



Republic of the Philippines
Department of Transportation
MARITIME INDUSTRY AUTHORITY



PROCUREMENT OF SUPPLY, DELIVERY, INSTALLATION AND CONFIGURATION OF BLOCKCHAIN ENABLED AUTOMATED CERTIFICATION SYSTEM

PUBLIC BIDDING NO. 2021-02

TABLE OF CONTENTS

SECTION I. INVITATION TO BID.....	3
SECTION II. INSTRUCTIONS TO BIDDERS.....	7
SECTION III. BID DATA SHEET.....	15
SECTION IV. GENERAL CONDITIONS OF CONTRACT.....	20
SECTION V. SPECIAL CONDITIONS OF CONTRACT.....	23
SECTION VI. SCHEDULE OF REQUIREMENTS.....	25
SECTION VII. TECHNICAL SPECIFICATIONS.....	29
SECTION VIII. BID FORM, ANNEXES & Checklist of Technical & Financial Documents.....	60

Section I.

Invitation to Bid



Republic of the Philippines
Department of Transportation
MARITIME INDUSTRY AUTHORITY



INVITATION TO BID

PROCUREMENT OF SUPPLY, DELIVERY, INSTALLATION AND CONFIGURATION OF BLOCKCHAIN ENABLED AUTOMATED CERTIFICATION SYSTEM

1. The MARITIME INDUSTRY AUTHORITY, through the 2021 National Expenditure Program (NEP) for MOOE, intends to apply the sum of **THIRTY-TWO MILLION FIVE HUNDRED THOUSAND PESOS (P32,500,000.00)**, inclusive of all applicable taxes and charges, being the Approved Budget for the Contract (ABC) for the Project: **PROCUREMENT OF SUPPLY, DELIVERY, INSTALLATION AND CONFIGURATION OF BLOCKCHAIN ENABLED AUTOMATED CERTIFICATION SYSTEM**. Bids received in excess of the ABC shall be automatically rejected at bid opening.
2. The MARITIME INDUSTRY AUTHORITY now invites bids for the said Project. Contract shall commence from the approval of Contract of Agreement and issuance of Notice to Proceed.
3. **Bidder's Qualifications** (in addition to the provisions of RA 9184 and its IRR):
 - The bidders must have at least three (3) client's satisfaction rating from a government agency or a private corporation with whom the bidder had contract for the past two (2) years or on-going; and
 - The bidders must have no pending case(s) against the government.

 - The bidder must have at least three deployed projects in government agency for the past 5 years.
 - The bidder should provide certification from at least FOUR (4) government agencies of successful implementation.
 - The bidder must have at least two (2) programmers trained with certification to develop system using Blockchain Technology with least 1-year tenure in the company.
 - The bidder shall assign a certified Project Management Professional with at least 15 years' experience as project manager.
 - The bidder shall have at least ten (10) years of experience in the design, development, delivery, installation, testing, and commissioning of information systems.
 - The bidder should have been operating in the Philippines for at least ten (10) years and is registered with SEC or DTI and meets PHILGEPS requirements.
 - The bidder must have experience in at least three (3) similar projects in the design, development, delivery, installation, testing, and commissioning of information systems would be preferred.
 - The bidder must have completed similar project in software development with data form entry and business process workflow.
 - The NFCC computation must at least be equal to the total ABC of the project.

- The bidder must submit, in addition to the bidding documents and in a separate envelope: A CERTIFICATION, UNDER OATH, THAT THEY ARE NOT BLACKLISTED BY ANY GOVERNMENT AGENCY.
 - The bidders are NOT allowed to “subcontract” the project to another company.
 - The bidder will be required to demonstrate a functional prototype for the automated issuance of certificates via a blockchain. Prototype must be presented and acceptable to MARINA’s “Selection Committee”.
4. Bidding will be conducted through open competitive bidding procedures using a non-discretionary “pass/fail” criterion as specified in the Revised Implementing Rules and Regulations (IRR) of Republic Act (RA) 9184, otherwise known as the “Government Procurement Reform Act.”

Bidding is restricted to Filipino citizens/sole proprietorships, partnerships, or organizations with at least sixty percent (60%) interest or outstanding capital stock belonging to citizens of the Philippines, and to citizens or organizations of a country the laws or regulations of which grant similar rights or privileges to Filipino citizens, pursuant to RA 5183 and subject to Commonwealth Act 138.

5. A complete set of Bidding Documents may be acquired by interested Bidders from the address below and upon payment of a non-refundable fee for the Bidding Documents pursuant to the latest guidelines issued by the GPPB.
6. It may also be downloaded free of charge from the website of the Philippine Government Electronic Procurement System (PhilGEPS) and at **www.marina.gov.ph** provided that Bidders shall pay the non-refundable fee of **Twenty-Five Thousand Pesos (P25,000.00)** only for the Bidding Documents not later than the submission of their bids.
7. The MARITIME INDUSTRY AUTHORITY will hold a Pre-Bid Conference on **03 November 2021 at the MARINA Board Room, 3rd Floor** MARINA Building, A. Bonifacio Drive corner 20th Street, Port Area, Manila which shall be open to all prospective bidders but shall be limited to only one (1) representative, per bidder, in observance of social distancing.
8. Bid submission and opening shall be strictly observed based on the schedule below. Bids will be opened in the presence of the Bidders limited to only one representative, who choose to attend at the address below. Late bids shall not be accepted.
9. The Schedule of Bidding Activities shall be as follows:

ACTIVITIES	DATE/TIME	VENUE
1. Sale and Issuance of Bid Documents	25 Oct 2021-12 Nov 2021 9:00 A.M. to 4:00 P.M.	MARINA BAC Office, 10 th Floor MARINA Building, Port Area, Manila
2. Pre-bid Conference	03 Nov 2021, 1:00 P.M.	MARINA Board Room, 3 rd Floor MARINA Building, Port Area,

		Manila
3. Submission of Bids	Deadline of Submission: 15 Nov 2021, 1:00 P.M.	MARINA BAC Office, 10th Floor MARINA Building, Port Area, Manila
4. Opening of Bid Documents	Opening of Bids: 15 Nov 2021, 2:00 P.M.	MARINA Board Room, 3rd Floor MARINA Building, Port Area, Manila

10. The MARITIME INDUSTRY AUTHORITY reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Section 41 of RA 9184 and its Revised IRR, without thereby incurring any liability to the affected bidder or bidders.

11. For further information, you can contact the BAC Administrative Support c/o Ms. Melinda D. Ongayo and Ms. Mira Daguio at (0906) 805-4489 or (02) 8524-6518 and email address at **2021marinabac@gmail.com** from 9:00 A.M. to 4:00 P.M., Monday to Friday.

Sgd.
VADM RENE V. MEDINA AFP (Ret)
Chairperson, Bids and Awards Committee

Section II.

Instructions to Bidders

General

1. **Scope of Bid**

The Procuring Entity, **MARITIME INDUSTRY AUTHORITY**, wishes to receive Bids for the **PROCUREMENT OF SUPPLY, DELIVERY, INSTALLATION AND CONFIGURATION OF BLOCKCHAIN ENABLED AUTOMATED CERTIFICATION SYSTEM**, with identification number **2021-02**.

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

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

2. **Funding Information**

2.1. The GOP through the source of funding as indicated below for 2021 in the amount of **THIRTY-TWO MILLION FIVE HUNDRED THOUSAND PESOS**.

2.2. The source of funding is: the General Appropriations Act or Special Appropriations.

3. **Bidding Requirements**

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

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

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

4. **Corrupt, Fraudulent, Collusive, and Coercive Practices**

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

5. **Eligible Bidders**

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

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

- 5.3. Pursuant to Section 23.4.1.3 of the 2016 revised IRR of RA No.9184, the Bidder shall have an SLCC that is at least one (1) contract similar to the Project the value of which, adjusted to current prices using the PSA's CPI, must be at least equivalent to:
 - a. For the procurement of Non-expendable Supplies and Services: The Bidder must have completed a single contract that is similar to this Project, equivalent to at least fifty percent (50%) of the ABC.
- 5.4. The Bidders shall comply with the eligibility criteria under Section 23.4.1 of the 2016 IRR of RA No. 9184.

6. Origin of Goods

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

7. Subcontracts

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

The Procuring Entity has prescribed that:

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

8. Pre-Bid Conference

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

9. Clarification and Amendment of Bidding Documents

Prospective bidders may request for clarification on and/or interpretation of any part of the

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

10. Documents comprising the Bid: Eligibility and Technical Components

- 10.1. The first envelope shall contain the eligibility and technical documents of the Bid as specified in **Section VIII (Checklist of Technical and Financial Documents)**.
- 10.2. The Bidder's SLCC as indicated in **ITB** Clause 5.3 should have been completed within *[state relevant period as provided in paragraph 2 of the IB]* prior to the deadline for the submission and receipt of bids.
- 10.3. If the eligibility requirements or statements, the bids, and all other documents for submission to the BAC are in foreign language other than English, it must be accompanied by a translation in English, which shall be authenticated by the appropriate Philippine foreign service establishment, post, or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines. Similar to the required authentication above, for Contracting Parties to the Apostille Convention, only the translated documents shall be authenticated through an apostille pursuant to GPPB Resolution No. 13-2019 dated 23 May 2019. The English translation shall govern, for purposes of interpretation of the bid.

11. Documents comprising the Bid: Financial Component

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

12. Bid Prices

- 12.1. Prices indicated on the Price Schedule shall be entered separately in the following manner:
 - a. For Goods offered from within the Procuring Entity's country:
 - i. The price of the Goods quoted EXW (ex-works, ex-factory, ex-warehouse, ex-showroom, or off-the-shelf, as applicable);
 - ii. The cost of all customs duties and sales and other taxes already paid or payable;

- iii. The cost of transportation, insurance, and other costs incidental to delivery of the Goods to their final destination; and
 - iv. The price of other (incidental) services, if any, listed in e.
- b. For Goods offered from abroad:
- i. Unless otherwise stated in the **BDS**, the price of the Goods shall be quoted delivered duty paid (DDP) with the place of destination in the Philippines as specified in the **BDS**. In quoting the price, the Bidder shall be free to use transportation through carriers registered in any eligible country. Similarly, the Bidder may obtain insurance services from any eligible source country.
 - ii. The price of other (incidental) services, if any, as listed in **Section VII (Technical Specifications)**.

