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**TERMS OF REFERENCE
FOR THE
SEAFARER'S IDENTITY DOCUMENT
(SID) AND SEAFARER'S RECORD
BOOK (SRB) SOFTWARE AND
HARDWARE SUPPORT &
MAINTENANCE**

I. BACKGROUND

A. Overview/Background

The Maritime Industry Authority (MARINA) was created on 01 June 1974 as an attached Agency to the Office of the President (OP) with the issuance of Presidential Decree No. 474, otherwise known as the Maritime Industry Decree of 1974, to integrate the development, promotion and regulation of the maritime industry in the country and the creation of the Ministry (now Department) of Transportation (DOTr) by virtue of Executive Order No. 546, the MARINA was attached to the DOTr for policy and program coordination on 23 July 1979. By virtue of Republic Act No. 10635, the Maritime Industry Authority (MARINA) is established as the "Single Maritime Administration" responsible for the implementation and enforcement of the 1978 International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, as amended, and International Agreements or Covenants related thereto.

The International Labor Organization adopted ILO Seafarer's Identity Documents Convention (Revised 2003), No. 185 (ILO Convention 185, as revised 2003). The new convention introduced modern security features into the seafarer's ID to help resolve the urgent question of seafarer' being refused admission into the territory of countries visited by their ships for the purpose of shore leave, transit and transfer to join or change ships.

The Maritime Industry Authority (MARINA) is the issuing authority for a Seafarer's Identity Document and Seafarer's Record Book (SID/SRB) in compliance with the ILO Convention No. 185 (Revised 2003).

The implementation of the SID/SRB started with the supply, delivery and installation of the required hardware and software communication and documentation and consultancy service for the design and development of the ILO – Compliant SID/SRB. Their approval and acceptance was made on 15 AUGUST 2019 for a period of three (3) years. On 15 August 2022, MARINA has to find ways and means to support and maintain the implementation of the SID/SRB.

II. APPROVED BUDGET FOR THE CONTRACT

The Approved Budget for the Contract (ABC) for the said project is **Eighteen Million Pesos (Php 18,000,000.00)** General Appropriations Act of 2022 inclusive of all applicable government taxes and charges.

The bidder shall provide comprehensive hardware and software support and maintenance service to MARINA SID-SRB System upon acceptance of the MARINA proposal, signed and acknowledged between MARINA and the bidder, as **provided under Section V and VI of this document.**

III. LEGAL FRAMEWORK REQUIREMENTS

1. **Republic Act No. 11032** - An Act Promoting Ease of Doing Business And Efficient Delivery of Government Services, Amending for the Purpose Republic Act No. 9485, Otherwise Known As The Anti-red Tape Act Of 2007, And For Other Purposes
2. **Republic Act 10173** – An Act Protecting Individual Personal Information in Information and Communications Systems in the Government and The Private Sector, Creating for this Purpose a National Privacy Commission, and for other Purposes;
3. **Executive Order No Republic Act No. 8792 of the Philippines Electronic Commerce Act of 2000** – An act providing for the recognition and use of electronic commercial and non-commercial transactions and documents, penalties for unlawful use thereof and for other purposes;
4. Ratification to ILO Convention 185 (Revised 2003) – Issuance of Seafarer's Identity Document (SID)
5. **Executive Order 125**, as amended – Issuance of Seafarer's record Book (SRB).

III. OBJECTIVES

Software and Hardware Maintenance and Support

To provide software updates, patches and fixes needed to improve functionality and keep the Seafarer's Identity Document (SID) and Seafarer's Identification and Record Book (SIRB) System in working order.

- A. **Software** – the software maintenance and support covers the following:
 - **Corrective Software Maintenance** – addresses the errors and faults within the software applications that could impact various parts of the software, including the design, logic and code. These corrections usually come from bug reports from the users.
 - **Adaptive Software Maintenance** - brought on by the change to the operating system, hardware and software dependencies.
 - **Preventive Software Maintenance** - prevents the deterioration of the system to become stable and manageable.
- B. **Hardware** - the hardware maintenance and support covers the following:
 - **Preventive Maintenance** – allows MARINA to a strategic action to anticipate the deterioration of the hardware
 - **Cleaning and Cooling of Physical Components** – cleaning, adjusting, lubrication, testing of the equipment.
 - **Corrective Maintenance** – repair and replacement process of any defective computer's hardware parts and restore to good working condition.

