• The Examination System must have high reliability (of the order of 99%) and itmust be secure in terms of protection of the questions and retention of exam results.	
	• The Examination System selected must be capable of meeting current aviation regulatory requirements related to the administration of theoretical knowledge examinations for airmen licensing.	
	System Requirements	
	• The ability to utilize an examination computer while maintaining at most security of the Examination System is desirable.	
	• The Examination System shall be capable of operating on computers fit with different / various operating systems such as Windows platforms.	
	Interfacing Requirements	
	The Examination System should also be capable of interfacing with other softwarepackages such as financial management systems, and the bespoke CAAP management system, and with online booking and payment options.	
	Security Requirements	
	The Examination System shall be designed to provide a high level of security for the stored question bank, any set papers and examination candidate and examination result data.	

	It shall be possible to create different levels of User Administrators and assign individual rights or permissions to each.	
	Question, Question Control and Attachments	
	• It shall be possible to analyze individual question usage, difficulty level, pass rates etc.	
	• Each question shall be uniquely identifiable in the Examination System.	
	• The Examination System shall be capable of randomizing the question-and-answer options available to each examination applicant for the same examination.	
	• The exam system shall be designed as to assign various attributes to questions, such as, but not limited to: Question Type, Multiple choice answers, Essay type question, Category.	
	• The Examination System shall be so designed as to enable easy search for and location of specific question(s).	
	• The Examination System shall be so designed as to enable importing and exporting of data such as question banks in various formats.	
	• The Examination System shall be capable of linking attachments to each question. These attachments shall be available to access by an examination candidate whenever the particular question is offered in an examination.	
	• The Examination System shall be capable of attaching and displaying various file formation such as image files, video files, pdf files, doc files, etc.	
	Examination Candidate Interface	
	• The interface for the examination candidate shall be clean, easy to navigate andintuitive. The examination candidate shall be readily able to review his/her progress during an examination including time remaining, questions completed,questions flagged for follow up and questions outstanding.	
	• Each examination candidate shall be provided with a unique login to enable them to access specific examinations assigned to him or her.	
	User Administrator Interface	
	• The interface for the User Administrator shall be easy to navigate and intuitive.The User Administrator shall	

	be readily able to access the various modules of the Examination System	
	• Each User Administrator shall be provided with a unique login to enable access to the Examination System. The ability to allow a User Administrator to changetheir password shall be provided.	
	Scheduling of Exams	
	The interface for scheduling of exams shall be easy to understand and should wherepossible utilize selection lists and auto fill functionality when scheduling examinations.	
	Examination Management	
	• The setting of examinations should be intuitive and easy to understand. The Examination System shall be able to develop individual question papers, combine papers into examination sessions and assign specific exam papers or sessions to certain venues and dates.	
	• The examination system should be in accordance with PCAR requirements andmethods.	
	• System access must be controlled by the use of individual usernames and passwords.	
	• The Examination System shall be capable of analyzing each examination paperand sitting and produce reports on problematic questions, unusual results, trends, etc.	
	• The Examination System shall be capable of tracking and recording any review of an examination result following a request by a examination candidate for review.	
	• The Examination System shall be capable of transferring all examination data required by the electronic licensing system – tailored to CAAP system.	
	Qualification/Competency Management	
	CAAP needs a module to handle competency of inspector staff. We need to trackcourses and experiences from the past and to manage the planning for the future.	
	The system shall handle: o Skills: acquired by attending courses or by having appropriate proficiency o Tasks: to be fulfilled during ongoing training program organized by CAAP	
	The details to be handled as definition data for skills an tasks: o Validity of skill/task o Aviation Sector o Category	

	○ Name and Type (skill or task) ○ One or multiple levels of skills	
	Courses:	
	They shall handle a set of skills. After course is taken by a participant, he shall beable to acquire a function requiring these skills.	
	○ The system shall store the courses offered (name, course number, start date, enddate, location, status, training method, etc (out of list box))	
	○ The courses shall handle in addition information of skills (one or many) with their level, examiner(s), participant(s) and a document container. Courses shall be able to be copied to generate similar courses quickly.	
	○ After the course is finished the respective results shall be added to the participant records (value like passed/failed or scores between 0 and 100)	
	The system shall handle the qualification requirements. It is a set of skills and/or task which has to be fulfilled by a competent person to acquire a certain qualification within CAAP. The system shall allow the definition of unlimited qualifications/ functions with requirements	
	The system shall be able to collect several tasks into training sets.	
	The competence / proficiency shall be handled per person in adequate screens. It isa collection over live time.	
	The competency of the person needs to be connected to the surveillance componentto respect the underlying data about his qualification (function, grade, status)	
2.3.13	**<u>Accident and Incident Management</u>**	
	The system shall serve to receive and process reported accidents and incidents.	
	Information on involved aircraft can be queried from the aircraft register.	
	Reports received in the module shall be evaluated in the reception area (inbox) where they can be put on hold, rejected, deleted or may be passed on to other accident incident software. The basic information contained in the inbox shall enable the case handlers to decide on the further processing of the report. This information shall contain time and date, classification, location, registration mark / call sign, operator and ATM unit, reporting group, report group and the occurrence narrative.Data submitted by the reporter is only viewed in the described module.	