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

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

13. Bid and Payment Currencies

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

14. Bid Security

- 14.1. The Bidder shall submit a Bid Securing Declaration¹ 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**.

¹ In the case of Framework Agreement, the undertaking shall refer to entering into contract with the Procuring Entity and furnishing of the performance security or the performance securing declaration within ten (10) calendar days from receipt of Notice to Execute Framework Agreement.

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

15. Sealing and Marking of Bids

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

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

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

16. Deadline for Submission of Bids

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

17. Opening and Preliminary Examination of Bids

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

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

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

18. Domestic Preference

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

- 18.2. *[Include if Framework Agreement will be used:]* For multi-year Framework Agreement, determination of margin of preference shall be conducted every call for Mini-Competition.

19. Detailed Evaluation and Comparison of Bids

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

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

- a. In the case of single-year Framework Agreement, the Lowest Calculated Bid shall be determined outright after the detailed evaluation;
 - b. For multi-year Framework Agreement, the determination of the eligibility and the compliance of bidders with the technical and financial aspects of the projects shall be initially made by the BAC, in accordance with Item 7.4.2 of the Guidelines on the Use of Framework Agreement.
- 19.2. If the Project allows partial bids, bidders may submit a proposal on any of the lots or items, and evaluation will be undertaken on a per lot or item basis, as the case maybe. In this case, the Bid Security as required by **ITB** Clause 15 shall be submitted for each lot or item separately.
- 19.3. The descriptions of the lots or items shall be indicated in **Section VII (Technical Specifications)**, although the ABCs of these lots or items are indicated in the **BDS** for purposes of the NFCC computation pursuant to Section 23.4.2.6 of the 2016 revised IRR of RA No. 9184. The NFCC must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder.
- 19.4. The Project shall be awarded as follows:

Option 1 – 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. *[Include if Framework Agreement will be used:]* For multi-year Framework Agreement, all bidders initially determined to be eligible and financially compliant shall be subject to initial post-qualification. The BAC shall then recommend the execution of a Framework Agreement among all eligible, technically and financially compliant bidders and the Procuring Entity and shall be issued by HoPE a Notice to Execute Framework Agreement. The determination of the Lowest Calculated Bid (LCB) shall not be performed by the BAC until a Mini-Competition is conducted among the bidders who executed a Framework Agreement. When a Call for Mini-Competition is made, the BAC shall allow the bidders to submit their best financial proposals on such pre-scheduled date, time and place to determine the bidder with the LCB.

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

21. Signing of the Contract

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

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

- 21.2. At the same time as the Procuring Entity notifies the successful Bidder that its bid has been accepted, the Procuring Entity shall send the Framework Agreement Form to the Bidder, which contract has been provided in the Bidding Documents, incorporating therein all agreements between the parties.
- 21.3. Within ten (10) calendar days from receipt of the Notice to Execute Framework Agreement with the Procuring Entity, the successful Bidder or its duly authorized representative shall formally enter into a Framework Agreement with the procuring entity for an amount of One Peso to be paid to the procuring entity as a consideration for the option granted by the procuring entity to procure the items in the Framework Agreement List when the need arises.
- 21.4. The Procuring Entity shall enter into a Framework Agreement with the successful Bidder within the same ten (10) calendar day period provided that all the documentary requirements are complied with.
- 21.5. The following documents shall form part of the Framework Agreement:
- a. Framework Agreement Form;
 - b. Bidding Documents;
 - c. Call-offs;
 - d. Winning bidder's bid, including the Technical and Financial Proposals, and all other documents/statements submitted (e.g., bidder's response to request for clarifications on the bid), including corrections to the bid, if any, resulting from the Procuring Entity's bid evaluation;
 - e. Performance Security or Performance Securing Declaration, as the case may be;
 - f. Notice to Execute Framework Agreement; and
 - g. Other contract documents that may be required by existing laws and/or specified in the **BDS**.

Section III.

Bid Data Sheet

Bid Data Sheet

ITB Clause	
1	The Procuring Entity is MARITIME INDUSTRY AUTHORITY-Central Office The Bid Reference No. is : Public Bidding No. 2021-02
2.1	The Funding Source is: The Government of the Philippines (GOP) through 2021 National Expenditure Program (NEP) in the total amount of THIRTY-TWO MILLION FIVE HUNDRED THOUSAND PESOS (P32,500,000.00) .
2.2	The name of the Project is: Procurement of Supply, Delivery, Installation and Configuration of Blockchain Enabled Automated Certification System.
5.3.a	The Bidder must have completed a single contract that is similar to this Project, equivalent to at least fifty percent (50%) of the ABC within the last three (3) years. For this purpose, similar contracts shall refer to Procurement of Supply, Delivery, Installation and Configuration of Blockchain Enabled Automated Certification System.
7.1.b	Subcontracting is not allowed.
8	The procuring entity will hold a Pre-Bid Conference for this project on 03 November 2021, 1:00 P.M. at the MARINA Board Room, 3 rd Floor, MARINA Building, A. Bonifacio Drive corner 20 th Street, Port Area, Manila.

10.1

The Bidder shall submit the following Eligibility and Technical Documents, arranged, numbered or tabbed as enumerated below:

CLASS A DOCUMENTS:

Copy of the following Legal Documents (Eligibility Documents):

- i. Valid and current PhilGeps Certificate of Registration and Membership in accordance with Section 8.5.2 of Revised IRR of RA9184.***
- ii. Registration Certificate from Securities and Exchange Commission (SEC), Department of Trade and Industry (DTI) Registration for Sole Proprietorship and Cooperative Development Authority (CDA) for cooperative.***
- iii. Valid and current Mayor's/Business Permit issued by the city or municipality where the place of business of the prospective bidder is located.***
- iv. Valid and current Tax Clearance per Executive Order 398, series of 2005 as finally reviewed and approved by the BIR.***

Technical Documents:

- v. Statement of prospective bidder of all its ongoing government and private contracts within the last three (3) years, 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***
- vi. Statement identifying the bidder's single largest completed contract (SLCC) similar to the contract to be bid within the last three (3) years from the date of submission and receipt of bids equivalent to at least fifty percent 50% of the ABC.***

SLCC shall be supported by the Following:

- Contract/Memorandum of Agreement; and
- Certificate of end-user acceptance (EUA) or Official Receipt (OR)/Collection Receipt covering the full amount of the contract.

Failure to submit a copy of the Single Largest Completed Contract with proof of completion is a valid ground for disqualification of the bidder.

- vii. Certificate of Net Financial Contracting Capacity***
- viii. Omnibus Sworn Statement***

11.1	The Bidder shall submit the complete and signed Financial Bid Form inclusive of VAT and other applicable taxes. The amount should not exceed the ABC.
13.2	Payment of the contract price shall be made in Philippine Pesos.
14.2	Bids will be valid for 120 calendar days from date of bid opening.
15	<p>Each Bidder shall submit the following in <i>one (1)</i> big envelope duly labeled as follows:</p> <ul style="list-style-type: none"> a.) Be addressed to the Procuring Entity’s BAC b.) Bear the name and address of the Bidder in CAPITAL LETTERS c.) Bear the Name and Bid Ref. No. of the Project d.) Contain the name of the project to be bid in CAPITAL LETTERS Bear the warning “DO NOT OPEN BEFORE” The date and <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <p>TO : THE BIDS AND AWARDS COMMITTEE MARITIME INDUSTRY AUTHORITY</p> <p>FROM : _____ (Name of Bidder in Capital Letters)</p> <p>ADDRESS : _____ (Address of Bidder in Capital Letters)</p> <p>PROJECT : _____ BID REF : _____ (In capital letters, indicate the phrase)</p> <p style="text-align: center;">“DO NOT OPEN BEFORE _____” (time for the opening of bids)</p> </div> <p>Inside the one (1) big sealed envelope shall contain two (2) sets of sealed envelopes:</p> <ul style="list-style-type: none"> a) First envelope must contain one original and two copies of eligibility and technical documents duly marked as “original”, “copy 1”, “copy 2” and additional two (2) separate envelopes containing the following: b) The bidders must have at least three (3) client’s satisfaction rating from a government agency or a private corporation with whom the bidder had contract for the past two (2) years or on-going; and c) The bidders must have no pending case(s) against the government d) The bidder must have at least three deployed projects in government agency for the past 5 years. e) The bidder should provide certification from at least FOUR (4) government agencies of successful implementation f) The bidder must have at least two (2) programmer trained with certification to develop system using Blockchain Technology with least 1-year tenure in the company g) The bidder shall assign a certified Project Management Professional with at least 15 years’ experience as project manager. h) The bidder shall have at least ten (10) years of experience in the design, development, delivery, installation, testing, and commissioning of information systems i) The bidder should have been operating in the Philippines for at least ten (10) years and is registered with SEC or DTI and meets PHILGEPS requirements.

	<p>j) The bidder must have experience in at least three (3) similar projects in the design, development, delivery, installation, testing, and commissioning of information systems would be preferred</p> <p>k) The bidder must have completed similar project in software development with data form entry and business process workflow.</p> <p>l) The NFCC computation must at least be equal to the total ABC of the project.</p> <p>m) The bidder must submit, in addition to the bidding documents and in a separate envelope: A CERTIFICATION, UNDER OATH, THAT THEY ARE NOT BLACKLISTED BY ANY GOVERNMENT AGENCY.</p> <p>n) The bidder are NOT allowed to “subcontract” the project to another company.</p> <p>o) The bidder will be required to demonstrate a functional prototype for the automated issuance of certificates via a blockchain. Prototype must be presented and acceptable to MARINA’s “Selection Committee”.</p> <p>p) Second envelope must contain one original and two copies of Financial Bid Form duly marked as “original”, “copy 1”, and “copy 2”.</p>
16.1	<p>The address for submission of bids is</p> <p style="text-align: center;">MARINA BAC Secretariat 10th Floor, MARINA Building, A. Bonifacio Drive corner 20th Street, Port Area, Manila</p> <p>The deadline for submission of bids is <u>15 November 2021, 1:00 P.M.</u></p>
17.1	<p>The place of bid opening is</p> <p style="text-align: center;">MARINA Board Room, 3rd Floor MARINA Building A. Bonifacio Drive corner 20th Street, Port Area, Manila</p> <p><i>The date and time of opening is on: <u>15 November 2021, 2:00 P.M.</u></i></p>

Section IV.