IV. ELIGIBILITY REQUIREMENTS

1. To qualify, bidders may be anyone (1) of the following:
 - 1.1. Duly licensed Filipino citizen/sole proprietorship.
 - 1.2. Partnership duly organized under the laws of the Philippines, and of which at least sixty percent (60%) of the interest belongs to citizens of the Philippines.
 - 1.3. Corporation duly organized under the laws of the Philippines, and of which at least sixty percent (60%) of the outstanding capital stock belongs to citizens of the Philippines.
 - 1.4. Cooperatives duly organized under the laws of the Philippines; and
 - 1.5. Persons/entities forming themselves into a Joint Venture (JV), i.e., a group of two (2) or more persons/entities that intend to be jointly and severally responsible or liable for a particular contract. Provided, however, that Filipino ownership or interest of the JV shall be at least sixty percent (60%).
2. Single Largest Completed Contract (SLCC)
 - 2.1. Bidders must submit a notarized statement of their Single Largest Completed Contract (SLCC) similar to the contract to be bid supported by the following:
 - 2.1.1. Copy of SLCC completed from Y2016 to present amounting to at least 50% of the total ABC of the project. If submitting two or more similar contracts, the aggregate contract amount should be equivalent to at least 50% of the total ABC to be bid. The largest of these similar contracts must be equivalent to at least 50% of the total ABC. (Contract / Agreement can be any or all of the following: Contract / Job Order / Purchase Order / Notice of Award / Notice to Proceed, or any other duly executed document proving / showing the name / nature of project or project description and contract cost; and
 - 2.1.2. Proof of Completion and Acceptance for the aforesaid SLCC (Proof of completion and acceptance can be any or all of the following: Sales Invoice / Official Receipt / Certificate of Completion / Certificate of Acceptance / Certificate of Satisfactory Performance / Delivery Receipt duly acknowledged by the client).
 - 2.2. A similar contract refers to the supply, delivery, installation with maintenance support of a national government identification system certified ILO compliant within the last three (3) years.
3. Other Significant Qualifications
 - 3.1. The bidder must have implemented a previous support project certified by ILO as whitelisted under the International Labour Organization's (ILO) revised Seafarers' Identity Documents (SID) Convention, 2003 (ILO Convention No. 185).
 - 3.2. As part of bid submission, bidders must submit the following:
 - 3.1.1 Notarized Technical Support Certification by the Core Software & Hardware Provider of the current SID-SRB system
 - 3.1.2 Certificate of Exclusive Distributorship from Core Software Provider of the current SID-SRB system
 - 3.1.3 Certificate of Exclusive Distributorship from the various critical hardware providers of the current SID-SRB system modules namely: Biometric Servers, Storages & Other Front-end & Back-end Machines

(ABIS, INVESTIGATION, and ADMIN), ID and Booklet Personalization & Inventory Machines (PERSO & Inventory), Quality & Issuance (QC & ISSUANCE).

- 3.1.4 Certification of Certified Technicians issued by the critical non-commercial HW manufacturers on the ABIS, PERSO & Inventory system of the current SID-SRB project
- 3.1.3 Certificate of any international management system such as ISO 9001, ISO 37001 or equivalent

V. SCOPE OF WORK

A. Software Application System

- 1. The bidder shall provide Maintenance and Support to All MARINA SID/SRB processing Centers in the following:

A. Software

- Software Licenses Renewal Subscription for Front End and Back End Systems
- Data Capture Module
- Staging Module
- Workflow and front-End Communication Module
- Automated Biometrics Information Systems (ABIS)
- Personalization Module
- Inventory
- Quality Control Module
- Investigation Module
- Issuance Module
- Oracle Database Support
- Helpdesk Module

FRONT END SYSTEM

Items	Description	Specifications	Qty
1	Workstations Operating System	Windows 8	122
2	Anti-Virus for Workstations	kaspersky	122
3	Front – End Communication Software	NEC Software Application	14
1	VPN Client	Fortinet VPN Client	136
1	SPID For Enrollment, Issuance, Investigation Workstations	NEC SPID	65

