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**TERMS OF REFERENCE FOR THE**

**SUPPLY, DELIVERY,**  
**INSTALLATION AND**  
**CONFIGURATION**

**OF**

**QUEUING MANAGEMENT SYSTEM**  
**AT MARINA PITX**

## **I. 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.

## **II. OBJECTIVE OF THE PROJECT**

- Provide a system that can organize the queue of customers by issuing queue ticket numbers based on the service they require
- Provide a system that allows customer to select the services they need by pressing the configurable service buttons in the touch screen interface/monitor for automatic issuance of the numbered queue ticket
- Provide a system that have the facility to customize, add or remove service buttons according to the requirements of the MARINA
- Provide a system that shall include the software and/or hardware components to enable the servicing agent to call the queue ticket numbers issued by the system and to show in the main display the queue ticket number being called/serviced and the servicing counter calling/servicing the queue ticket number has capability to divide the monitor into several sections in order to display other video contents, advertisement, advisories and other messages together with the queue-related information on the same monitor
- Provide a system that supports wide variety of video formats such as avi, mpeg, mp4, and wmv
- Provide a system that allows creation of multiple display layouts and switch between different display layouts
- Provide a system that shall be able to store statistical data/information and generate regular reports related to customer traffic, waiting and transaction time and other reports that would show the efficiency of customer handling
- Provide a system that shall have support for appointment-based scheduling of clients/customers
- Provide a system that shall have support for online and central monitoring of the system during operation

### **III. APPROVED BUDGET FOR THE CONTRACT**

The Approved Budget for the Contract (ABC) for the project is **ONE MILLION PESOS (P1,000,000.00)** chargeable against 2020 Continuing Appropriation for Capital Outlay, inclusive of all applicable government taxes and charges.

### **IV. GENERAL REQUIREMENT**

The Supply, Delivery and Installation of Queuing Management Systems for the business window transactions of the Maritime Industry Authority at Paranaque Integrated Terminal Exchange (PITX) must cover the following:

1. Supply and delivery of queuing management system (hardware and software)
2. Customization of the queuing management system based on the services to be offered by the following offices:
  - a. STCW Certification Division
  - b. Manpower Development Service (SID/SRB)
  - c. Domestic Shipping Service
  - d. Maritime Safety Service
  - e. Franchising Service
  - f. Shipyards Regulation Service
  - g. Public Assistance Desk (Certification/IT/SID/SRB)
3. Setup of queuing management system
4. Provision of five (5) days of operational and end-user's training
5. Supply of 300 rolls of thermal paper for the queue kiosk
6. Installation and Commissioning (LAN/Electricity/Monitor Wires)
7. One (1) year technical support and maintenance of the system
8. One (1) year warranty of the hardware components

### **IV. VENDOR'S QUALIFICATIONS**

1. That the supplier has at least three (3) years of technical experience in the installation, commissioning and maintenance of Queuing Management System (QMS).
2. That the supplier has a history of at least five (5) successful operational Queuing Management System installed based on satisfied customers either private or government projects.
3. The supplier should have been operating in the Philippines for at least three (3) years and is registered with SEC or DTI.

## **V. DELIVERABLES**

	<b>ITEMS</b>	<b>QTY</b>	<b>UNIT</b>
1	Touch Screen Queuing Kiosk	3	units
2	50 inches Monitor Display	3	units
3	Queuing Management Software (Unlimited License) a. Queuing server kiosk b. Servicing agents and c. Multimedia display	1	lot
4	Server	1	Unit
5	2-kVA Uninterruptable Power Supply (UPS)	1	Units
6	1-kVA Uninterruptable Power Supply (UPS)	3	units
7	Thermal paper for queue kiosk	300	rolls
8	Installation and Commissioning (LAN/Electricity/Monitor Wires)	1	Lot

## **IV. TECHNICAL SPECIFICATION**

### **1. LED TELEVISION/MONITOR ATLEAST 50 INCHES**

- Screen Size atleast 50"
- FULL HD 1920 x1080 Pixels
- 3,000,000:1 Dynamic Contrast Ratio
- Supports HDMI x 3
- Supports USB Device: JPEG, MP3, MKV
- Audio Output Power 3Wx2
- Heavy Duty Wall Mount