General Conditions of Contract

1. *Scope of Contract*

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

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

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

2. *Advance Payment and Terms of Payment*

- 2.1. Advance payment of the contract amount is provided under Annex “D” of the revised 2016 IRR of RA No. 9184.
- 2.2. The Procuring Entity is allowed to determine the terms of payment on the partial or staggered delivery of the Goods procured, provided such partial payment shall correspond to the value of the goods delivered and accepted in accordance with prevailing accounting and auditing rules and regulations. The terms of payment are indicated in the **SCC**.

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

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

3. *Performance Security*

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

4. *Inspection and Tests*

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

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

5. *Warranty*

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

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

6. *Liability of the Supplier*

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

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

Section V.

Special Conditions of Contract

Special Conditions of Contract

GCC Clause	
1	The contract shall have provisions for General Conditions, Special Conditions, Schedule of Delivery of Requirements and Technical Specifications specified under Section IV, V, VI and VII respectively of the Bid Documents.
2.1	Not allowed.
3	No further instruction.

Section VI.

Schedule of Requirements

Section VI. Schedule of Requirements

Item	Description	Delivery Date
1	Supply, Delivery, Installation and Configuration of Blockchain Enabled Automated Certification System	Within Two Hundred Ten (210) Calendar Days upon from receipt of Notice to Proceed (NTP)
2	Duly complied and signed Section VII. Technical Specifications	To be submitted during Bid Opening
3	<p>Certification from the bidder stating the following:</p> <ul style="list-style-type: none"> - Certification of Three (3) years Maintenance and Support. - That they will provide a Quarterly web vulnerability assessment / penetration testing; - That they will provide semi-annual preventive maintenance within the warranty period; 	To be submitted during Bid Opening
4	<p>Certificate of Performance Evaluation with a rating of at least Very Satisfactory, issued by the Single Largest Completed Contract Client of the bidder on the following parameters:</p> <ul style="list-style-type: none"> a. Timely delivery b. Compliance to Specifications and Performance; c. Warranty; and d. After Sales Service 	To be submitted during Bid Opening
5	Omnibus Sworn Statements (Revised) using the form prescribed.	To be submitted on Bid Submission and Opening Date
6	Bid Form and Price Schedule(s)	To be submitted on Bid Submission and Opening Date
7	<p>Notarized Bidder's Certification:</p> <ul style="list-style-type: none"> • That it has no overdue deliveries or unperformed services intended for MARINA • That it did not participate as a consultant in the preparation of the design or technical specification of the GOODS subject of the bid. 	To be submitted during Post Qualification
8	Documentary proof that the bidder have at least three deployed projects in government agency for the past 5 years.	To be submitted on Bid Submission and Opening Date
9	The bidder should provide certification from at	To be submitted on Bid

	least FOUR (4) government agencies of successful implementation.	Submission and Opening Date
10	Documentary Proof that the bidder has at least two (2) programmers trained with certification to develop system using Blockchain Technology with least 1-year tenure in the company.	To be submitted on Bid Submission and Opening Date
11	Documentary Proof that the bidder has a certified Project Management Professional with at least 15 years' experience as project manager.	To be submitted on Bid Submission and Opening Date
12	Documentary proof that the bidder have at least ten (10) years of experience in the design, development, delivery, installation, testing, and commissioning of information systems	To be submitted on Bid Submission and Opening Date
13	Documentary proof that the bidder have been operating in the Philippines for at least ten (10) years and is registered with SEC or DTI and meets PHILGEPS requirements.	To be submitted on Bid Submission and Opening Date
14	Documentary proof that the bidder has experience in at least three (3) similar projects in the design, development, delivery, installation, testing, and commissioning of information systems	To be submitted on Bid Submission and Opening Date
15	Documentary proof that the bidder has completed similar project in software development with data form entry and business process workflow.	To be submitted on Bid Submission and Opening Date
16	Documentary proof that the bidder has at least ten (10) years of experience in the design, development, delivery, installation, testing, and commissioning of information systems	To be submitted on Bid Submission and Opening Date
17	A certification, Under Oath, that they are not blacklisted by any government agency.	To be submitted on Bid Submission and Opening Date
18	The bidder will be required to demonstrate a functional prototype for the automated issuance of certificates via a blockchain. Prototype must be presented and acceptable	To be submitted during Post Qualification

	to MARINA’s “Selection Committee”.	
19	Present a Proof of Concept similar to Certificate Issuance and Verification that uses blockchain technology.	One week after the bidding
20	Provide all the software licenses needed to ensure successful deployment and implementation of the system.	Within Two Hundred Ten (210) Calendar Days upon from receipt of Notice to Proceed (NTP)
21	Provide (2) two video materials explaining the usage and features of the system for both seafarer, shipping companies and other Marina stakeholders.	Within Two Hundred Ten (210) Calendar Days upon from receipt of Notice to Proceed (NTP)
22	The bidder must provide Copyright Certificate of the Systems and Deposit to National Library of the Philippines.	Within Two Hundred Ten (210) Calendar Days upon from receipt of Notice to Proceed (NTP)
23	Disaster Recovery Plan	Within Two Hundred Ten (210) Calendar Days upon from receipt of Notice to Proceed (NTP)

Bidders must state in the statement of compliance either “Comply” or “Not Comply” against each of the individual parameters of each Specification.

Name of Company in Print

Signature Printed Name of Authorized Representative

Date

Section VII.

Technical Specifications

Technical Specifications

Software Application System	
1. The bidder shall provide an application system to MARINA with the following characteristics:	
a.	The software application system shall be a web application system that can be securely accessed by MARINA Service Units and MARINA Regional Offices.
b.	The software application system shall be a blockchain enabled certificate management system that efficiently authenticates MARINA issued certificates.
c.	The software application system must be capable of accepting online application.
d.	The software application system and mobile application system shall have the capability to attach documentary requirements into the system.
e.	The software application system and mobile application system must be capable of online viewing of records.
f.	The software application system must be capable of online evaluation of documents.
g.	The software application system and mobile application system must be capable of uploading all required documents listed and shown in the system.
h.	The software application system and mobile application system shall be capable of Real Time monitoring of application through web portal and mobile version.
i.	The software application system and mobile application system shall allow verification of records by checking hash values in the blockchain.
j.	The software application system and mobile application system should be customized according to the integration of workflow procedure/process flow submitted by MARINA service unit/offices for the processing of certificates/permits/licenses/inspection/ accreditation/ exam application.
k.	The software application system and mobile application system shall allow recording of certificates, assessment results and other information into a blockchain.
l.	The software application system and mobile application system must facilitate the recording and monitoring of stakeholder's applications and record.
m.	The software application system must be capable of online verification of all MARINA released certificates/clearance.
n.	The Certificates created must contain a QR code for quick verification on the MARINA system
o.	The software application system and mobile application system shall have a capability of online payment

p.	The software application system and mobile application system shall have a capability of online appointment/scheduling.	
q.	The software application system and mobile application system shall have capability for an online chat for help desk.	
r.	The software application system and mobile application system shall be developed using software development framework with the latest versions for systems and mobile application and database.	
s.	The software application system shall facilitate the recording and monitoring of records and credentials.	
t.	The software application system shall replicate all the functionalities, data bases and reports of the systems being used by MARINA.	
u.	The software application system must have an account for Maritime Training Institutions, Assessment Centers, Maritime Higher Education Institutions, DOH Accredited Clinics, Manning Agencies for the updating of seafarer's records.	
v.	The software application system shall be capable of generation of user defined statistics query for top management use.	
w.	The software application system shall generate the profile of the client.	
x.	The software application system shall generate the master list or alpha list of all stakeholders.	
y.	The software application system shall generate list who transacted at MARINA on a yearly, monthly, weekly and daily bases.	
z.	The software application system must have a checklist for all the requirements.	
aa.	The software application system should allow dynamic configuration of user defined form using graphical form builder without programming so that creation and changes in the forms can be done without a developer.	
ab.	The software application system should support common shortcut keys such as, Ctrl + C=copy, Ctrl + V=paste, Ctrl + S=save,etc.	
ac.	The software application system should allow configuration to define mandatory fields and will not allow deals to be saved if mandatory fields are not filled-up.	
ad.	The software application system should provide and/or allow creation of additional user-defined fields.	
ae.	The software application must replicate all the functionalities of the Surveillance Accreditation and Monitoring Information System (SAM-IS).	
af.	The software application system should automatically generate transaction reference numbers with option for user-defined numbering convention.	
ag.	The software application system should provide facility to download information and convert file to a standard and/or common format.	
ah.	The software application system should provide facility for calendar and holidays maintenance.	

ai.	The software application system should allow users to add or lengthen tables or fields without need for customization.	
aj.	The software application system should provide validation rules for data entries.	
ak.	The software application system should generate descriptive error messages for error handling.	
al.	The software application system should incorporate defined controls that will be applied uniformly across all or selected transactions.	
am.	The software application system and mobile application must have an access rights.	
an.	The software application system and mobile application system shall have a query function that will be able to generate, display and print reports based on parameters defined by the end-user.	
ao.	The software application system and mobile application system shall have a capacity of monitoring and management of seafarer's education, training, sea service, medical records and other related information as may be defined by the Administration.	
ap.	The software application system and mobile application system shall record those who submitted questionable documents.	
aq.	The software application system and mobile application system shall have a monitoring of expired certificates.	
ar.	The software application system and mobile application system shall have the change password for seafarers with security questions.	
as.	The software application system shall have a capability of defining level of security usage and management.	
at.	The software application system and mobile application system shall have capability in prompting the end-user for duplicate or double entries.	
au.	The software application system shall have capability of merging duplicate accounts.	
av.	The software application system shall contain a database that will establish a complete platform that is capable of providing secure, scalable and effective data control and management. The database shall have the capability to handle automated processes and give relevant information on resource management, and other customized monitoring functions.	
aw.	The software application system must be compliant to performance and response time. Thus, the Bidder must follow the 8 second rule, which means that systems responsiveness must not exceed 8 seconds per transaction. It is also encouraged that bidder should maximize the use of SQL VIEWS, Triggers, Stored Procedures and/or other performance enhancement techniques like clustering, high availability in database efficiency. Moreover, slow queries must be avoided if not totally removed.	
ax.	The software application system should have user	