BACK END SYSTEM

Items	Description	Specifications	Qty
1	OS – Server (Windows)	Microsoft Windows Server 2016 / Standard Edition, Per 2 Core Licenses	78
2	OS – Server (Linux)	Red Hat Enterprise Linux RHEL 7.5	2
1	Oracle 12c Standard Edition	Oracle 12c Standard Edition SE2, Release 2	2
1	Anti-Virus Licenses for Servers	Kaspersky Endpoint Security for Business – Select (Client Language)	15

1	Net backup Server – Standard	Veritas 14 Client Licenses Net Backup Server – Standard	1
NEC BMS Server Software License			
1	BMS Server Software License for 1,000,000 records	NEC Face Matching Controller for 2 servers	1
Face Matching			
1	NEC Face Matching Units Software License (2 Way)	NEC Search Engines for 2 x Xeon 8 Cores Server	1
Back End Server SW			
1	Personalization System	FMC In-house Personalization System	1
2	Inventory \$ QA System	FMC In-house Personalization System	1
3	Helpdesk Module	Zendesk	1

B. Hardware – Maintenance of existing Front-End and Back-End Hardware

FRONT END

Items	Description	Specifications	Qty
WORKSTATIONS			
1	Data Capture Module Workstation w/ 2 Monitors	HP ProDesk 400 G4 Microtower w/2 HP V194 18.5" Monitor	45
2	Perso & Inventory Workstation	HP ProDesk 400 G4 Microtower w/1 HP V194 18.5" Monitor	21
3	Quality Control Workstation	HP ProDesk 400 G4 Microtower w/1 HP V194 18.5" Monitor	19
4	Issuance Workstation	HP ProDesk 400 G4 Microtower w/1 HP V194 18.5" Monitor	19
5	Coms/Front-End Workstation	HP ProDesk 400 G4 Microtower w/1 HP V194 18.5" Monitor	14
6	Stand-Alone Kiosk Workstation	HP ProDesk 400 G4 Microtower w/1 HP V194 18.5" Monitor	16
LASER PRINTER			
1	Desktop Laser Printer (QC Module)	HP Laser Jet Pro M12	19
CAMERA			
1	Data Capture Module Digital Camera w/ Accessories	Canon EOS 3000D	45
DOCUMENT SCANNER			
1	Data Capture Module - Document Scanner	Epson Workforce DS-520	45
SIGNATURE PAD			
1	Data Capture Module - Signature Pad	Wacom STU-430 Signature Tablet	45
2	Issuance - Signature Pad	Wacom STU-430 Signature Tablet	19
BARCODE READER			
1	Perso & Inventory - Barcode Reader	Honeywell 1300G-2USB	21
MRZ READER			
1	Quality Control – MRZ Reader	ARH Combo Smart MRZ Reader	19
2	Stand-Alone Kiok – MRZ Reader	ARH Combo Smart MRZ Reader	16
UNINTERRUPTIBLE POWER SUPPLY (UPS)			
1	Data Capture Module – UPS for Workstation	APC Back-UPS 625	45
2	Perso & Inventory – UPS for Workstation	APC Back-UPS 625	21
3	Perso & Inventory – UPS for SID & SRB Printer	APC Back-UPS BX-1100 LI/MS	21
4	Quality Control – UPS for Workstation	APC Back-UPS 625	19
5	Issuance – UPS for Workstation	APC Back-UPS 625	19
6	Comms/Front-End – UPS for Workstation	APC Back-UPS 625	14
AUTOMATIC VOLTAGE REGULATOR			
1	Perso & Inventory – SR3 Laminator	Iontek SR-1	21
SID PRINTER WITH CHIP READER			
1	Perso & Inventory – SID Printer with Chip Reader	Fargo DTC5500 LMX, Dual Side Printer with Build-in Omnikey 5421 Chip Encoder	21
SRB PRINTER			
1	Perso & Inventory – SRB Printer	Surys HiPrint P2000	21
SRB LAMINATOR			
1	Perso & Inventory – SRB Laminator	Surys HiLam R2000	21