	Reports received in the module shall be evaluated in the reception area (inbox) where they can be put on hold, rejected, deleted or may be passed on to other accident incident software The basic information contained in the inbox shall enable the case handlers to decide on the further processing of the report. This information shall contain time and date, classification, location, registration mark / call sign, operator and ATM unit, reporting group, report group and the occurrence narrative.Data submitted by the reporter is only viewed in the described module.	
	The case handler shall be able to perform the quality assurance of the information provided in the report and may code it in the event structure provided by any other software. When the case is stored, it is added to the national database. The nationaldatabase can be searched and queried for information to be used in statistics, overviews and the follow-up of individual cases.	
	The case administration function in this module shall retrieve selected informationfrom the national database to sort and filter the occurrences. Also, a report on inputsafety information for each case is available in PDF format. Inspectors working in the case administration of the desired module can see all cases, get an overview on recommendations and perform searches in the national database. Follow-up activities are logged and individual cases receive a status.	
	A separate view shall show all cases which will be treated in the meetings and keepsa history of issues handled in past meetings. A management overview shall provide information on the number of open occurrences, case handlers and their workload and safety recommendations issued.	
	An e-mail function shall be integrated in the case administration to ease communication between users.	
	Case handling	
	• The system must provide the user with the ability to handle incoming cases in an inbox. • The system must provide the user with the ability to manually log changes of the cases.	
	• The system must provide the user with the ability to search for cases.	
	• The system must provide the user with the ability to merge cases based on theirsimilarity.	
	• The system must ensure that only authorized users may handle cases.	

	• The system must provide the user with the ability to organize meetings basedon properties (e.g. criticality) of the cases.	
	Case details	
	o The system must provide the user with the ability to create, edit and delete cases.	
	o The system must provide the user with the ability to print case details.	
	Interface	
	• The system must be able to receive reported incidents and accidents from an external system (e.g. web portal) using a standard web service of the software system.	
	• The system must provide the user with the ability to export incident cases toexternal system.	
	Reports	
	• The system must provide the user with the ability to create reports that give anoverview of the cases.	
	• The system must provide the user with the ability to print reports.	
	Interfacing Requirements	
	The System should also be capable of interfacing with other software packages such as financial management systems, and the bespoke CAAP management system, and with online booking and payment options.	
2.3.14	**Protocol Questions (PQ) Compliance**	
	Protocol Questions (PQs) are the primary tool for assessing the level of effective implementation of a State's safety/security oversight system. They are based on ICAO SARPs, PANS, ICAO documents, other guidance material and taking into consideration the Critical Elements (CEs). PQs are organized by audit areas. States, such as the Philippines thru CAAP are required to submit and regularly update the status of PQs. As a priority, States shall conduct a PQ self-assessment using the following: ICAO USOAP CMA – (Universal Safety Oversight Audit Program – Continuous Monitoring Approach) o Primary Aviation Legislation and Civil Aviation Regulations (LEG);	NA

	○ Civil Aviation Organization (ORG); ○ Personnel Licensing and Training (PEL); ○ Aircraft Operations (OPS); ○ Airworthiness of Aircraft (AIR); ○ Aircraft Accident and Incident Investigation (AIG); ○ Air Navigation Services (ANS); and ○ Aerodromes and Ground Aids (AGA). ICAO Eight Critical Elements - 1) CE-1: Primary Aviation Legislation 2) CE-2: Specific Operating Regulations 3) CE-3: State Civil Aviation System and Oversight Functions 4) CE-4: Technical Personnel Qualifications and Training 5) CE 5: Technical Guidance, Tools and Provision of Safety Critical information 6) CE-6: Licensing, Certification, Authorization and Approval Obligations 7) CE-7: Surveillance Obligations 8) CE-8: Resolution of Safety Concern When ICAO issues a finding, i.e. when the status of a PQ changes to not satisfactory because of a USOAP CMA activity, in response the State must develop a Corrective Action Plan (CAP). The State shall develop an acceptable CAP and submit it through the USOAP CMA online framework.	
	• The system must have the capability of monitoring the Audit Areas, Sub Areas, critical Elements with corresponding Protocol Questions (PQs), evidence and Corrective Action Plans.	
	• The system must have the provisions to upload, search and generate report for any/all PQs with the following options: ✓ Identify PQ ✓ Identify PPQ ✓ Identify SSC PQ ✓ Identify SSP PQ ✓ Identify PQ with MIR ✓ Identify PQ requires CAP ✓ Identify PQ Amendment New/Revised/Merged/Separated ✓ Identify PQ Status Satisfactory/Unsatisfactory/Not Applicable/Undetermined	