	management to create new user accounts with specific roles	
ay.	Development of biometric API that will interface with biometric capture readers of MARINA.	
	- The API must be able to compliant to the following:	
	<ul style="list-style-type: none"> • Perform fingerprint capture, minutiae extraction, and 1:1 Matching using simple, small libraries that can be integrated to existing application. 	
	<ul style="list-style-type: none"> • Must perform high quality imaging, extraction, and matching algorithm technologies, including Highly-Adaptive Filtering and Advanced Image Enhancement and Restoration. 	
	<ul style="list-style-type: none"> • Processes and stores fingerprint minutiae into 3 types of template formats (ANSI INCITS 378, ISO/IEC 19794-2, 400-byte encrypted) 	
	<ul style="list-style-type: none"> • Complies with Biometric Standards (ANSI INCITS 378, ISO/IEC 19794-2) 	
	<ul style="list-style-type: none"> • Includes NIST Certified algorithms for FIPS 201 / PIV Compliance (MINEX tested Template Generator v3.5, Template Matcher v3.5) 	
	- The API shall be integrated with existing login examination system of MARINA.	
	- The API shall support capturing of fingerprint on exam centers and uploading of captured fingerprint record to the central server of MARINA.	
	- The API shall support downloading of examinee information with biometric information and allow offline verification of biometric with 1:1 matching on the facility within the exam centers.	
	- The API must be compliant to the existing biometric reader of MARINA (Secugen Hamster Pro 20)	
az.	The database capabilities shall include the ability to:	
	- Store, retrieve and update data;	
	- Establish a complete platform that is capable of providing secure, scalable and effective data control and management;	
	- Handle automated processes and give relevant information on resource management, and other customized monitoring functions;	
	- Secure information;	
	- Handle application clustering (i.e., blending separate machines into a single virtual database based on the growth of the database and increase in the number of transactions); and	
	- Work with other RDBMS such as Oracle, DB2, SQL Server, MySQL, Postgres, etc.	
2.	The Bidder shall adopt the Agile Methodology approach on developing the MARINA Automated Certification System.	

3. The Bidder shall respond to each issue logged, within the prescribed resolution time depending on problem classification, as shown in the table below:

Severity level	Description	Resolution time
BLOCKER	users cannot proceed in using the system or execution of the module due to this error	4 hrs.
HIGH	not an execution blocker but is a blocker for operations (ex. missing function; impairs data integrity, etc.)	8 hrs.
MEDIUM	not an execution blocker and not a blocker for operations (ex. column header is not descriptive, trash screen displayed, etc.)	16 hrs.
LOW	Standard infractions (ex. displayed fields are not aligned, etc.)	32 hrs.

4. The Bidder must Migrate all databases of existing systems.

5. The bidder shall apply the software application system, and other components not specified, to the overall output of the project.

6. The Bidder shall give advance/prior notice in case of modification/change in the services or products provided as part of maintenance. Implementation of any modification or change shall be subject to the approval of MARINA.

7. The bidder must ensure the smooth transition from old to new system. The old system should still be used by MARINA so as not to interrupt the daily operations in processing of documents. Thus, the bidder must see to it that system releases should be compatible with the old database until such time that all database records shall be migrated to the new updated/upgraded database and then systems shall progressively transition to the new system.

Blockchain Requirements	
The bidder shall ensure that the system should provide basic functions and features as stated below:	
1. Certificate template construction in accordance with MARINA guidelines	
2. Certificates shall have a unique certificate ID and underlying information's.	
3. Certificates issued directly on the blockchain by MARINA authorized organizations	
4. Certificates created contain a QR code for quick verification on the MARINA system	
5. The E-Certificates should comply with the IMO FAL.5/Circ.39 dated 20th April 2016 "Guidelines for the use of Electronic Certificates"	
6. Cryptographic tokenization of certificates and blockchain hash comparison for validations	
Security and Privacy Requirements	
The bidder shall ensure that the system should provide the Security and Privacy Requirements as stated below: The authentication and authorization of the system need to be robust to ensure highest level of security. The system prevents all standard web vulnerabilities and provides industry standard security measurements. With a very strong Enterprise system's regular security audit and careful implementation of various measures least but not limited to the following must be taken to prevent any kind of security breach:	
1. Application Security	
a. The system should be completely secure and foolproof with incorporation of industry standard proven data encryption techniques and methodologies. Those encryption techniques should be audited in timely manner to detect loopholes and updated with the latest patches, in order to ensure that the mechanisms are fitted with the latest security features.	
b. User sessions and cookies should be uniquely re-generated and stored securely each time they log in.	
c. URL restriction should be tight. The system should recognize a logged-in user with proper rights and only present the part of the system that falls within his/her authorization scope. Furthermore, trying to access a URL by guessing should also be prohibited	

d. The URLs for internal users should be relatively unique (only known to administrators and relevant personnel) and separate from the well-known portal URLs. The communication between the user's device and interfaces should be SSL encrypted to prevent data hijacking through network protocols	
e. Configuration and other sensitive system-level artifacts should be securely stored	
f. The access control security function shall provide a facility for the system administrator to suspend an existing user's access rights for a specified period of time or indefinitely.	
2. User Interface Security	
a. No system level file/information should be accessible throughout the web browser. The system should never allow executing direct files	
b. Facility can be provided to lock a user and unlock as and when required	
c. No invalidated input should be accepted in any web forms – all incoming data should be validated, checked and purified before acting on that	
d. In case of any system failure or error condition, no sensitive information (e.g. database credential) should be displayed on the site. All kinds of errors should be suppressed, logged, gracefully handled and should only be accessible by the administrators with proper rights	
e. SQL/XML/Code injection, Session hijacking/fixation, Output Escaping, Cross-Site Request Forgery, Cross-Site Scripting, Enforced Same Origin Policy, Parameter Tampering, Directory Traversal, Denial of Service etc. should be prevented, logged, and reported	
f. Shall have a privilege and password system that is very flexible and secure, and that enables host-based verification.	
g. Shall have a password security by encryption of all password traffic when you connect to a server.	
h. Shall have two (2) factor authentications Client <ol style="list-style-type: none"> 1. Username and password 2. Time-based One-time Pin (TOTP) via email Admin <ol style="list-style-type: none"> 1. Username and password 2. Facial Recognition 	

i. The system must have a forgot password features for all users.	
j. The system should have policy for brute force attacks. <ul style="list-style-type: none"> • Accounts with 3 failed login attempts should block. • Recover of password should be done by the assigned administrator using administration panel. • Idle time of 15 minutes should automatically log out. Or can be set by IT Admin • Only alpha and numeric keys are allowed in username and password field. • Accounts which are idle for seven days shall be temporarily disabled. 	
k. The system should have a password reset tool to be manage by the end user requester via email.	
l. The system should notify the administrator thru email for new request for change password.	
Data Security	
a. The System shall comply with the R.A. 10173 otherwise known as the “Data Privacy Act of 2012”, respecting and protecting the privacy of each individual/ applicant as prescribed in the abovementioned law, hence, shall come up with the “Data Privacy Statement” to be posted in the Front-End System and shall notify the users/ applicants every time they log in to the system;	
b. The system shall comply to the Data Privacy Policy as approved by Data Privacy Officer of Marina and should comply to the Data Privacy Act of the Data Privacy Commission.	
c. No personally identifiable information may be exposed within and outside the system without proper authorization as privacy of the user data must be dealt with utmost priority.	
d. Any attempt to breach the security will be recorded with all the relevant data	
e. If the system is accessed in the time not defined by the Administrator, e.g. in the case of production deployment, all options will be locked and the user will not be able to use the system.	
f. Reports can be retrieved for all audit logs.	
g. The bidder must submit a quarterly privacy impact assessment report	

Network Security	
a. The system must communicate using Transport Layer Security	
b. Public-key encryption methods are used as part of SSL encryption and are expected to be part of the System.	
c. The system must be protected by a cloud-based network protection system that support DDoS Protection, Web Application Firewall and Rate Limiting with subscription for three (3) years.	
d. The system must have a licensed Secure Socket Layer (SSL) with license valid for three (3) years.	
Electronic Payment Requirements	
The bidder shall ensure that the system should provide the Electronic Payment Requirements as stated below:	
1. The system should be integrated with a payment gateway that can facilitate all types of electronic payment options and media available.	
2. Stakeholders should have the ability to make electronic payment for fees using their existing bank accounts/debit card/mobile bank account and over the counter payment.	
3. All stake holders (both national and international) should have the ability to make payment through web portal or mobile application.	
Web Application Requirement	
The bidder shall ensure that the system should provide the Web Application Requirements as stated below:	
1. The application which is a web-based solution, has to be hosted in a centralized Web-server.	
2. The application should be developed following Service Oriented Architecture (SOA).	
3. Application should support Model View Controller (MVC) framework.	
4. Considering the operating/client environment at different level of this application, it should be developed in such a way so that it requires low bandwidth to run.	
5. The web-based application should support cross browser platforms (popular web-browsers such Mozilla Firefox, Opera, Chrome, Internet Explorer, Safari etc.)	
6. Should have ability to seamless integration with future	

module/components /applications	
7. Application should be lightweight and rich client-side scripting	
8. User Interface (UI) should be developed based on the analysis of User Experience (UX).	
9. Any web interface of this application should be fully responsive	
Mobile Application Requirements	
The bidder shall ensure that the system should provide the Mobile Application Requirements as stated below:	
1. The mobile application version of the system should be developed for Android and IOS.	
2. The mobile app should have capability of displaying system notifications.	
3. The mobile app should support registration of new users with verification of credentials and login of users.	
4. The mobile app should support e-KYC for registration of users which supports recording of video, and online verification of user accounts.	
5. The mobile app should provide QR code and links to verify issued certificates through a blockchain enabled verification system.	
6. Functionality for registration options for service recipients	
7. App should enable compact view of services for service recipients.	
8. There should be an option to auto synchronization with the central database with apps local data based on the availability of the internet connectivity.	
9. The bidder shall register the OIS and Android version of the mobile application.	
Language Support	
The bidder shall ensure that the system should provide the Language Support Requirements as stated below:	
1. The system should support multilingual option i.e. English and Filipino version for customer facing applications. All the user interfaces will be able to display and input controls can take input both in English. System/App users can choose and set his/her preferred language in profile setting for the system interfaces.	
Configurable Form and Business Workflow	
The bidder shall ensure that the system should provide the Configurable Form and Business Workflow Requirements as stated below:	