NETWORK SWITCHES			
1	Network Switch – Central Office	NEC QX – S1008GT-2G / 24 Port 1 Gbps Network Switch	1
1	Network Switch – Regional / Satellite Office	NEC QX – S1008GT-2G / 8 Port 1 Gbps Network Switch	15
KVM SWITCH			
1	KVM Switch	NEC N8143-106F 17" LCD, US 83 keys keyboard, optical mouse, 8- port switch	1

BACK END

Items	Description	Specifications	Qty
1	Servers - Database	NEC Express5800 / R12h-1M Xeon Silver 4110 Processor 1 x 8 Core 2 x 32GB (64GB) DDR4-2666 REG Memory 2 x 600GB 2.5 Inch Hot Plug SAS HDD RAID1 2 x 800W Platinum Hot Plug Power Supply FC: Fiber Channel Controller (2 CH) Emulex	2
2	Servers Biometric (BMS)	Matching System NEC Express5800 / R120h-1M Xeon Silver 4114 Processor 2 x 10 – Cores 2 x 32GB (64GB) DDR4-2666 REG Memory 2 x 600GB 2.5 Inch Hot Plug SAS HDD RAID1 2 x 800W Platinum Hot Plug Power Supply	2
3	Servers – Virtualization Host	NEC Express5800 / R120h-1M Xeon Silver 4114 Processor 2 x 10 – Cores 2 x 32GB (64GB) DDR4-2666 REG Memory 6 x 600GB 2.5 Inch Hot Plug SAS HDD RAID1/RAID10 2 x 800W Platinum Hot Plug Power Supply	2
4	Servers – Backup	NEC Express5800 / R120h-1M Xeon Silver 4114 Processor 2 x 8 – Cores 2 x 32GB (64GB) DDR4-2666 REG Memory 6 x 300GB 2.5 Inch 15K Hot Plug SAS HDD RAID1 2 x 800W Platinum Hot Plug Power Supply FC: Fiber Channel Controller (2 CH) Emulex	1
Disk Storage			
1	NEC M310 Disk Array Controller and Enclosure	14X600GB SAS Disk Drives 12X2TB NLSAS Disk Drives 4X8GB Fiber Channel	1
Network Switch			
1	NEC QX-S5248GT-4X	48 Port 1 Gbps Network Switch	1
Network Security / Firewall			
1	Fortinet Management Appliance	Unified Threat Foregate Fg-80E with 200 VPN Clients 14 x GE RJ45 Ports (including 1 DMZ) – Demilitarized Zone)	1
Tape Library			
1	Backup System	DELL – EMC ML3 2 x ML3 LTO6 FG-HH Tape Drive	1

2. Other Responsibilities:

- a. The bidder shall submit the **CURRENT and COMPLETE SOURCE Code** stored in flash drive of the SID/SRB System within 15 days upon the issuance of Notice to Proceed.
- b. The bidder shall submit the **UPDATED SOURCE Code** stored in flash drive of the SID/SRB System one (1) month prior to the end of the contract.
- c. Coordinate with the concerned Operating Units in the acceptance/ testing on the **CHANGE Request** during the maintenance period and to assist with the signing of the Certificate of Acceptance of the said deliverables.
- d. Assist in conducting an acceptance test based on mutually agreed test procedures and parameters by both parties which shall commence on the

next working day immediately following the advice of complete installation submitted to MARINA