	✓ Identify PQ CAP Status ✓ Selection of CAP Progress ✓ Selection of CAP Review Result ✓ Determine SSP Component and Maturity Level ✓ Select Compliance Status **PQ** – Protocol Questions **PPQ** – Priority PQ **SSC PQ** – Significant Safety Concern PQ - The SSC mechanism is a USOAP CMA process that is used to notify a State of identified deficiencies that may pose an immediate safety risk to international civil aviation. **SSP PQ** – State Safety Program - Each PQ was linked to one of the four SSP components (i.e. State Safety Policy and Objectives, State Safety Risk Management, State Safety Assurance, and State Safety Promotion), rather than the eight Critical Elements associated with the legacy USOAP CMA activities. **MIR** – Mandatory Information Request - A MIR is issued by ICAO under the USOAP CMA process when concerns are raised by internal and/or external stakeholders about aspects of a State's safety oversight system. **CAP** – Corrective Action Plan	
	MANAGEMENT OF PROTOCOL QUESTIONS	
	- Provisions to bulk upload Protocol Questions (PQ) of any audit program;	
	- Define Area, Sub Area, Critical Elements for each PQ;	
	- Provision to isolate PQs for MIR, SSC PQ, SSP PQ, Offsite PQ, Priority PQ;	
	- Provisions to integrate the Compliance Standards related to the PQ	
	- PQ search pattern for all findings, CAP and Self-Assessment;	
	- Progress documented for each PQ; Audit/ICVM counter parts record keeping.	
	MONITORING OF ICAO SARPS AND UPDATING OF COMPLIANCE CHECK LISTS AND ELECTRONIC FILING OF DIFFERENCES (EFOD)	
	States are required by the USOAP CMA to file their differences against standards and recommended practices by completing and maintaining Up-to-date Compliance Checklists (CCs). These contain information regarding the implementation of the specific provisions of the relevant Annexes to the Convention. The completion of the CCs by	NA

	Member States will provide an overview of the level of implementation of ICAO Standards to authorized users. States must provide this information through the Electronic Filing of Differences (EFOD) system on the CMA online framework (http://www.icao.int/usoap/). By completing the CCs through the EFOD system, States can use the EFOD as an alternative means for notifying ICAO of their compliance and differences.	
	- The system must have the provisions to add corresponding Standards in relation the Specific Annex, Volume/Part, Chapter/Appendix; - The system must be capable to integrate and monitor the ICAO SARPs Amendment affecting any of the Standards;	
	Management Accident Investigation (AIG), Occurrence Reporting and Safety Recommendations	
	Management Accident Investigation (AIG)	
	• The system must be able to generate reports/ notification but not limited to the following:	
	- for accidents the abbreviation ACCID, for serious incidents INCID;	
	- manufacturer, model, nationality and registration marks, and serial number of the aircraft;	
	- name of owner, operator and hirer, if any, of the aircraft;	
	- qualification of the pilot-in-command, and nationality of crew and passengers;	
	- date and time (local time or UTC) of the accident or serious incident;	
	- last point of departure and point of intended landing of the aircraft;	
	- position of the aircraft with reference to some easily defined geographical point, and latitude and longitude;	
	- number of crew and passengers: aboard, killed and seriously injured; others: killed and seriously injured;	
	- description of the accident or serious incident, and the extent of damage to the aircraft so far as it is known;	
	- an indication to what extent the investigation will be conducted or is proposed to be delegated by the State of Occurrence;	
	- physical characteristics of the accident or serious incident area, as well as an indication of access	

	difficulties or special requirements to reach the site; - identification of the originating authority; and - presence and description of dangerous goods on board the aircraft.	
	• The system must be capable of adding any more aircraft if engaged in the same occurrence.	
	• The system must be capable of adding the 'Technical Investigation Team' by Groups as prescribed by the ICAO	
	• The system must be capable of adding the 'Investigation Management System Events' as prescribed by the ICAO	
	• The system must be capable of adding the 'Investigation Event Task-Assignments' as prescribed by the ICAO	
	• The system must be capable of displaying the 'Investigation Management System — Event Flow Chart, as prescribed by the ICAO	
	• The system must be capable of adding the sixty-six (66) current 'Investigations Management System — Event Checklist' as prescribed by the ICAO	
	Final Reporting and Safety Recommendations:	
	• The system must be able to generate the report as prescribed by the ICAO - Format and Content of the Final Report including Safety Recommendations (SR).	
	• **The following provisions are necessary for online tracking of AIG:** - Provisions to upload Airport, Manufacturer and Aircraft Information for an Accident/Incident; - Provisions for High-Risk Category and Occurrence category including injury details. - Provision for Accident/Incident Notifications and establishment of Investigation in-Charge (IIC); - Provision to create the Investigation Group and Events and assignment of the respective tasks; - Provisions to finalize the Safety Recommendations (SR) and Reports;	
3.0	**CLOUD HOSTING GENERAL REQUIREMENT (MANAGED SERVICE)**	
	● To maintain a resilient, efficient, and secure Cloud Service	
	● Must be at least Tier 3 Local Cloud Hosting Facility	