<p>1. The system shall provide form builder that allows MARINA to dynamically change form fields so that revisions in form can be easily accommodated without need of additional programming.</p>	
<p>2. The form builder should allow dynamic changes in the fields for all the forms and supports various types of input fields including textfield, date, dropdown, radio buttons, and more.</p>	
<p>3. The form builder should allow setup of page layout into 1, 2 or 3 columns so that page layout can be flexible and designed to fit the user experience.</p>	
<p>4. The business workflow should be configurable via a graphical workflow tool that allows changes in the business process. This is essential to ensure that the system can be used without reprogramming when policy of business process has been changed. The business workflow shall allow flexibility of changes in the business process workflow</p>	
<p>Interoperability and Data Exchange</p> <p>The bidder shall ensure that the system should provide the Interoperability and Data Exchange Requirements as stated below:</p>	
<p>1. The bidder must develop the system following all the standards and protocols of interoperability, integration and data exchange with other systems. It is expected that the system will be based on open architecture and will be fully interoperable with the current and future systems.</p>	
<p>The following are the key expectations on interoperability requirements:</p>	
<p>a. The system should be designed for interoperability using industry standard protocols.</p>	
<p>b. System must expose data by Advanced Message Queuing Protocol and REST via TLS</p>	
<p>c. All imported data must undergo data validation to ensure full integrity.</p>	
<p>d. Data exchange within the system at different levels via the internet shall be encrypted.</p>	
<p>e. The system should have functionality to exchange data with other own systems or external institute systems.</p>	
<p>f. The system shall have functionality to export/import files based on the standard template defined through web services and/or API</p>	

g. Full API documentation must be provided so that third party integrators can integrate their system with this system.	
System Audit The bidder shall ensure that the system should provide the System Audit Requirements as stated below:	
1. This system shall maintain an audit trail of any changes or updates made in any information that are considered as vital and should maintain the audit log with information such as:	
a. Log the users who are accessing the system	
b. Log the parts of the application that are being accessed	
c. Log the fields that are being modified	
d. Log the results of these modifications	
e. Log attempted breaches of access	
f. Log attempted breaches of modification rights	
g. Timestamp	
Ensure an audit trail is kept for all transactions and all audit transactions logged are kept on the trail file or trail database from where system can generate different audit reports as and when required.	
Database Requirements for all Modules	
The bidder shall ensure that the system shall contain the database for easy tracking and reference. At the minimum, the database shall have the following features	
1. Internals and Portability	
a. Works on many different platforms.	
b. Uses multi-layered server design with independent modules.	
c. Designed to be fully multi-threaded using kernel threads, to easily use multiple CPUs if they are available.	
d. Provides transactional and non-transactional storage engines.	
e. Uses very fast B-tree disk tables (MyISAM) with index compression.	
f. Designed to make it relatively easy to add other storage engines. This is useful if you want to provide an SQL interface for an in-house database.	
g. Uses a very fast thread-based memory allocation system.	
h. Executes very fast joins using an optimized nested-loop join.	

i. Implements in-memory hash tables, which are used as temporary tables.	
j. Implements SQL functions using a highly optimized class library that should be as fast as possible. Usually there is no memory allocation at all after query initialization.	
k. Provides the server as a separate program for use in a client/server networked environment, and as a library that can be embedded (linked) into standalone applications. Such applications can be used in isolation or in environments where no network is available.	
2. Data Types	
a. Many data types: signed/unsigned integers 1, 2, 3, 4, and 8 bytes long, <u>FLOAT</u> , <u>DOUBLE</u> , <u>CHAR</u> , <u>VARCHAR</u> , <u>BINARY</u> , <u>VARBINARY</u> , <u>TEXT</u> , <u>BLOB</u> , <u>DATE</u> , <u>TIME</u> , <u>DATETIME</u> , <u>TIMESTAMP</u> , <u>YEAR</u> , <u>SET</u> , <u>ENUM</u> , and Open GIS spatial types.	
b. Fixed-length and variable-length string types.	
3. Statements and Functions	
a. Should have a full operator and function support in the SELECT list and WHERE clause of queries	
b. Should have a full support for SQL GROUP BY and ORDER BY clauses. Support for group functions (COUNT(), AVG(), STD(), SUM(), MAX(), MIN(), and GROUP_CONCAT()).	
c. Should have a support for LEFT OUTER JOIN and RIGHT OUTER JOIN with both standard SQL and ODBC syntax.	
d. Should support for aliases on tables and columns as required by standard SQL.	
e. Should support for DELETE, INSERT, REPLACE, and UPDATE to return the number of rows that were changed (affected), or to return the number of rows matched instead by setting a flag when connecting to the server.	
f. Should support for MySQL-specific SHOW statements that retrieve information about databases, storage engines, tables, and indexes. Support for the INFORMATION_SCHEMA database, implemented according to standard SQL.	
g. An EXPLAIN statement to show how the optimizer resolves a query.	
h. Independence of function names from table or column names.	
i. Can refer to tables from different databases in the same statement.	
4. Scalability and Limits	
a. Shall support for large databases.	

b. Shall support for up to 64 indexes per table.	
5. Connectivity	
a. Clients can connect to MySQL Server using several protocols:	
b. Clients can connect using TCP/IP sockets on any platform.	
c. On Windows systems, clients can connect using named pipes if the server is started with the enable-named-pipe option. Windows servers also support shared-memory connections if started with the shared-memory option. Clients can connect through shared memory by using the protocol=memory option.	
d. On Unix systems, clients can connect using Unix domain socket files.	
6. Localization	
a. The server can provide error messages to clients in many languages.	
b. Full support for several different character sets, including latin1 (cp1252), german, big5, ujis, several Unicode character sets, and more. For example, the Scandinavian characters “å”, “ä” and “ö” are permitted in table and column names.	
c. All data is saved in the chosen character set.	
d. Sorting and comparisons are done according to the chosen character set and collation (using latin1 and Swedish collation by default).	
e. The server time zone can be changed dynamically, and individual clients can specify their own time zone.	
L. Database Replication	
The bidder shall ensure that the system should provide the Database Replication Requirements as stated below:	
1. Must be able to replicate the database of all modules to the MARINA Server Room.	
2. Must have a Cross-platform support - Support for multiple operating systems such as Windows, Unix and Linux platforms ensures that the software will function in any heterogeneous network environment with the most commonly deployed operating systems.	
3. Must have a Source server automated failover - Setting a target server so that it can automatically assume the functions of the source server can either minimize or eliminate downtime.	
4. Must have a Multiple source server failover - Setting a target server so that it can automatically assume the functions of a number of	

source servers.	
5. Real-time and queued replication - Real-time replication means that there is always a duplicate copy of critical data but sometimes if the server is otherwise involved, or bandwidth conservation needs to be practiced at specific times, then the replicated data should be able to be queued.	
M. Dashboard Requirements	
<p>The bidder shall ensure that the applications for all the modules shall have a “dashboard” functionality that shall retrieve and display statistical requirement. The dashboard shall be displayed on the MARINA server which shall be compatible with most web browsers and available to work on any operating system.</p> <p>The dashboard shall be designed with a catchy and simple template with clear representation of data and information, at the same time the graphics shall be simple to reduce the required time for processing.</p>	
1. Information and data shall be presented in form of charts and graphs that displays statistics with the ability to choose different time scales (today, yesterday, last week, last month, last year and date range).	
2. The dashboard shall contain the administrator’s access to all data that will be displayed in to the monitor with the ability to download all information and graphs in supported file format.	
3. The following set of functions shall be optionally available in the results portion of the dashboard. The results of the report are either represented in a separate browser window (the default behavior), or from within the dashboard for result types of instruments.	
a. Print – this will send the report as displayed to the printer.	
b. Save – this will save the report in its presentation format to the file system.	
c. Save As – this will allow the user to save the file to a fixed set of alternate formats. One example would be PDF.	
d. Email – this will email the report to another user.	
e. View info – this will launch a default browser page form for the selected item	
f. View file – this will launch the selected file (by query) from the database for viewing.	
4. Refresh Rate – this property shall determine how often the dashboard shall automatically refresh the data for the active dashboard panel. A selection from manual refresh, 5 second, 2 minutes, 5 minutes, 15 minutes and 30 minutes refresh rate is required.	
5. The following enumerates the list of dashboard panels:	
a. List of Reminders.	

b. Bar Graph of transactions received for the last 7 days.	
c. Pie Chart of Breakdown of transactions	
Non-Functional Requirements	
<p>1. User Interface Design/User Experience Design (UI/UX)</p> <p>The bidder must propose a UI/ UX plan containing UI designing method and tools, prototype or Mockup design (if applicable). UI review method, process for study and analyze UX, collaboration of basic web and mobile UX issues and expected result and outcome of UX, finalizing the UI/UX design. Apart from this, The Bidder should consider the following issues as requirement at the time of UI/UX plan.</p>	
a. The software application system interfaces should be highly user friendly, easy to navigate and ensure fast loading.	
b. The UI shall design by using well-established, supported and lightweight UI framework so that it follows widely used industry flow patterns	
c. UI shall be easily configurable if any changes are needed	
d. Menu, content and navigation shall be based on the user entitlements, roles and permissions.	
<p>2. Sizing, Performance and Scalability Requirements</p> <p>The bidder shall ensure that the system should provide the Sizing, Performance and Scalability Requirements as stated below:</p>	
a. The software application system shall be capable of handling online functionalities for a database of at least 2,000,000/year service recipients and 500 operators System Users.	
b. The software application system shall be scalable to support the volume estimates for a period of 10 years at a 20% annual growth rate.	
c. The software application system shall be designed to handle estimated large scale 5,000 simultaneous connection (online users) when it is ultimately rolled out.	
d. The bidder must conduct an extensive load testing task taking above factors into consideration and submit a load testing results.	
e. The database architecture should be such that the system is available to user 24 x 7 x 365 days a year without any unapproved down-time.	

