



TECHNICAL SPECIFICATIONS

Project Description	SEAFARER'S IDENTITY DOCUMENT (SID) AND SEAFARER'S RECORD BOOK (SRB) SOFTWARE AND HARDWARE SUPPORT & MAINTENANCE FOR 2025																																				
Approved Budget of the Contract	The Approved Budget for the Contract (ABC) for the said project is Forty-Five Million Pesos (Php 45,000,000.00) inclusive of VAT and other applicable government taxes, chargeable against the approved budget of MARINA for 2025.																																				
Specifications/Deliverables	<p>A. Software Application System</p> <p>1. The bidder shall provide Maintenance and Support to All MARINA SID/SRB processing Centers in the following:</p> <p>A. Software</p> <ul style="list-style-type: none"> • Proof of Software Licenses Renewal Subscription for Front End and Back End Systems and Hardware • 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 <p>FRONT END SYSTEM</p> <table border="1" data-bbox="496 1522 1523 2187"> <thead> <tr> <th>Items</th> <th>Description</th> <th>Specifications</th> <th>Qty</th> </tr> </thead> <tbody> <tr> <td colspan="4">Front End Work Stations</td> </tr> <tr> <td>1</td> <td>Workstations Operating System</td> <td>Windows 8</td> <td>122</td> </tr> <tr> <td>2</td> <td>Anti-Virus for Workstations</td> <td>Kaspersky</td> <td>122</td> </tr> <tr> <td>3</td> <td>Front – End Communication Software</td> <td>NEC Software Application</td> <td>14</td> </tr> <tr> <td colspan="4">VPN – Virtual Private Network Client</td> </tr> <tr> <td>1</td> <td>VPN Client</td> <td>Fortinet VPN Client</td> <td>136</td> </tr> <tr> <td colspan="4">NEC SPID Face, Capture and QC, Signature and Document Scanning</td> </tr> <tr> <td>1</td> <td>SPID For Enrollment, Issuance, Investigation, Workstations</td> <td>NEC SPID</td> <td>65</td> </tr> </tbody> </table>	Items	Description	Specifications	Qty	Front End Work Stations				1	Workstations Operating System	Windows 8	122	2	Anti-Virus for Workstations	Kaspersky	122	3	Front – End Communication Software	NEC Software Application	14	VPN – Virtual Private Network Client				1	VPN Client	Fortinet VPN Client	136	NEC SPID Face, Capture and QC, Signature and Document Scanning				1	SPID For Enrollment, Issuance, Investigation, Workstations	NEC SPID	65
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BACK-END SYSTEM

Items	Description	Specifications	Qty
Operating System			
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
Database System			
1	Oracle 12c Standard Edition	Oracle 12c Standard Edition SE2, Release 2	2
Anti-Virus			
1	Anti-Virus Licenses for Servers	Kaspersky Endpoint Security for Business – Select (Client Language)	15
Centralized Backup			
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 or equivalent	1

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

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.

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 Workstation	Kiosk HP ProDesk 400 G4 Microtower w/1 HP V194 18.5" Monitor	16
DIGITAL CAMERAS			
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 – SRB 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
2	Network Switch – Regional / Satellite Office	NEC QX – S1008GT-2G / 8 Port 1 Gbps Network Switch	15
3	KMV – NEC N8143-106F 17 inch LCD US	83-keys keyboard optical mouse 8-port switch	1
BACK END			
Items	Description	Specifications	Qty
SERVERS			
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 Matching System (BMS)	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 Unified Threat Management Appliance	Forigate 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	One Lot

2. Restoration Parts and Materials

To restore to its original functionalities, all the items below are prescribed and shall be installed:

	ITEM	QTY	
1	SID PRINTER	Asy PCB Output Controller	10
2	(Fargo DTC5500	Pulley Gear Combo	10
3	LMX)	Flipper Table Complete	15
4	SPAREPARTS	Head Lift Assembly	10
5		Platen Roller	15
6		Cleaning Roller	15
7		Mag Roller	15
8		Output Roller	15
9		Pinch Roller Bracket	5
10		Short Lead Screw	5
11		Assy Motor Card Feed	5
12		PCB Mainboard	5
13		Lam Module Mainboard	5
14		Laminator Heater	12
15		Cleaning Kit Printing Area*	21
16		Electronic Board Tray E3	3
17	SRB PRINTER	Electronic Board Power E3	3
18	(Sury's HiPrint	KeyPad Electronic E-Series	8
19	P2000)	USB Hub 2.0.4 port 3 1/2 TG	3
20	SPAREPARTS	Decoder Wheel-Tray SI 1100	2
21		Printer Board	4
22		Catridge Station SI 1100	2
23		Tubes	2
24		Sensor Board Tray E3	5
25		Printer Belt	21
26		Tray motor with sensor	4
27		Cable set	3
28		Power Supply (PSU)	2

29		Service Station	15
30		Printer unit incl belt	2
31		LID Switch Sensor	4
32		Flexi Cable	10
33	SRB LAMINATOR (Sury's Hiram R2000) SPAREPARTS	Main PCB R2000	2
34		Power Supply (PSU)	3
35		Pressure Plate w/ Frame	3
36		Spindle stroke gear box v-ribbed belt	2
37		FUSE 6, 3A/T	5
38		Ribbon Transport Steeper Motor	2
39		Variable Contrast Mark Detection Sensor	2
40		Laminate separator KIT R&L	2
41		Rubber Driver Roller	2
44		Fork Light Sensor	2
43		Main Filters	2
44		DC Motor Filter Laminate	2
45		DC Motor Laminate	2
46		Stepper Motor Kit 42 single-shaft	2
47		Silicon Tubing R+L kit	2
48		Heating Cartridge for heating device	10
49	Heating Device Assembly	6	
50	STORAGE SPAREPARTS (including installation and setup service) (1 unit of LENOVO DE4000H Hybrid Flash Array)	DE4000H 2U24	1
		Storage 2U24 Chassis iSCSI (Optical)	1
		DE4000 Controller 8GB Gen2	1
		10Gb iSCSI/16Gb FC Universal SFP+Module	1
		DE Series 1.8TB 10K 2.5" HDD 2U24	2
		10m LC-LC OM3 MMF Cable	1
		USB Cable, Micro USB	1
		1.5m, 10A/100-250V, C13 to IEC 320- C14	1
		Rack Power Cable	1
		Storage-Rack Mount Kit 2U24/4U60	1
		Storage SFF Drive Filler	1
		DE2000/4000 HIC, 10/25GbE iSCSI, 4-ports	1
51	PERSONALIZATION SERVER SPAREPARTS (including installation and setup service) (3units of DELL POWEREDGE R450)	Processor: Intel Xeon Silver 4310 2.1G, 12C/24T, 10.4GT/s, 18M Cache, Turbo, HT (120W) DDR4- 2666	6
		Memory: 16GB RDIMM, 3200MT/s, Dual Rank Raid 1	6
		Network Controller : 2x 1GbE LOM	
		Storage Controller: PERC H755 SAS Front	3
		Hard Drive: 600GB HARD DRIVE SAS ISE 12GBPS 10K 512N 2.5IN HOT-PLUG	6
		Power Supply: Dual, Hot-plug, Power Supply Redundant (1+1), 800W, Mixed Mode, NAF	3
		Jumper Cord: Jumper Cord – C13/C14, 2M, 250V, 12A	6
		MOTHERBOARD WITH BROADCOM 5720 DUAL Port	3
		1GB ON-BOARD LOM BROADCOM 5720 QUAD PORT 1GBE BASE T- ADAPTER, OCP NIC 3.0	3
		Heatsink for 1 CPU configuration (CPU less than 165-Watt)	6