	● With multiple source/ redundancy for power and cooling	
	● Does not require a total shutdown during maintenance or equipment replacement	
	● Storage must auto scale in size with no downtime or shutdown needed	
	● Anti-DDOS	
	● Must also have an N+1 availability (able to support at full capacity load plus additional components as failover in primary failure scenario)	
	● Backup solutions that can keep operations running in case of a local or region-wide power outage	
	● The facility must ensure equipment can continue to operate for at least 72 hours following an outage	
	● Maximum allowable downtime per year 1.6 hours	
	● Shared compute, storage, network and security resources	
	Data Center Parameters TIER 3	
	● Uptime guarantee 99.982%	
	● Downtime per year <1.6 hours	
	● Component redundancy Full N+1	
	● Concurrently maintainable Partially	
	● Staffing 1+ shift	
	● Certifications and Compliance ISO 9001, ISO 27001, and PCI-DSS	
	● ANSI/TIA 942B Compliant Seismic Zone PhilVolc Seismic Zone 4 or equivalent	
	● Fire Protection Standard (in DC) NFPA Standard 2001 (at least) or equivalent	
	● Flood Risk at least 80ft above sea level	
	● CCTV Coverage PCI-DSS Compliant or equivalent	
	The managed (hosted) services should include the following standard minimum requirement in hosting the application, environment must be fully redundant, active-passive configuration and should have the following infrastructure in production.	
	Shared (Cloud) Hosting Service Minimum Requirement for primary and Disaster Recovery Site/Redundancy:	
	● High availability shared Compute, Network, Storage and Security configuration	
	● At least 24 cores per processor or higher (or its equivalent)	
	● At least 2*Intel Xeon Gold 5318Y 2.1GHz CPU per node or higher (or its equivalent)	
	• Guaranteed throughput of 100mbps	
	● At least 512GB Total Memory or higher	

	● Required SSL Certificates	
	● Required licenses	
	● 20TB of Usable Storage minimum on each site (scalable) for the first year, additional 10TB for each succeeding two (2) years.	
	● Backup and Recovery Software	
	licensed Enterprise-grade protection and recovery of Virtual machines, containers, databases, applications	
	Able to manage backed-up data and workloads with efficiency and security.	
	Role-based access control that enables self-service, restricting unauthorized access. Automated backup and recovery of VMs, containers, applications and databases	
	Data security and resilient ransom-ware protection Support	
	● Backup	
	Protection of virtual machines, applications and databases	
	De-duplicated data for more efficient data transmission	
	Auto-discovery provides proactive protection of newly added data-sets Customized retention for recovery and compliance	
	Configurable encryption both at-rest and in-transit	
	Able to manage backed-up data and workloads with efficiency and security	
	● Data Loss prevention	
	Data loss prevention from the following but not limited to phishing, malware, cyber-attacks, insider risk, unintentional exposure and loss and ransomware	
	Recovery	
	Recovery of virtual machines, applications and databases. Recovery of entire system, instance and application	
	Granular single file recovery	
	● Migration	
	Fully automated processes; no need for customized scripts to migrate workloads from cloud to cloud (site1 to site2)	
	No downtime to production systems Data portability between clouds (site1 to site2)	
	● Hardware Snapshot Integration	
	Leverage hardware snapshots for near-instant recovery of entire data volumes Support for all major snapshot hardware vendors	
	Automated snapshot backup and recovery	
	Customized snapshot retention	
	● Cloud Integration	

	Utilize the cloud for scalability, mobility, availability, and cost reduction for production Workloads	
	Support for all major cloud vendors	
	Single platform for data management Backup, recovery, and migration to the cloud.	
	Flexible Storage Options	
	Retain copies of protected data in multiple locations (site1 and site2)	
	De-duplication for more efficient – and cost- effective – data storage	
4.0	**HARDWARE COMPONENT**	
4.1	**Supplier's proposed brand of Tablet, Laptop and Mini PC must have been locally and internationally marketed and sold for at least twenty (20) years prior to the scheduled date of bid opening**	
4.2	**200 Units Tablet** OS platform such as but not limited to: IOS, Android, MS, etc. is acceptable as long as the SOMS application/system can be accessed using the proposed tablet. o Resolution: At least 2560 x 1600 (or higher) o Display: 11" display (or higher), touchscreen o Processor: At least Octa-|Core @ 2.0GHz (or its equivalent) (or higher) o Operating System: Latest version o Memory: At least 8GB or higher o Storage: At least 256GB or higher o External Storage: up to 1TB o Accessories: book cover keyboard and pen o WIFI ready/ Bluetooth o With webcam/speaker o SIM Card ready o All delivered tablets must include individual SIM Card with 20G/month internet load for 3 years.	
4.3	**100 Units Mini PC** o Processor: Latest Generation i5 (or higher) o Memory: 16GB DDR4 (or higher) o Storage: 1T SSD (or higher) o Graphics: Integrated Graphics o Display: At least 21.0-inch LCD HD Monitor (same brand as the cpu) o Peripherals: USB Keyboard and Mouse; 650va UPS (or higher) o USB Configuration: At least 4 x USB 2.0/3.0/3.2 , 1x USB – C, lan, o Integrated LAN: Yes o Integrated Wireless: Wi-Fi 6Integrated	