### **2. SERVER**

- Form Factor - 1U Rack /2S
- Processor - Intel Xeon E5-2620 v3 2.4GHz,15M Cache,8.00GT/s QPI, Turbo, HT, 6C/12T (85W) Max Mem
- Memory / Max - 2 x 16GB RDIMM, 2133MT/s, Dual Rank, x8 Data Width (8/12 max DIMM slots)
- HD Capacity - 2 x 500GB 10K RPM SAS 12Gbps 2.5in Hot-plug Hard Drive (max 8 HDD)
- Optical - DVD+/-RW SATA Internal
- RAID - PERC H730P Integrated RAID Controller, 2GB Cache
- Onboard NICs - On-Board LOM 1GBE (Quad Port)
- Power Supplies - Single, Hot-plug Power Supply (1+0), 550W
- Static Rail - Ready Rails, Sliding Rails With Cable Management Arm
- Keyboard - USB Keyboard
- Mouse - USB Optical Mouse
- Warranty - Three (3) years next Business Day On Site
- OS – Latest Windows Server
- Other Requirements - Two (2) KVA UPS

### **3. TICKET DISPENSER**

- Atleast 15" Touch Screen Monitor
- Thermal Printer with 80mmx70mm thermal paper
- Wood/Metal Enclosure Ticket Kiosk Stand; Dimension: 41.5cm (L) x 39cm (W) x 144cm (H)
- Capable of issuing different series of queue
- Tickets for at least seven (7) types of services, which can be expanded based on the future requirements of MARINA
- has automatic cutter of printed queue tickets
- capable of adding logo or other images and text on any part of the queue ticket
- queue tickets are printed only when the selected service was pressed
- has the capability to print the date and time on the ticket
- queue numbers can be automatically reset at the beginning of each day
- shall include initial supply of three hundred (300) rolls of thermal paper for printing the queue numbers

### **5. UNINTERRUPTIBLE POWER SUPPLY 2KVA (UPS)**

- Backup time of at least 9 minutes at full load Load capacity of 2000VA
- Communication: USB/SNMP
- On-Line UPS System
- Input and Output Voltage at 230 VAC with60Hz
- UPS battery must have at least 1-yearwarranty
- User Interface: LCD with audible alarm
- Outlet Receptacle: 8 IEC C13Outlets

### **6. UNINTERRUPTIBLE POWER SUPPLY 1KVA (UPS)**

- Backup time of at least 9 minutes at full load Load capacity of 1000VA
- Communication: USB/SNMP
- On-Line UPS System
- Input and Output Voltage at 230 VAC with60Hz
- UPS battery must have at least 1-yearwarranty
- User Interface: LCD with audible alarm
- Outlet Receptacle: 8 IEC C13Outlets

## **V. TECHNICAL FUNCTIONALITY**

### **1. Ticket Issuing**

- The ticket dispensing kiosk should have the capability to display a number of query types as defined by MARINA for the client to select from.
- The ticket dispensing kiosk should be able to issue uniquely numbered tickets (i.e. No number duplication).
- The ticket dispensing kiosk should have the capability for the ticket dispensing kiosk to issue a ticket based on the service or enquiry type that is selected by the client.
- The ticket dispensing kiosk must have the ability to print the content within the ticket with certain information highlighted e.g. ticket number in a bigger font, bold and date and time stamp in smaller font, etc.
- The ticket dispensing kiosk has the capability of Ticket reprinting capability when there is a printer jam.
- The ticket dispensing kiosk should have an alert capability if there is a technical problem with the kiosk
- The ticket dispensing kiosk should have an early warning when consumables i.e. thermal paper reach low level

### **2. Client Queuing**

- The system should be able to handle linear queuing principles. Linear queuing is when the client actually queues in a queue in front of the servicing agent.
- While waiting, the QMS should have the capability to play entertainment and other relevant informative content on the client facing multimedia display.

### **3. Servicing the Client**

- The system must be able to match clients to client service agents that will provide the best service to the client.
- The system must provide the ability to adjust service levels should acceptable waiting times are exceeded or should client service agents become idle.

### **4. Queue Management Application**

- User Administration/management to manage client service agent access.
- System administration shall allow user to apply basic configuration changes without requesting support from the service provider.
  - Control/Configuration for ticket dispensing kiosk.
  - Control/Configuration for the agent workstations and roles.
  - Control/Configuration for various types of information displays.
  - Control/Configuration for the audible and display alert notifications.