f. Page load time, login response-time, on-click" load time for the web application should be less than 3 seconds while this is accessed over the intranet.	
g. Average transaction response time, on-submit response-time, or any other database access/ search time should be less than 5 seconds when the system solution is accessed over the intranet.	
h. Considering the network infrastructure challenges in Philippines, the system must support low bandwidth conditions for the services defined in the functional requirements.	
i. In case of mobile application also, this should support very low bandwidth even in 2G network provided internet bandwidth.	
j. The proposed solution should be highly scalable to accommodate current and future requirements within the scope of the scope mentioned in the TOR	
k. Analyze the requirements whether both horizontal scaling (scale out) and vertical scaling (scale up) will be required for this software application system?	
l. The software application system should be provided with appropriate caching mechanism to handle very high-traffic scalability	
m. The bidder may propose here other relevant measures for the scalability.	
3. Business Continuity	
Business Continuity plan will play a vital role by creating the systems of prevention and recovery to deal with potential threats and risk of the systems operation. The bidder must propose a Business Continuity Plan for the software application system.	
a. The Bidder shall develop backup and recovery procedures and policies in maintaining the application system. All standard backup facilities should be supported by the system which can be started with disk based backup facility, gradually moving to Storage Area Network (SAN) based backup system.	
b. Data and the Operating system core component will be separated. A ghost image of the Operating system will always be available in case of rebuilding the server. All data can be restored in the data drive once the Operating System is restored.	
c. System can also have an automated Backup mechanism by which users can schedule the backups and the system will take the backups without manual intervention.	
d. System must check for the media and generate a report on backup with date time and details of backup.	

e. If a restoration fails for any reason, the system should prompt with proper error messages and suggest what has to be done to rectify the situation via on-screen, logs, email and text messages.	
f. System should maintain an automated recovery system and all versions of backup will be maintained. At any given point in time, the versions and incremental backup details can be retrieved from the system.	
g. The system may be hosted in virtual servers or containers. A restore of a virtual server/container is much easier and faster compared to a single host server.	
4. Disaster Recovery	
a. The bidder shall provide a Disaster Recovery Program/Plan which shall describe how the MARINA shall deal with potential disasters. As disaster strikes when least expected, precautions shall be undertaken so that the effects of a disaster shall be minimized or almost negligible or occur unnoticed. The Disaster Recovery Plan shall be detailed enough for all possible disasters such as power outage, computer failure, natural calamities or human error, among others. It shall contain the comprehensive procedures necessary to resume business to its normal operation in the least possible time. Moreover, the responsibilities of the people involved in the operation shall be thoroughly defined.	
5. User Acceptance Test (UAT)	
All types of users must test the developed system application and have to provide a details feedback/ test report. Based on the UAT report, the bidder must update the application accordingly to ensure user satisfaction by making it more user friendly. The bidder must propose a comprehensive UAT plan in their technical proposal which may cover the followings:	
a. UAT activities to be perform (planning, designing test cases, selection of testing team, Executing test cases and documenting, Bug fixing, sign-off etc),	
b. Types of user wise roles and test items distribution	
c. Resource requirement,	
d. Activity wise time requirement	
e. Activity wise test case, test results/ deliverables	
f. Detail user feedback / test reports	
g. System update plan	
6. Copyright	
a. All kinds of source code including code documentation and other approved documents (i.e. complete source code, database schema, SDD, DFD, administrative manual, user manual etc.) and all kinds of deliverables developed under	

<p>the scope of this TOR are the property of Maritime Industry Authority and the bidder have to handover these to MARINA.</p>	
<p>b. The bidder must provide Copyright Certificate of the Systems and Deposit to National Library of the Philippines.</p>	
<p>7. Reports, Forms and Correspondences</p> <p>The bidder shall ensure that the Reports, Forms and Correspondence Requirements as stated below:</p>	
<p>a. System should be able to generate specific reports, forms and correspondences.</p>	
<p>b. System should include standard reports for management.</p>	
<p>c. System should allow users to create additional ad-hoc reports, forms and correspondences.</p>	
<p>d. Reports, forms and correspondences can be viewed on-line, printed on demand, or scheduled as part of end-of-day batch processing.</p>	
<p>e. Reports, forms and correspondences can be exported to various file types i.e. MS Word, Excel, Text, PDF,HTML</p>	
<p>f. Reports, forms and correspondences can be transmitted via email.</p>	
<p>g. System should be able to generate reports providing statistical data on transactions entered in the system.</p>	
<p>8. Interfaces</p> <p>The bidder shall ensure that the system should provide the Interface Requirements as stated below:</p>	
<p>a. System should be capable of generating flat files for handoff to external systems.</p>	
<p>b. Electronic files transferred between systems should be encrypted on transmission and decrypted on receipt.</p>	
<p>9. Inquiry/Search Function</p> <p>The bidder shall ensure that the system should provide the Inquiry/Search Function as stated below:</p>	

<p>a. System should allow users to inquire/search for details using user-defined parameters</p>	
<p>Design, Development & Implementation Requirements</p>	
<p>1. System Requirement Analysis</p> <p>Requirement's finalization will be a very important milestone of the bidder proposed development methodology. It is expected that, the selected bidder will carry out detailed requirement study and analysis on the each and every scope of e-Service that mentioned in the TOR. Under this scope of work, the bidder has to analyze the detail functions, processes, documents, actors, sites and infrastructure of the relevant prevailing system precisely of the concerned organization. The bidder should submit a system requirement analysis plan which should cover the scope of work, relevant activities to be performed, timeline, deliverables to be produced, dependencies and resources to be used.</p>	
<p>2. System Design</p> <p>The detailed functional scope defining and designing as per the standard of software engineering approach for the proposed system tasks are being performed. This is very vital and important phase of any Software Development Life Cycle (SDLC). Considering the ultimate development and implementation scope, the proposed system design should be robust, scalable, user friendly and interoperable enough. At this system designing phase vendor may perform different following designing related task and will produce various standard System designing Documents (SDD).</p>	
<p>a. Identifying module, components, tasks, I/O and functional features.</p>	
<p>b. Specifying technical and functional requirements.</p>	
<p>c. User Interface design.</p>	
<p>d. Description of UI and requirements.</p>	
<p>e. Preparing the use cases.</p>	
<p>f. Defining Integration and interoperability scope.</p>	
<p>g. Designing system architecture.</p>	
<p>h. Determine process and data flow.</p>	
<p>i. Database design.</p>	
<p>j. API Design.</p>	
<p>k. Finalizing tools, technologies and frameworks to be used</p>	

etc.	
The bidder must cover details system designing plan in their technical proposal which may include relevant activities, approaches, methods, documentations and deliverables.	
3. Solution Architecture	
The Bidder shall propose comprehensive solution architecture on Blockchain Enabled Certification System which may cover the following items in their descriptive and diagrammatic presentation.	
a. Goals/Results	
b. Service Recipients	
c. e-Service Operators/User (Stakeholders)	
d. e-Service Observers (Service administration and performance monitor)	
e. Database application components	
f. Entity application component	
g. Systems to be integrated	
h. Process application component	
i. Interaction application component	
j. Application	
k. Accessible Points	
l. Networks	
m. Types or Layers of Service Delivery Points	
n. Hosting Site	
4. Development & Implementation Methodology	
The bidder must provide the complete system development and implement methodology including complete project implementation methodology. The proposed methodology should be justified for this project.	
5. Testing	
The Bidder must propose a testing plan for the Automated Certification System starting from development to deployment. This testing plan should cover all the standard suitable testing approaches for this system application which may include phase wise testing activities like test scripting, test cases, testing tools, testing process, test log, result and report formats i.e. expected test deliverables based on the application	

development requirements.	
a. Unit Test	
b. Functional Test	
c. Installation testing	
d. Compatibility testing	
e. Smoke and sanity testing	
f. Regression testing	
g. Stress Testing	
h. Acceptance testing	
i. Alpha testing	
j. Beta testing	
k. Functional vs non-functional testing	
l. Continuous testing	
m. Destructive testing	
n. Software performance testing	
o. Usability testing	
p. Accessibility testing	
q. Security testing	

<p>6. Deployment and Implementation</p> <p>After the completion of development, integration, testing and hosting. MARINA will issue the consent to “GO LIVE”. The Bidder shall ensure that the system is ready for exposure to access towards all level of users. The bidder must also submit a Deployment and Implementation plan covering the major activities to be performed, the deliverables to be provided.</p>	
<p>7. Additional System Specification for all Modules</p> <p>The Bidder shall ensure that all the software licenses needed for successful deployment and implementation of the System will be provided.</p>	
<p>8. Training and Knowledge Transfer</p> <p>Training and knowledge transfer must be provided that:</p>	
<p>a. The Bidder must propose a detail training plan for the users of the e-service application.</p>	
<p>b. The Bidder have to develop and provide so training to the Trainer (TOT), that TOT can provide training to Users of MARINAs nationwide implementation.</p>	
<p>c. The Bidder should include necessary training methodology, documentation and training materials support in their training plan</p>	
<p>d. The training materials may include user manual, administration manual, quick start tutorial, online help, and frequently asked questions</p>	
<p>e. The training plan must describe the sequencing, time, duration and resources involved in implementation of each of the proposed training activities.</p>	
<p>f. The training plan should contain full course descriptions for all courses that to be carried out for respective users.</p>	
<p>g. The Bidder should develop multimedia training materials for all users. These materials shall be available for viewing and reviewing for all users through a web portal.</p>	
<p>h. The training activities should cover the training feedback and evaluation report.</p>	
<p>i. The type of training will depend on the function of the participants such as but not limited to System Administration, Database Management, Network Administration, Security Administration, Content Management and others that are deemed necessary in the proper implementation of the modules.</p>	
<p>k. The numbers of participants to be trained are as follows:</p>	
<ul style="list-style-type: none"> • Six (6) personnel for System Maintenance and Development 	