	○ Bluetooth: Yes ○ Latest Microsoft Operating System (Pro) (64-bit) ○ Latest Microsoft Office Standard	
4.4	**4 Units Laptop (for Project Management and Implementation)** ○ Processor: At least 10 cores, 16 thread (or higher) ○ Display: At least 14.0" FHD (1920×1080); Anti-glare ○ Memory: 16GB DDR4 (or higher), ○ Storage: 1TB SSD ○ Graphics: Latest Integrated Graphics ○ Operating System: Latest Windows 64 bit ○ Keyboard: Backlit, English ○ Camera: 720p with Privacy Shutter ○ Battery: Integrated 38Wh (or higher) ○ Power Adapter: Yes ○ I|O Ports: At least - 1x USB 2.0 - 1x USB 3.0/3.2 - 1x USB-C - 1x Headphone / microphone combo jack ○ Bundled Software: Latest Microsoft Professional Operating System and Office ○ XDR endpoint security	
4.5	**10 Units Pen Tab** ○ Tablet Size: At least 200 x 160 x 8.8 mm / 7.87 x 6.3 x 0.35 in or higher ○ Active Area: At least 152.0 x 95.0 mm (6.0 x 3.7 in) or higher ○ Express Keys: At least 4 customizable application-specific settings or higher ○ Pressure Levels: At least 4096 or higher ○ Resolution: At least 2540 Ipi (or higher)	
4.6	**10 Units Webcam** ○ Widescreen Full HD video (1080p at 30fps) or higher ○ Fast and smooth autofocus ○ Glass lens ○ Full HD 1080p videos (or higher) ○ Razor sharp image/video up to 10 cm from the camera lensAuto Light Correction ○ Built-in noise-reducing HD Microphone ○ Swivels a full 360 degrees ○ Tri-pad	
5.0	**WARRANTY AND SUPPORT**	
5.1	**Delivered Devices:**	

	○ 3 years warranty and support for parts, labor, and services ○ 4 hours response time from time of reporting for Chat, SMS, Call and email Support ○ 8 hours response time from time of reporting for on premise support	
5.2	**Software / Application:**	
	• Three (3) years contract agreement /service.	
	• The maintenance service shall include updates in accordance with the ICAO requirements, system enhancements, new features, big fixes and support for error handling.	
	• Support must be available 24/7 • Not more than 4 hours response time from the time of reporting via email, call, SMS and chat with 24/7 alert/notification system • Support and Hotline for 2nd level (advanced users)	
6.	**TRAININGS**	
	○ Training and Workshops for IT and end users: ○ Should be ensured that appropriate training/s for different level users are provided. ○ Training for the software - Database Administration - Train-the-Trainor - End-users ○ Training for Cloud Hosting - Cloud Security and Access Control - Cloud Service Management & Optimization ○ Training to be conducted on site. ○ Must provide training material. ○ Must submit training course outline subject to approval	
	○ The winning bidder shall submit the training course outline subject to CAAP approval.	
	○ The winning bidder shall develop, provide, and facilitate transfer of knowledge related to the project, including but not limited to configuration, best practices and method of procedure (MOP) or standard operating procedures (SOPs) for common cloud hosting scenarios to the end users or designated CAAP personnel.	
	○ The winning bidder shall develop, provide, and facilitate transfer of knowledge on comprehensive	

	Cloud Service Outage Plan, which outlines the procedures and protocols to be followed in the event of planned and un-planned cloud service outages.	
	○ The winning bidder shall provide the necessary training modules/manual/materials before the conduct of the actual training.	
	○ CAAP shall provide the name of the participants for the training.	

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.

Section IX. Bidding Forms

TABLE OF CONTENTS

{ATTACH COMPANY LETTERHEAD/LOGO}

Bid Form for the Procurement of Goods
[shall be submitted with the Bid]

BID FORM

Date: _____
Project Identification No.: _____

To: [name and address of Procuring Entity]

Having examined the Philippine Bidding Documents (PBDs) including the Supplemental or Bid Bulletin Numbers [insert numbers], the receipt of which is hereby duly acknowledged, we, the undersigned, offer to [supply/delivery/perform] [description of the Goods] in conformity with the said PBDs for the sum of [total Bid amount in words and figures] or the total calculated bid price, as evaluated and corrected for computational errors, and other bid modifications in accordance with the Price Schedules attached herewith and made part of this Bid. The total bid price includes the cost of all taxes, such as, but not limited to: [specify the applicable taxes, e.g. (i) value added tax (VAT), (ii) income tax, (iii) local taxes, and (iv) other fiscal levies and duties], which are itemized or in the Price Schedules.

If our Bid is accepted, we undertake:

a. to deliver the goods in accordance with the delivery schedule specified in the Schedule of Requirements of the Philippine Bidding Documents (PBDs);

b. to provide a performance security in the form, amounts and within the times prescribed in the PBD;

c. to abide by the Bid Validity Period specified in the PBDs and it shall remain binding upon us at any time before the expiration of that period.

[Insert this paragraph if Foreign-Assisted Project with the Development Partner:

Commissions or gratuities, if any, paid or to be paid by us to agents relating to this Bid, and to contract execution if we are awarded the contract, are listed below:

Name and Address, Amount and Purpose of agent
Currency Commission or gratuity

_____

_____
_____
(if none, state "None")]

Until a formal Contract is prepared and executed, this Bid, together with your written acceptance thereof and your Notice of Award, shall be binding upon us.

We understand that you are not bound to accept the Lowest Calculated Bid or any Bid you may receive.

We certify/confirm that we comply with the eligibility requirements pursuant to the PBDs.

The undersigned is authorized to submit the bid on behalf of [name of the bidder] as evidenced by the attached [state the written authority].

We acknowledge that failure to sign each and every page of this Bid Form, including the attached Schedule of Prices, shall be a ground for the rejection of our bid.