## **5. Service Agent's Activity**

- The agent's servicing the client should have the ability to do the following, via a PC based application (for function selection purposes):
  - Start the service time, as they welcome the client.
  - Stop the service time, as the client's query is resolved or escalated (and the client has left the cubicle and the agent completed the wrap-up activities.
  - Calls for the next person in Queue.
  - Pend the ticket, if there is a no show from client. The client position in the queue will then be moved down the queue a pre-configured number of places or to the bottom of the queue and will be given another chance to be serviced.
  - Reroute the ticket, if unable to resolve the query or in case of a different query to what the ticket says.
  - Close the desk, so that the agent desk is not active to service clients.
  - Activate/ Reactivate the desk to start receiving the clients.
  - Repeat calling the queue number, if needed
  - Recall or random call a queue number
  - Inquire the number of waiting customers and current queue status
  - Capable of inputting of the type of transaction made by the customer
  - Capable of monitoring multiple transactions using a single queue number
  - Transfer customer to another service based on the prioritization guidelines to be identified by MARINA.

## **6. Supervisor's Activity**

- The supervisor managing the queue management operations should have the ability to do the following:
  - Monitor the average waiting time per service type.
  - Communicate with the Agent via the Queue management application and provide support and assistance as required.
  - Start / Stop the Queue management operation, as a beginning of the day / End of the day activity.
  - Monitor and measure queuing performance.
  - Command centre functionality/dashboard.
  - Must have the ability to manage the client service agent's (CSA's) availability roster, based on supervisor discretion.
  - Capability to provide a supervisor/manager dashboard view to monitor the queue.
  - Capture a duty roster for the day, Agent's availability such as lunch, coffee and body breaks per agent.
  - Use the application to predict the workload and agent contingency required for servicing the expected load of clients.

## **VI. CONSUMABLES**

- 300 rolls of thermal papers for the QMS system must be provided by the service provider.

## **VII. INTEGRATION REQUIREMENTS/CAPABILITIES**

- More attentive service for elderly, disabled and technologically-inept clients, by pre-identifying their service query upfront.
- The display screens must have the capability to display infotainment contents either from the QMS system itself or from an external source (e.g. TV signal, set-top box).

## **VIII. NON-FUNCTIONAL REQUIREMENTS**

- The QMS must be based on the existing business process flow of MARINA.
- Provide comprehensive and configurable reporting.
- Consumables to be provided by the successful bidder.
- MARINA will provide computer desktops to be used by the agents.
- The service provider must provide MARINA with System Documentation including design as well as as-built documentation.
- Maintenance & support for the duration of the contract.
- MARINA can request for modification in the system within one year that must be completed not more than one (1) week without cost to MARINA i.e. tailor fitting of the process flow.

## **IX. QUEUE MANAGEMENT REPORTING REQUIREMENTS**

The Queue Management System must have real time reports but not limited to the following:

- Average and longest waiting time per service type.
- Average service time (per client):
  - Per Service type
  - Per Service Desk
  - Per User (Client Only)
- Average ticket issuing load.
- Report delivery scheduler.
- Client feedback report per service type per agent.
- Dashboard that must be available to the supervisors:
  - Number of clients serviced
  - Type of clients serviced
  - Average waiting times
  - Average service times
  - Number of abandoned tickets
- Number of cases per query type, to identify a root cause for seasonal influx in order to react proactively in the future.

## **VII. OTHER REQUIREMENTS**

### **A. WARRANTY AND AFTER-SALES SUPPORT**

1. One (1) year on parts, labor



2. On-site support shall be provided for the delivered within twenty-four (24) hours from verbal/written notification by the END-USER AGENCY, with cut-off time at 2:00 pm per working day. Verbal/ written notifications received after 2:00 pm will be addressed by suppliers the following working day.
3. Within the warranty period, machines that cannot be repaired within forty-eight (48) hours shall be immediately replaced with a service unit of similar specifications or better at no cost to the MARINA

## **B. TRANSFER OF TECHNOLOGY**

1. The supplier must provide a free training program to designated staff/employee of the Maritime Industry Authority (MARINA) in installation, configuration, administration of all of the deliverables.
2. Appropriate manuals (e.g. Equipment, User, Operational Manuals...etc) shall be provided to each participant and written in a very simple manner that everybody can understand.
3. Training and Technology Transfer should be conducted before final project acceptance.

## **C. OTHERS**

- The system shall have a provisioned for future enhancement/upgrading.

## **VIII. PROJECT TIMEFRAME**

- The project shall be completed within a period of Thirty (30) days upon receipt of the Notice to Proceed.

## **IX. PAYMENT TERMS**

- Payment shall be within fifteen (15) days upon issuance of Inspection and Acceptance Report by MARINA, through Advice to Debit Account (ADA).