1. Hardware Maintenance Support for 12-month Period Contract
 - a. The service provider shall provide the following services within the contract period.
 - b. Remedial Maintenance. 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.
 - c. Comprehensive Hardware Support
 1. Maintenance service covers all hardware and equipment only
 - d. Preventive Maintenance Services
 1. The cleaning, adjusting, lubrication and testing of the equipment to determine that is in good working condition.
 2. The schedule of the preventive maintenance service is as follows:
(MARINA Central Office – June, MRO I & II – July, MRO IV – July, MRO V – July, MRO VI – August, MRO VII – August, MRO VIII – August, MRO IX – September, MRO X – September, MRO XI – September, MRO XIII – September)
 3. The SID/SRB Preventive Maintenance Form must be completed and signed by MISS personnel/officers, and PREVENTIVE MAINTENANCE PROVIDER personnel for checking and monitoring.
 4. Designated MISS IT Technical staff shall accompany PREVENTIVE MAINTENANCE PROVIDER personnel during the conduct of the scheduled preventive service at the MARINA Regional Offices.
2. Software Application Support Services for 12-month Period Contract
 - a. The service provider shall provide Maintenance and Support services to all MARINA SID/SRB processing centers in the following:
 - 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. Limited to Database Administrative Support
 - xii. Helpdesk Module
 - b. Provide Level 1 (L1) & Level 2 (L2) technical support for the hardware and services list provided in Scope of Work/Technical Specifications via email, messaging, and phone. The service provider 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 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 the MARINA environment.
 - g. Testing of fixes and patches with MARINA.
 - h. Deployment of licenses in case additional licenses are procured.


	<p>i. Provide annual health checks on Application Software and assess its current status.</p> <p>j. Provide technical guidance on optimization procedures and tune-up and error re-processing when necessary.</p> <p>k. Provide assistance on testing of the new environment (e.g. OS upgrade, Server migration, testing of new devices within the warranty, maintenance period).</p> <p>l. Software Release Tracking and Deployments. Timely updates on Software release version tracking when bug fixes need to be applied.</p> <p>m. Monitor the system capacity and performance to ensure that the system is running smoothly and in optimal condition.</p> <p>N. Shall prepare and institute contingency measures against critical issues that may hamper or hinder any of the applications in the SID-SRB system, their access, and usage. In this wise, back-up systems to ensure business continuity are vital. Immediate restoration to full serviceability when so required is a priority.</p> <p>3. Operation and Technical Support for 12-month Period Contract</p> <p>a. 8 x 5 Technical support Onsite in the MARINA Central Office – personnel (Monday to Friday, excluding National/Public and Special Non-Working Holidays) for the hardware and services listed</p> <p>b. Corrective Maintenance Response time: within four (4) hours upon receipt of the problem report using the current system’s Helpdesk Ticketing platform for the Central Office, and within one (1) week for MARINA Regional Offices, provided that back-up units are available onsite.</p> <p>c. Reporting and safekeeping of service records</p> <p>d. Incident Management and Reporting</p> <p>i. Close monitoring of tickets and/or service requests</p> <p>ii, Daily updates on tickets/incident status</p> <p>iii. Proper turnover of incidents and pending activities</p> <p>iv. Knowledge-based management</p>
<p>Delivery Terms</p>	<p>The 12-month maintenance contract shall commence from the date of issuance of the Notice to Proceed (NTP).</p>
<p>Other End-User Requirements <i>Ex. Warranty, photos of the product and other end-user requirements</i></p>	<p>1. The Bidder is required to submit satisfactory performance certificate of implemented maintenance and support project related to Identification System. The project must be certified by the International Labor Organizations (ILO) or any International Governing Bodies.</p> <p>2. The bidder is required to provide a Certification of Software and Hardware Technicians and Developers who are qualified to conduct maintenance and repairs on the critical systems and components of the SID-SRB System. The submitted certificates will undergo a verification process, and an actual demonstration will be required by the end-user as part of the Post Qualification assessment.</p> <ul style="list-style-type: none"> • Biometric Servers • Storage Devices • Front-end and Back-end Machines (ABIS, Investigation, and Administration modules) • ID and Booklet Personalization & Inventory Machines (PERSO & Inventory)