Name: _____

Legal capacity: _____

Signature: _____

Duly authorized to sign the Bid for and on behalf of: _____

Date: _____

Price Schedule for Goods Offered from Within the Philippines
[shall be submitted with the Bid if bidder is offering goods from within the Philippines]

For Goods Offered from Within the Philippines

Name of Bidder _____ Project ID No._____ Page _____of_____

1	2	3	4	5	6	7	8	9	10
Item	Description	Country of origin	Quantity	Unit price EXW per item	Transportation and all other costs incidental to delivery, per item	Sales and other taxes payable if Contract is awarded, per item	Cost of Incidental Services, if applicable , per item	Total Price, per unit (col 5+6+7+8)	Total Price delivered Final Destination (col 9) x (col 4)

Name: _____

Legal Capacity: _____

Signature: _____

Duly authorized to sign the Bid for and behalf of: _____

Price Schedule for Goods Offered from Abroad

[shall be submitted with the Bid if bidder is offering goods from Abroad]

For Goods Offered from Abroad

Name of Bidder _____ Project ID No._____ Page _____ of _____

1	2	3	4	5	6	7	8	9
Item	Description	Country of origin	Quantity	Unit price CIF port of entry (specify port) or CIP named place (specify border point or place of destination)	Total CIF or CIP price per item (col. 4 x 5)	Unit Price Delivered Duty Unpaid (DDU)	Unit price Delivered Duty Paid (DDP)	Total Price delivered DDP (col 4 x 8)

Name: _____

Legal Capacity: _____

Signature: _____

Duly authorized to sign the Bid for and behalf of: _____

Other Bidding Forms

(ANNEX "A")

Annex "A" Form 1 ....Statement of all On-going Contracts
Annex "A" Form 2..... Statement of Single Largest Completed Contract
Annex "A" Form 3..... .... Joint Resolution Form for JVA

{ATTACH COMPANY LETTERHEAD/LOGO}

Statement of all its <u>ON-GOING</u> 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

Name of Project: _____

Location of Project: _____

Name of Company: _____

Address of Company: _____

Name of Contract	a. Owner's Name b. Address c. Telephone No.	Nature of Work	Contractor's Role		Contract Amountat Award	a. Date Awarded b. Date of Contract c. Contract Duration d. Date Started e. Date Completed	Accomplishment		Values of OutstandingWorks
			Description	%			Planned	Actual	
Government									
Private									
							Total value of outstanding works		

Submitted by: _____
(Print Name & Signature)

Designation: _____

Date: _____

{ATTACH COMPANYLETTERHEAD/LOGO}

Statement of single largest COMPLETED contract similar to the contract to be bid

Name of Project: _____

Location of Project: _____

Name of Company: _____

Address of Company: _____

Name of Contract	a. Owner's Name b. Address c. Telephone No.	Nature of Work	Contractor's Role		Contract Amount atAward	a. Date Awarded b. Date of Contract c. Contract Duration d. Date Started e. Date Completed
			Description	%		

Submitted by: _____

(Print Name & Signature)

Designation: _____

Date: _____

CAAP-BAC-SF Annex "A" Form 3

JOINT RESOLUTION

Whereas, _____ (Bidder/Name of Particular JV Partner), duly organized and existing under the Laws of the _____, with office address at _____, represented herein by its _____, and _____ (Name of Particular JV Partner), duly organized and existing under the Laws of the _____ with main office address at _____, represented by herein by its _____, have entered into a Joint Venture (JV) Agreement to undertake the following project/ contract:

(Name of Project / Contract)

Whereas, in order to facilitate the orderly execution and conduct of the contract that was entered into by the joint venture in the name of the joint venture, it is hereby resolved by theparties in the Joint Venture as follows:

a. To appoint _____ as the Authorized Managing Officer and Official Representative, to represent, to manage the Joint Venture and isempowered to enter in contract in the name of the Joint Venture, or to sign for any document in the name of the Joint Venture required by the (Procurement Agency) or any entities pursuant to the terms of the Joint Venture Agreement:

b. That, the parties agreed to make _____ (Name of Particular Lead Partner)_____ as the Lead Partner of the Joint Venture and (Name of Authorized Officer) _____ as the Official Representative & Managing Partner of the JointVenture, and are granted full power and authority to do, execute and perform any andall acts necessary and/or to represent the Joint Venture in the Eligibility Check, Bidding and Undertaking of the said contract in the name of the Joint Venture, as fully and effectively and the Joint Venture may do and if personally present with full power of substitution and revocation. _____ is fully authorized and empowered to sign any or all documents pertaining to the above statedproject / contract in the name of the Joint Venture.

c. That the parties agree to be jointly and severally liable for their participation in the Eligibility Check, Bidding and Undertaking of the said contract.

d. That the terms of the JV Agreement entered into the parties shall be valid and is co- terminus with the final completion and turnover of the Name of Contract / Project tothe agency of the government, which in this case, the (Name of Procurement Entity);

IN WITNESS THEREFORE, we hereby sign jointly this Joint Resolution this _____ day of _____, 20_____in_____.