<ul style="list-style-type: none"> • Six (6) personnel for Systems Administration 	
<ul style="list-style-type: none"> • Six (6) personnel for Database Management 	
<ul style="list-style-type: none"> • Six (6) personnel for Security Administration 	
<ul style="list-style-type: none"> • Six (6) personnel for Content Managers 	
<ul style="list-style-type: none"> • Four Hundred (400) personnel for End-User 	
<p>l. Appropriate training manuals shall be provided for each participant. Training manuals must be easy to understand and comprehend.</p>	
<p>m. The bidder shall include in the Bid a preliminary training plan for the training courses to be carried out including but not limited to the following:</p>	
<ul style="list-style-type: none"> • Course Title and Description 	
<ul style="list-style-type: none"> • Learning Objectives 	
<ul style="list-style-type: none"> • Class Size and Composition 	
<ul style="list-style-type: none"> • Course Duration 	
<ul style="list-style-type: none"> • Training Sequence 	
<p>n. Training and Technology Transfer shall be conducted before final project acceptance. All expenses incurred during the training shall be borne by the bidder.</p>	
<p>9. Documentation</p>	
<p>a. The bidder shall provide complete documentation for every deliverable and at every end of each development stage and milestone that will be submitted to MARINA for approval. The documentation shall include all the source codes of the application systems. All documents shall be owned by the MARINA and shall reserve the right to reproduce at no additional cost. All documentations shall be written in English and must be available in both soft and hard formats.</p>	
<p>b. The bidder shall provide user and system manuals and technical materials of all IT equipment including all of its components. Complete documentation of hardware, software, utility and CDs shall be provided including the inventory of components and serial numbers.</p>	
<p>c. The bidder shall provide (2) two video materials explaining the usage and features of the system for both seafarer, shipping companies and other Marina stakeholders.</p>	

d. Provision of all documentations (user, administrative and technical) to MARINA personnel including necessary handover and training. Documentation shall include, but not limited to the following:	
1. User Documentation <ul style="list-style-type: none"> • Requirements Specification • User's Manual / FAQ <ul style="list-style-type: none"> ▪ Operations manual (booklet) on how to use the system, which should cover all types of users and all types of system interactions. ▪ e-Learning module (web-based and CD-based instructional training) complete with screenshots and voice-over. • Administration Manual 	
2. Technical Documentation	
3. Technical Architecture	
• Architecture Framework	
• Class Diagram, Sequence Diagram	
• Entity-Relationship Diagram	
• Database Schema	
• Database Dictionary	
4. System Installation Manual	
10. Maintenance and Support Service	
The selected Bidder has to provide a period of three (3) years maintenance and support service. The Bidder must provide detail maintenance and support service plan in the technical proposal, which may include the followings-	
a. Support service types and mode of services	
b. Helpdesk functionalities	
c. Configuration management	
d. Release management	
e. Incident management	
f. Problem management	
g. SLA (Service Level Agreement)	
h. Maintenance and support service-related reporting	

i. Service Log Management	
At the end of 3 years MARINA may evaluate the scope of support requirement and request a new contract for Support and Maintenance from the Bidder.	

11. Service Level Agreement

MARINA shall maintain a Service Level Agreement (SLA) with the bidder, with provisions for liquidated damages for their non-compliance. The terms and conditions of the SLA are enumerated below:

Criteria	Description	Liquidated
System Maintenance and Support	Provide 8 X 5 technical support on the problems reported by MARINA based on the prescribed time frames	In accordance RA 9184 Liquidated
Software updates, maintenance releases and patches	Provide software updates, maintenance releases and patches within thirty (30) calendar days after product distribution in the market for the duration of the contract at no additional cost to the MARINA.	In accordance RA 9184 Liquidated

MARINA shall have the right to blacklist the bidder after twelve (12) instances of non-compliance to these terms of reference at any given time during the contract period.

--	--

12. Warranties

a. The bidder warrants that it shall conform strictly to the terms and conditions of this Terms of Reference.	
b. A warranty period of thirty-six months (36) months shall commence upon issuance of the Certificate of Acceptance.	
c. The bidder shall neither assign, transfer, pledge, nor subcontract any part or interest therein.	

--	--

P. Back up and Recovery

<ul style="list-style-type: none"> The Bidder Must provide a two (2) year off-site backup and recovery of the entire system. 	
---	--

BIDDER'S DELIVERABLE

1. The bidder should provide a running application in Web Application Interface.	
2. The bidder should provide a mobile application for both Android and IOS Devices that connects to the MARINA Automated Certification System, with specific features enabled to be provided by MARINA.	
3. The bidder should provide a system that runs on latest PHP or Java programming language using Service Oriented Architecture design.	
4. The bidder should provide a database running on latest MySQL.	
5. The bidder should provide a bootstrap framework and materialize CSS for front end of web application.	
6. The bidder should provide a dedicated repository of codes that is securely stored through a private repository. All codes provided by the bidder from day 1 should be place in the repository.	
7. The bidder should provide an extensible automation build process that can automatically assemble, build and deploy the application on different servers.	
8. The bidder should provide a platform for continuous inspection of code quality to perform automatic reviews with static analysis of code to detect bugs, code smells and security vulnerabilities.	
9. The bidder should provide a project management tool for issuance of tickets for both change and incident request.	
10. The bidder should provide end user training for all users of the system and in-depth training for the assigned IT personnel to maintain the system.	
11. The bidder should provide a dedicated support engineer upon project sign off that can cater support request 8x5 phone, email, remote and on-site request with 2-years warranty for both incident and change request.	
12. The bidder should cater a support request with unlimited man-hours for incident request and 500 man-hours for change request for a period of three years upon completion of the project.	
CONFIDENTIALITY OF DATA	
1. The bidder shall document detailed procedures/techniques in identifying systems security risks and breach(es) and how such shall be handled.	
2. All project staff of bidder shall be required to sign a non-disclosure agreement.	

<p>3. The Blockchain Enabled Automated Certification System, its components, parts and all products, product samples and specifications, data, ideas, technology, and technical and non-technical materials, all or any of which may be derived from any of the foregoing (all of which, individually and collectively, referred to as "Proprietary Information") are confidential and proprietary to the Maritime Industry Authority.</p>	
<p>4. The bidder agrees to hold the Proprietary Information in strict confidence. The bidder furthermore agrees not to reproduce, transcribe, or disclose the Proprietary Information to third parties without prior written approval of the Maritime Industry Authority.</p>	
PRE-TERMINATION OF THE CONTRACT	
<p>1. The bidder for the Blockchain Enabled Automated Certification System may be pre-terminated by MARINA for any violation of the terms of the contract. In case of pre-termination, the bidder shall be informed by MARINA, thirty (30) days prior to such pre-termination in conformance with Procurement Law Republic Act 9184 and its Implementing Rules and Regulations.</p>	
<p>2. In case of pre-termination, the bidder shall be liable to an additional liquidated damages equivalent to one percent (1%) of the total contract price as provided by the Government Accounting and Auditing Manual (GAAM) and forfeiture of the Performance Security.</p>	
<p>3. MARINA shall have the right to blacklist the bidder in case of pre-termination.</p>	
PROJECT TIMEFRAME	
<p>The project shall be completed within a period of Seven (7) months broken down as follows:</p>	
<p>Six (6) months for:</p> <ul style="list-style-type: none"> a. Data Gathering, system investigation and system design b. Software Development c. Data Migration and parallel testing <p>One (1) month for:</p> <ul style="list-style-type: none"> d. Training 	
TECHNICAL SUPPORT	
<p>1. The bidder shall provide technical support via telephone/fax, on-site assistance to resolve technical and other related problems. Resolution shall be delivered in the form of telephone, electronic and/or on-site resolution. It shall refer to a condition wherein the</p>	

reported problem is resolved by the bidder to the satisfaction of MARINA.	
2. The bidder shall resolve a problem within twenty-four (24) hours after it was reported by MARINA thru fax, telephone or email.	
3. The bidder shall provide portal intended for monitoring/discussion and reporting on the process of development and implementation.	
BIDDER'S QUALIFICATIONS	
1. The bidder must have at least three deployed projects in government agency for the past 5 years.	
2. The bidder should provide certification from at least FOUR (4) government agencies of successful implementation	
3. The bidder must have at least two (2) programmers trained with certification to develop system using Blockchain Technology with least 1-year tenure in the company	
4. The bidder shall assign a certified Project Management Professional with at least 15 years' experience as project manager.	
5. The bidder shall have at least ten (10) years of experience in the design, development, delivery, installation, testing, and commissioning of information systems	
6. The bidder should have been operating in the Philippines for at least ten (10) years and is registered with SEC or DTI and meets PHILGEPS requirements.	
7. The bidder must have experience in at least three (3) similar projects in the design, development, delivery, installation, testing, and commissioning of information systems would be preferred	
8. The bidder must have completed similar project in software development with data form entry and business process workflow.	
9. The NFCC computation must at least be equal to the total ABC of the project.	
10. The bidder must submit, in addition to the bidding documents and in a separate envelope: A CERTIFICATION, UNDER OATH, THAT THEY ARE NOT BLACKLISTED BY ANY GOVERNMENT AGENCY.	
11. The bidders are NOT allowed to "subcontract" the project to another company.	
12. The bidder will be required to demonstrate a functional prototype for the automated issuance of certificates via a blockchain. Prototype must be presented and acceptable to MARINA's "Selection Committee".	
BIDDER'S RESPONSIBILITIES	
1. To protect sensitive data, the developer/vendor shall sign a Non-Disclosure Agreement (NDA) to protect the data in the system. Likewise, all personnel of The Bidder who are involved in the project shall sign an NDA.	
2. Present a Proof of Concept similar to Certificate Issuance and	

Verification that uses blockchain technology one week after the bidding.	
3. Submits weekly status report detailing the accomplishments, project risks and issues, and next tasks.	
4. Shall assign the following personnel for the development and implementation of the project	
a. One (1) full time Project Manager	
b. One (1) Systems Analyst (with experience in Systems Analysis and Design)	
c. At least Two (2) full time Developers (experience in web development and Java)	
d. At least Two (2) full-time Mobile Developer	
e. At least Two (2) full-time Blockchain Developer	
f. Database Administrator	
g. End-User Trainer	
5. Performs capacity planning and provide hardware and network recommendations to ensure sufficient infrastructure is in place prior to full rollout.	
6. Performs Quarterly web vulnerability assessment / penetration testing to verify the security configuration of the application.	
7. Ensures all deliverables are submitted on time.	
8. Ensures that application will be ready for deployment to the cloud.	
9. Training of MARINA personnel on all regions for nationwide roll-out.	
10. Ensures that key project risks that impact the project are monitored and visible to all project stakeholders.	
11. Submit User's Acceptance and Testing Plan	
12. Provides warranty and 8:00 A.M. to 5:00 P.M. technical support for 3 years after the system has been deployed for production use.	
13. The Bidder shall provide all the software licenses needed to ensure successful deployment and implementation of the system.	
14. The Bidder must update all documentations on a semi-annually basis and must submit the final documentations before the expiration of warranty period.	

Bidders must state in the statement of compliance either “Comply” or “Not Comply” against each of the individual parameters of each Specification.

Name of Company in Print

Signature Printed Name of Authorized Representative

Date

Section VIII.