	<ul style="list-style-type: none"> • Quality Control & Issuance Systems (QC & ISSUANCE) • SID Printer with Chip Reader (Fargo) • SRB Printer (Surys) <ol style="list-style-type: none"> 3. The bidder must submit a Certificate of Satisfactory Performance of completed similar Government Projects 4. The bidder must submit a Certificate of Satisfactory Completion and Acceptance with any national government agency in the Philippines on any contract involving supply and delivery of identity documents in the past 5 years 5. The bidder must submit a Valid Certificate of any international management system any of the following such as ISO 9001, ISO 27001, ISO 37001 or equivalent 6. The bidder must submit a Valid Certificate of Registration from National Privacy Commission 7. The bidder must submit a Valid Certificate of No Pending Case from National Privacy Commission 8. All bidders, JV Partners and/or consortium, including all its affiliates, parent company, and subsidiaries must not be blacklisted or involved in any corruption, enter any settlement or have any pending arbitration with any government agencies. A notarized attestation issued by the Bidder shall be included in the bid submission. 9. The bidder shall implement a Software Access Plan as provided by MARINA for varying levels of access to the different applications of the SID-SRB system. 10. The bidder shall conduct a regular audit or automated log of software performance, usage data on specific features, logging and resolution of issues, and other relevant areas. 11. The bidder shall exert all efforts against any issues arising from the SID-SRB system, its access, and usage. In the event that problems are encountered, the Bidder commits to vigilance and urgency in their resolution. Remedial measures shall be undertaken by the bidder without delay. 12. The bidder shall prepare and institute contingency measures against critical issues that may hamper or hinder any of the applications in the SID-SRB system, their access, and usage. In this wise, back-up systems to ensure business continuity are vital. Immediate restoration to full serviceability when so required is a priority. 13. The bidder shall adopt a meticulous and transparent routine of documenting methodologies, issues, solutions, best practices, and other information that will be critical prospective educational and instructional media. Detailed documentation as required by the MISS shall be turned over to the latter at the end of every twelve-month period and as necessitated by circumstances.
<p>Payment Terms (Government terms 15-30 CD)</p>	<ol style="list-style-type: none"> 1. The twelve (12) month contract shall commence from the date of issuance of the Notice to Proceed (NTP); 2. Payment shall be made on a monthly basis within 15-30 calendar days subject to the submission of the billing statement and other supporting documents of the Awardee and the issuance of a certificate of satisfactory service by MARINA; 3. In case of Automatic Debit Arrangement (ADA) through Land Bank of the Philippines (LBP) facilities, or other Commercial Banks, the applicable bank charges shall be for the account of the Awardee. The Awardee shall

	submit bank details together with the billing statements/invoice for reference.
<p>Documentary Requirements (per RA9184) Eligibility Requirements</p>	<p>1. To qualify, bidders may be anyone (1) of the following:</p> <ul style="list-style-type: none"> 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; 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%); and <p>Eligibility Requirements</p> <p>Class “A” Documents</p> <p>Legal Documents</p> <p>1. Valid PhilGEPS Certificate of Registration (Platinum Membership) including valid/ updated Annex “ A “ showing the following documents:</p> <ul style="list-style-type: none"> 1.1 Registration certificate from SEC, Department of Trade and Industry (DTI) for sole proprietorship, or CDA for cooperatives. 1.2 Mayor’s/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. 1.3 Tax clearance per E.O. 398, s. 2005, as finally reviewed and approved by the Bureau of Internal Revenue (BIR). <p>Technical Documents</p> <ul style="list-style-type: none"> 1.4 Statement of the 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. 1.5 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 9184, within the relevant period as provided in the Bidding. <p><i>Contracts similar to the Project shall be:</i></p> <ul style="list-style-type: none"> a. <i>Software and Hardware support and maintenance to any government entity</i> b. <i>Completed within Three (3) years prior to the deadline for the submission and receipt of bids</i> c. <i>Certificate of Satisfactory Performance issued by the government entity as the end user of the project.</i> <p>Financial Documents</p> <ul style="list-style-type: none"> 1.6 The bidder’s audited financial statements, showing, among others, the bidder’s total and current assets and liabilities, stamped “received” by the BIR or its duly accredited and authorized institutions, for the preceding

	<p>calendar year which should not be earlier than two (2) years from the date of bid submission</p> <p>1.7 The bidder's computation of Net Financial Contracting Capacity (NFCC). However, in the case of procurement of Goods, a bidder may submit a committed Line of Credit from a Universal or Commercial Bank, in lieu of its NFCC computation.</p>
<p>Note: Prospective bidder must comply with all of the above requirements to become eligible with the said procurement project.</p>	

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