Name of Bidder (Lead Partner)

By:_____
Signature & Name of
Managing Officer

_____
Designation / Position

Name of Bidder (Member Partner)

By: _____
Signature & Name of Authorized
Authorized Representative

_____
Designation / Position

Name of Bidder (Member Partner)

By:_____
Signature & Name of
Managing Officer

_____
Designation / Position

Name of Bidder (Member Partner)

By: _____
Signature & Name of Authorized
Authorized Representative

_____
Designation / Position

SIGNED IN THE PRESENCE OF:

_____

_____

_____

_____

A C K N O W L E D G E M E N T

REPUBLIC OF THE PHILIPPINES)
CITY OF) S.S.

BEFORE ME, a Notary Public, for and in the City of _____, Philippines, this _____ day of_____, 20_____ personally appeared the following persons:

NAME	**Community Cert. No.**	**Date / Place of Issue**

Representing to be the _____of _____ and _____ of _____ respectively, known to me and to me known to be the same persons who executed the foregoing instrument for and in behalfof said corporations and who acknowledge to me that same is their free and voluntary act and deed as well as of the corporations which they represent, for the uses, purposes, and considerations therein set forth and that they are duly authorized to sign the same.

This Instrument consists of three (3) pages including this page wherein this Acknowledgement is written and signed by the parties and their instrumental witnesses on each and every page thereon.

WITNESS MY HAND AND NOTARIAL SEAL at the place and date hereinafter first above written.

NOTARY PUBLIC

Doc. No. _____
Book No. _____
Page No. _____
Series of _____

Other Bidding Forms

(ANNEX "B")

CAAP-BAC-SF Annex "B" Form 1

Bid-Securing Declaration

(REPUBLIC OF THE PHILIPPINES) CITY OF_____) S.S.
x---------- x

Invitation to Bid [Insert reference number]

To: [Insert name and address of the Procuring Entity]

I/We, the undersigned, declare that:

1. I/We understand that, according to your conditions, bids must be supported by a Bid Security, which may be in the form of a Bid-Securing Declaration.

2. I/We accept that: (a) I/we will be automatically disqualified from bidding for any contractwith any procuring entity for a period of two (2) years upon receipt of your Blacklisting Order; and, (b) I/we will pay the applicable fine provided under Section 6 of the Guidelineson the Use of Bid Securing Declaration, within fifteen (15) days from receipt of written demand by the procuring entity for the commission of acts resulting to the enforcement ofthe bid securing declaration under Sections 23.1(b), 34.2, 40.1 and 69.1, except 69.1 (f), ofthe IRR of RA 9184; without prejudice to other legal action the government may undertake.

3. I/We understand that this Bid-Securing Declaration shall cease to be valid on the followingcircumstances:

    a. Upon expiration of the bid validity period, or any extension thereof pursuant to your request;

    b. I am/we are declared ineligible or post-disqualified upon receipt of your notice to sucheffect, and (i) I/we failed to timely file a request for reconsideration or (ii) I/we filed awaiver to avail of said right;

    c. I am/we are declared as the bidder with the Lowest Calculated Responsive Bid, and I/we have furnished the performance security and signed the Contract.

IN WITNESS WHEREOF, I/We have hereunto set my/our hand/s this_____day of [month][year] at [place of execution].

[Insert NAME OF BIDDER'S AUTHORIZED REPRESENTATIVE]

[Insert signatory's legal capacity]

Affiant

SUBSCRIBED AND SWORN to before me this day of [month] [year] at [place of execution], Philippines. Affiant/s is/are personally known to me and was/were identified by methrough competent evidence of identity as defined in the 2004 Rules on Notarial Practice (A.M.No. 02-8-13-SC). Affiant/s exhibited to me his/her [insert type of government identification card used], with his/her photograph and signature appearing thereon, with no.__.

Witness my hand and seal this____day of [month] [year].

NAME OF NOTARY PUBLIC

Serial No. of Commission _____
Notary Public for_____until_____
Roll of Attorneys No.
PTR No. __, [date issued], [place issued]
IBP No. __, [date issued], [place issued]
Doc. No. ____

Page No.
Book No.
Series of_.

CAAP-BAC-SF Annex "B" Form 2

{ATTACH COMPANY LETTERHEAD/LOGO}

Schedule of Requirements

ItemNo.	Description	Quantity	Unit	Delivered, Weeks/ Months

SUBMITTED BY:

Signature: _____

Printed Name: _____

Position: _____

Name of Company: _____

Date: _____

CAAP-BAC-SF Annex "B" Form 3

{ATTACH COMPANY LETTERHEAD/LOGO}

Technical Specifications

Item	Specification	Statement of Compliance

SUBMITTED BY:

Signature: _____

Printed Name: _____

Position: _____

Name of Company:_____

Date: _____

CAAP-BAC-SF Annex "B" Form 4

Omnibus Sworn Statement

REPUBLIC OF THE PHILIPPINES)
CITY/MUNICIPALITY OF_____) S.S.