3. Hardware Maintenance Support for Six (6) Months
 - a. The bidder shall provide the following services within the contract period:
 - i. Remedial Maintenance Services
 1. The cleaning, adjusting, lubrication, testing of the equipment and replacement of any defective part to ensure that any defect in the equipment is remedied and the equipment is restored to good working condition.
 - ii. Comprehensive Hardware Support
 1. Maintenance service covers all hardware and equipment as stated in **Section V. A and B.**
 - iii. Preventive Maintenance Services
 1. The cleaning, adjusting, lubrication, testing of the equipment to determine that is in good working condition. This shall be done at the end of each year of the maintenance period or on agreed schedule with MARINA.
4. Software Application Support Services for Six (6) Months
 - a. The bidder shall conduct software support services for:
 - i. Renewal of Licenses of the Software for Front-End and Back-End
 - ii. Data Capture Module
 - iii. Staging Module
 - iv. Workflow & Front-end Communication Module
 - v. Automated Biometrics Information System (ABIS)
 - vi. Personalization Module
 - vii. Inventory Module
 - viii. Quality Control Module
 - ix. Investigation Module
 - x. Issuance Module
 - xi. Oracle Database Support
 - xii. Helpdesk Module
 - b. Provide Level 1 (L1) & Level 2 (L2) technical support for the hardware and services list provided in **Section V. A and B** via email, messaging, and phone. The bidder will assign a technical support engineer, available for eight (8) hours a day for five (5) days a week Mondays to Fridays (excluding Public and Non-Working Holidays) to assist in the analysis of the Application Software and perform troubleshooting in the event an issue is raised by MARINA.
 - c. Escalate of issues to Level 3 (L3) support
 - d. Provide bug fixes, patches, and necessary upgrades for and within the same application functionality, version, and operating environment.
 - e. Conduct testing of releases and patches before delivery to MARINA.
 - f. Deployment of the fixes and patches to MARINA environment.
 - g. Testing of fixes and patches with MARINA.
 - h. Deployment of licenses in case additional licenses are procured.
 - i. Provide annual health checks on Application Software and assess its current status.
 - j. Provide technical guidance on optimization procedure and tune-up and error re-processing when necessary.
 - k. Provide assistance on testing of new environment (e.g. OS upgrade, Server migration, testing of new devices within the warranty, maintenance period).
 - l. Software Release Tracking and deployments. Timely updates on Software release version tracking when bug fixes need to be applied.

- m. Monitor the system capacity and performance to ensure that the system is running smoothly and in optimal condition.
5. Operation and Technical Support for Six (6) Months
- a. 8 x 5 Technical support Onsite – One (1) personnel (Monday to Friday, excluding National/Public and Special Non-Working Holidays) for the hardware and services listed
 - b. Response time: within four (4) hours upon receipt of problem report using the current system's Helpdesk Ticketing platform
 - c. Reporting and safekeeping of service records
 - d. Incident Management and Reporting
 - i. Close monitoring of tickets and/or service requests
 - ii. Daily updates on tickets/incident status
 - iii. Proper turnover of incidents and pending activities
 - iv. Knowledge-base management


VI. GENERAL TERMS

1. To assist the bidder in complying with its obligations under this contract, MARINA shall:
 - 1.1 Allow access for the bidder's employees and/or representatives to its premises upon request, subject to the existing security arrangements including provisions for adequate working space and other facilities, as necessary.
 - 1.2 Assist in conducting an acceptance test based on mutually agreed test procedures and parameters by both parties which shall commence on the next working day immediately following the advice of complete installation submitted to MARINA.
 - 1.3 Ensure that the bidder's personnel are provided with all information, computer related facilities, services, supplies, consumables, or associated items reasonably required to comply with its obligations under this contract.
 - 1.4 Provide on request, a suitably trained or informed person(s) to accompany the bidder's personnel and to advise the access or on any other matter within MARINA's knowledge or control.
 - 1.5 Make available and be represented in all activities related to the maintenance task.
 - 1.6 Provide all internet connectivity and its' relevant maintenance
2. The bidder shall provide technical evaluation, basic troubleshooting assessment and provide recommendation within 24-48 hours arising from any instances beyond the scope of this contract including but not limited to the software application system, database etc. After which, the bidder shall submit a course of action on a time and material basis.
3. The bidder shall be responsible for possible software application update that may arise, in coordination with the system developers of the MARINA SRB/SID Online Application System, upon a just and reasonable request of the End-User.

vii. **DELIVERY, WARRANTY & PAYMENT**

The Six (6) Months maintenance contract shall commence upon acceptance of the MARINA proposal, signed and acknowledged between MARINA and the bidder. Payment shall be made **MONTHLY** by MARINA upon submission of the monthly billing statement with supporting documents by the bidder and the issuance of certificate of satisfactory service rendered to be issued by the MARINA.

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