Bid Form, Annexes and Checklist of Technical and Financial Documents

COMPANY LETTERHEAD

Statement of ongoing government and private contracts

PROCUREMENT OF SUPPLY, DELIVERY, INSTALLATION AND CONFIGURATION OF BLOCKCHAIN ENABLED AUTOMATED CERTIFICATION SYSTEM

Statement of all its ongoing government and or private contracts within the last three (3) years, 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 client	Name of Contract	Date and status of contract	Kinds of Goods	Amount of contract	Value of outstanding contracts	Date of Delivery	Purchase order Number/s or Date of Contract/s
Total value of outstanding contract:							

CERTIFIED CORRECT:

Name and Signature of Authorized Representative

Position

Date

COMPANY LETTERHEAD

Statement of Single Largest Completed Contract (SLCC)

PROCUREMENT OF SUPPLY, DELIVERY, INSTALLATION AND CONFIGURATION OF BLOCKCHAIN ENABLED AUTOMATED CERTIFICATION SYSTEM

Statement of Single (1) Largest Completed Contract of Similar nature within the last three (3) years from the date of submission and receipt of bids amounting to at least fifty percent (50%) of the Approved Budget of the Contract (ABC)

Name of client	Name of Contract	Date of contract	Kinds of Goods	Value of contract	Date of completion	Contract Memorandum of Agreement; and Certificate of End-user’s Acceptance (EUA) or Official Receipt (OR)/ Collection Receipt covering the full amount of contract (copies attached)

CERTIFIED CORRECT:

Name and Signature of Authorized Representative

Position

Date

COMPANY LETTERHEAD

PROCUREMENT OF SUPPLY, DELIVERY, INSTALLATION AND CONFIGURATION OF BLOCKCHAIN
ENABLED AUTOMATED CERTIFICATION SYSTEM

Certificate of Net Financial Contracting Capacity

(Please show figures at how you arrived at the NFCC)

This is to certify that our Net Financial Contracting Capacity (NFCC) is _____(P_____) which is at least equal to the ABC to be bid. The amount is computed as follows: (Please show computation of NFCC)

$$NFCC = [(CA-CL) (15)] - C$$

Where:

CA = Current Assets

CL = Current Liabilities

C = Value of all outstanding or uncompleted portions of the projects under on-going contracts, including awarded contracts yet to be started, coinciding with the contract to be bid.

NOTE:

The values of the bidder's current assets and current liabilities shall be based on the latest Audited Financial Statements submitted to the BIR (Sec. 23.4.1.4.), Revised IRR of RA 9184.

Issued this _____ day of _____, 20_____

Name & Signature of Authorized Representative

Position

Date

PROCUREMENT OF SUPPLY, DELIVERY, INSTALLATION AND CONFIGURATION OF BLOCKCHAIN
ENABLED AUTOMATED CERTIFICATION SYSTEM

Joint Venture Agreement*

This **PROTOCOL/UNDERTAKING OF AGREEMENT TO ENTER INTO JOINT VENTURE**, executed by:

.....a sole proprietorship/partnership/corporation duly organized and existing under and by virtue of the laws of the Philippines, with offices located at,, represented herein by its,, hereinafter referred to as ".....";

-and-

..... a sole proprietorship/partnership/corporation duly organized and existing under and by virtue of the laws of the Philippines, with offices located at,, represented herein by its,, hereinafter referred to as ".....";

-and-

..... a sole proprietorship/partnership/corporation duly organized and existing under and by virtue of the laws of the Philippines, with offices located at,, represented herein by its,, hereinafter referred to as, hereinafter referred to collectively as "Parties")

For submission to the **Bids and Awards Committee** of the **MARITIME INDUSTRY AUTHORITY**, pursuant to **Section 23.1 (b)** of the Revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No.9184.

WITNESSETH That:

WHEREAS, the Parties desire to participate as a joint venture in the public bidding that will be conducted by the **MARITIME INDUSTRY AUTHORITY**, pursuant to Republic Act No. 9184 and its implementing rules and regulations, with the following particulars:

Bid Reference No.	
Name/Title of Procurement Project	
Approved Budget for the Contract	

NOW, THEREFORE, in consideration of the foregoing, the Parties undertake to enter into a **JOINT VENTURE** and sign a **Joint Venture Agreement** relative to their joint cooperation for this bid project, in the event that their bid is successful, furnishing the MARINA BAC a duly signed and notarized copy thereof within **ten (10) calendar days** from receipt of Notice from the BAC that

*if applicable

our bid has the lowest calculated responsive bid or highest rated responsive bid (as the case may be).

That furthermore, the parties agree to be jointly and severally under the said Joint Venture Agreement;

THAT finally, failure on our part of enter into the Joint Venture and/or sign the Joint Venture Agreement for any reason after the Notice of Award has been issued by shall be a ground for non-issuance of the Notice to Proceed, forfeiture of our bid security and such other administrative and/or civil liabilities as may be imposed by MARINA under the provisions of R.A. 9184 and its Revised IRR, without any liability on the part of MARINA.

This undertaking shall form an integral part of our Eligibility documents for the above-cited project.

IN WITNESS WHEREOF, the parties have signed this Protocol/Undertaking on the date first above-written.

Bidder's Representative/Authorized Signatory

SUBSCRIBED AND SWORN TO BEFORE ME this _____ day of _____ at _____, Philippines. Affiant exhibited to me his/her competent evidence of Identity (as defined by 2004 Rules on Notarial Practice issued _____ at _____, Philippines.

NOTARY PUBLIC

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

Bid Securing Declaration Form

[shall be submitted with the Bid if bidder opts to provide this form of bid security]

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

BID SECURING DECLARATION
Project Identification No.: *[Insert 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 procurement contract with 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 Guidelines on the Use of Bid Securing Declaration, within fifteen (15) days from receipt of the written demand by the procuring entity for the commission of acts resulting to the enforcement of the bid securing declaration under Sections 23.1(b), 34.2, 40.1 and 69.1, except 69.1(f), of the IRR of RA No. 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 following circumstances:
 - 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 such effect, and (i) I/we failed to timely file a request for reconsideration or (ii) I/we filed a waiver to avail of said right; and
 - c. I am/we are declared 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 OR ITS AUTHORIZED REPRESENTATIVE]
[Insert signatory's legal capacity]
Affiant

[Jurat]
[Format shall be based on the latest Rules on Notarial Practice]

Omnibus Sworn Statement (Revised)

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

AFFIDAVIT

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 [Name of 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 representative of [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 ensuing contract for [Name of the Project] of the [Name of the Procuring Entity], as shown in the attached duly notarized Special Power of Attorney;

[If a partnership, corporation, cooperative, or joint venture:] I am granted 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 ensuing contract for [Name of the Project] of the [Name of the Procuring Entity], as shown in the attached [state title of attached document showing proof of authorization (e.g., duly notarized Secretary's Certificate, Board/Partnership Resolution, or Special Power of Attorney, whichever is applicable)];

3. [Name of Bidder] is not "blacklisted" or barred from bidding by the Government of the Philippines 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, **by itself or by relation, membership, association, affiliation, or controlling interest with another blacklisted person or entity as defined and provided for in the Uniform Guidelines on Blacklisting;**

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 authorized representative(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 responsibilities as a Bidder in compliance with the Philippine Bidding Documents, which includes:
 - a. Carefully examining all of the Bidding Documents;
 - b. Acknowledging all conditions, local or otherwise, affecting the implementation of the Contract;
 - c. Making an estimate of the facilities available and needed for the contract to be bid, if any; and
 - d. Inquiring or securing 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 or activity.
10. **In case advance payment was made or given, failure to perform or deliver any of the obligations and undertakings in the contract shall be sufficient grounds to constitute criminal liability for Swindling (Estafa) or the commission of fraud with unfaithfulness or abuse of confidence through misappropriating or converting any payment received by a person or entity under an obligation involving the duty to deliver certain goods or services, to the prejudice of the public and the government of the Philippines pursuant to Article 315 of Act No. 3815 s. 1930, as amended, or the Revised Penal Code.**

IN WITNESS WHEREOF, I have hereunto set my hand this ___ day of ___, 20__ at _____, Philippines.

[Insert NAME OF BIDDER OR ITS AUTHORIZED REPRESENTATIVE]
[Insert signatory's legal capacity]
Affiant

[Jurat]
[Format shall be based on the latest Rules on Notarial Practice]

BID FORM

Date : _____
Project Ref. 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/deliver/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 herein 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 PBDs;
- 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 of agent	Amount and Purpose of 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 behalf of: _____

Date: _____

Company Letterhead

Financial Bid Form

Description	Quantity	ABC	TOTAL BID PRICE (Inclusive of VAT)
PROCUREMENT OF SUPPLY, DELIVERY, INSTALLATION AND CONFIGURATION OF BLOCKCHAIN ENABLED AUTOMATED CERTIFICATION SYSTEM	1 lot	₱32,500,000.00	
Total Bid Price Inclusive of VAT in Words			

[signature over printed name]

[in the capacity of]

Checklist of Technical and Financial Documents

I. TECHNICAL COMPONENT ENVELOPE

Class "A" Documents

Legal Documents

- (a) Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages);
or
- (b) Registration certificate from Securities and Exchange Commission (SEC), Department of Trade and Industry (DTI) for sole proprietorship, or Cooperative Development Authority (CDA) for cooperatives or its equivalent document,
and
- (c) Mayor's or Business permit issued by the city or municipality where the principal place of business of the prospective bidder is located, or the equivalent document for Exclusive Economic Zones or Areas;
and
- (d) Tax clearance per E.O. No. 398, s. 2005, as finally reviewed and approved by the Bureau of Internal Revenue (BIR).

Technical Documents

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

MARINA Requirements:

- a. The bidders must have at least three (3) client's satisfaction rating from a government agency or a private corporation with whom the bidder had contract for the past two (2) years or on-going; and
- b. The bidders must have no pending case(s) against the government.

Financial Documents

- (k) The Supplier's audited financial statements, showing, among others, the Supplier's total and current assets and liabilities, stamped "received" by the BIR or its duly accredited and authorized institutions, for the preceding calendar year which should not be earlier than two (2) years from the date of bid submission; **and**
- (l) 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

- (m) 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.

2. FINANCIAL COMPONENT ENVELOPE

- (a) Original of duly signed and accomplished Financial Bid Form;