A F F I D A V I T

I, [Name of Affiant], of legal age, [Civil Status], [Nationality], and residing at [Address of Affiant], after having been duly sworn in accordance with law, do hereby depose and state that:

1. **Select one, delete the other:**

   If a sole proprietorship: I am the sole proprietor or authorized representative of [Nameof Bidder] with office address at [address of Bidder];

   If a partnership, corporation, cooperative, or joint venture: I am the duly authorized and designated representative of [Name of Bidder] with office address at [address of Bidder];

2. **Select one, delete the other:**

   If a sole proprietorship: As the owner and sole proprietor or authorized representativeof [Name of Bidder], I have full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuingcontract for [Name of the Project] of the [Name of the Procuring Entity] [insert "as shown in the attached duly notarized Special Power of Attorney" for the authorized representative];

   If a partnership, corporation, cooperative, or joint venture: I am granted full power andauthority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for [Name of the Project] of the [Name of the Procuring Entity], accompanied by the duly notarized Special Power of Attorney, Board/Partnership Resolution, or Secretary's Certificate, whichever is applicable;

3. [Name of Bidder] is not "blacklisted" or barred from bidding by the Government of thePhilippines or any of its agencies, offices, corporations, or Local Government Units, foreign government/foreign or international financing institution whose blacklisting rules have been recognized by the Government Procurement Policy Board;

4. Each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the original, complete, and all statements and information

provided therein are true and correct;

5. [Name of Bidder] is authorizing the Head of the Procuring Entity or its duly authorizedrepresentative(s) to verify all the documents submitted;

6. **Select one, delete the rest:**

   If a sole proprietorship: The owner or sole proprietor is not related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

   If a partnership or cooperative: None of the officers and members of [Name of Bidder]is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

   If a corporation or joint venture: None of the officers, directors, and controlling stockholders of [Name of Bidder] is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

7. [Name of Bidder] complies with existing labor laws and standards; and

8. [Name of Bidder] is aware of and has undertaken the following responsibilities as a Bidder:

   a) Carefully examine all of the Bidding Documents;

   b) Acknowledge all conditions, local or otherwise, affecting the implementation of theContract;

   c) Made an estimate of the facilities available and needed for the contract to be bid, ifany; and

   d) Inquire or secure Supplemental/Bid Bulletin(s) issued for the [Name of the Project].

9. [Name of Bidder] did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project oractivity.

IN WITNESS WHEREOF, I have hereunto set my hand this____day of ___, 20___at _____, Philippines.

_____

Bidder's Representative/Authorized Signatory

SUBSCRIBED AND SWORN to before me this___day of [month] [year] at [place of execution], Philippines. Affiant/s is/are personally known to me and was/were identified byme through competent evidence of identity as defined in the 2004 Rules on Notarial Practice (A.M. No. 02-8-13-SC). Affiant/s exhibited to me his/her [insert type of government identification card used], with his/her photograph and signature appearing thereon, with no.
_____and his/her Community Tax Certificate No._____issued on_____at_____.

Witness my hand and seal this___day of [month] [year].

NAME OF NOTARY PUBLIC

Serial No. of Commission _____
Notary Public for_____until_____
Roll of Attorneys No._____
PTR No._____[date issued], [place issued]IBP No._[date issued], [place issued]

Doc. No.
Page No.
Book No.
Series of

* This form will not apply for WB funded projects.

Other Bidding Forms

(ANNEX "C")

Annex "C" Form 1 ....Authority of Signatory (Secretary's Certificate)

CAAP-BAC-SF Annex "C" Form 1

AUTHORITY OF SIGNATORY
(SECRETARY'S CERTIFICATE)

I, a duly elected and qualified Corporate Secretary of (Name of the Bidder), a corporation duly organized and existing under and by virtue of the law of the, DO HEREBYCERTIFY, that:

I am familiar with the facts herein certified and duly authorized to certify the same;

At the regular meeting of the Board of Directors of the said corporation duly convened and held on at which meeting a quorum was present and acting throughout, the following resolutions were approve, and the same have been annulled, revoked and amendedin any way whatever and are in full force and effect on the date hereof:

RESOLVED, that(Name of Bidder)be, as it hereby is, authorized to participate in thebidding of(Name of the Project)by the(Name of the Procuring Entity); and in that if awarded the project shall enter into a contract with the(Name of the Procuring Entity)and in connection therewith hereby appoints(Name of Representative), acting as duly authorized and designated representatives of(Name of the Bidder), and granted full power and authorityto do, execute and perform any and all acts necessary and/or to represent(Name of the Bidder)in the bidding as fully and effectively as the(Name of the Bidder)might do if personally present with full power of substitution and revocation and hereby satisfying and confirming all that my said representative shall lawfully do or cause to be done by virtue hereof;

RESOLVED FERTHER THAT, the Board hereby authorized its President to:

a. execute a waiver of jurisdiction whereby the (Name of the Bidder) hereby submits itself to the jurisdiction of the Philippine government and hereby waives its right to question the jurisdiction of the Philippine court;
b. execute a waiver that the (Name of the Bidder) shall not seek and obtain writ of injunctions or prohibition or restraining order against the CAAP or any other agency in connection with this Project to prevent and restrain the bidding procedures related thereto, the negotiating and award of a contract to a successful bidder, and the carrying out of the awarded project.

WITNESS the signature of the undersigned as such officer of the said this.

(Corporate Secretary)

SUBSCRIBED AND SWORN to before me this day of, 20affiant exhibited to me his/her Community Tax Certificate No._____issued on_____ _____at, Philippines.

Doc. No. _____
Page No.: _____
Book No.: _____
Series of _____

Notary Public


Republic of the Philippines
gppb
Government Procurement Policy Board