TERMS OF REFERENCE FOR THE SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF ELECTRONIC TERMINAL MANAGEMENT SYSTEM (ETMS) INCLUSIVE OF CLOUD-BASED UNIFIED ELECTRONIC TICKETING CAPABILITIES FOR THE PHILIPPINE PORTS

1. BACKGROUND:

Section 6(a) of PD 857, as amended, states that PPA shall have corporate duty to supervise, control, regulate, construct, maintain, operate and provide such facilities or services as are necessary in the ports vested in, or belonging to PPA.

Further, Section 26(a) states that PPA may, after consultation with relevant government agencies, make rules or regulations for planning, development, construction, maintenance, control, supervision and management of any port or port district and the services to be provided therein, and for the maintenance of good order therein, and generally for carrying out the purposes of this Decree.

On November 18, 2019, after a series of public consultations in Luzon, Visayas and Mindanao, PPA Administrative Order No. 12-2019 entitled, "Policy on the "Centralized Ticketing System (CTS)" Relative to An Online Application Integrating The Booking and Payment Processed for the Use of Ship, and Passenger Terminal in a Single Platform" was issued to provide a real time system with "single window" concept, to process the booking, payment and other related transactions needed by the government, shipping companies, port terminal operators, passenger terminal building operators and the general/riding public into a single online portal.

On September 18, 2020, PPA conducted a Proof of Concept (POC) of a Unified Electronic Ticketing System (UETS) at the Ports of Batangas and Calapan to determine feasibility of the project. The said system seeks to provide online services for the convenience and benefit of port users, attain overall ease of doing business, get rid of fixers and scalpers, and improve port processes for maritime safety and security, while providing reliable service for inter-island maritime operations.

On November 9, 2020, a public consultation was conducted to solicit inputs from stakeholders in the preparation of the Implementing Rules and Regulations of PPA AO No. 12-2019.

PPA has acknowledged the inputs as well as the issues and concerns raised during the public consultation. Considering the types of vessels, vehicles,

cargo, and passengers that traverse each port, and given the current health protocols in place, PPA centered in ensuring efficiencies and effectiveness in operations, communications, and coordination between parties necessary to come up with the requirements in this project.

To ensure coordinated formulation of the TOR for the procurement of ETMS, a Project Committee was created pursuant to PPA Special Order No. 511-2020 dated December 21, 2020.

2. GENERAL OBJECTIVES:

The objectives of installing and operating an Electronic Terminal Management System (ETMS) inclusive of Cloud-Based Unified Electronic Ticketing Capabilities for the Philippine Ports ("Project") are:

2.1 To provide regulatory platform and institutionalize innovative ways of doing business under "new normal" conditions through an online and real-time application accessible by the passengers, vessel operators, port service providers and the Philippine Port Authority (PPA) anytime and anywhere.

2.2 To establish an electronic terminal management system that will provide a digitized and systematized process of recording and simultaneous submission of passenger manifest, and vessel voyage information which can effectively be scaled and extended to support future phases of the terminal management process at the PPA port terminals.

2.3 To ensure safety and provide convenience to the public specifically passengers traversing from one port terminal to another by streamlining and harmonizing the process of booking and payment of passenger trip ticket with passenger terminal and cargo fees using secured online application which can provide timely and significant seagoing travel information.

2.4 To streamline the payment process and collection of port fees (terminal and cargo/RORO) and harmonize it with the existing e-payment system of PPA.

2.5 To have an integrated system which can generate credible, immutable and highly available data which can be used for analytics, reporting, and decision support purposes of PPA.

2.6 To support observance of safety health measures at the port terminals through effective and efficient monitoring of passenger health status through captured information.

2.7 To strengthen security and safety standards by mitigating vessel overloading and effectively control the flow of regulated goods and cargo using PPA port facilities.

2.8 To provide highly available multi-tenant software platform for vessel operators who choose to avail of the services of the online system to configure and automate their ticketing services.

2.9 To provide a standard stakeholders' registries, credentialing, licensing and accreditation monitoring.

3. GENERAL DESCRIPTION OF THE PROJECT

The Project which will be implemented simultaneously in the herein mentioned ports, is a package solution that consists of software, hardware, equipment and peripherals including system installations, adjustment or updates, testing , training, system support and the installation and setup of necessary network infrastructure. It will include five (5) years operation and maintenance services. In particular, the package solution must be:

a. a cloud-native system that is accessible via any browser using any internet-connected endpoint device such as a personal computer or workstation or laptop, a smart phone, or tablet.
b. a Commercial-Off-The-Shelf product (COTS) with the capability to:
    - Process a minimum of 100 million passengers per year.
    - Process a minimum of 16,500 tickets per day.
    - Process a minimum of 2,500 tickets per hour (via kiosks)
    - Enable a minimum of 10 ports with check-in, boarding, and ticket kiosks.
    - Connect ferry / vessel operators covering PPA ports.
c. easily configurable even by non-programmers to meet the specifications of the PPA.
d. an API Web services capable, using standard encapsulation formats such as JSON or XML.
e. a full-turnkey, scalable and upgradable solution complete with the following essential technology stack provisions:
    - Cloud Infrastructure (Compute and Storage)
    - Identity Access Management System
    - Virtualization System
    - Standards-based Server Operating System
    - Public Key Infrastructure (PKI) System
    - Standards-based SQL Database System
    - Standards-based Middleware System
    - Standards-based API Gateway System
    - Data Warehousing System
    - Reports Generation and Visualization System
    - Payment Aggregator and secure API connector services to standard, local, and international payment gateway systems, and/or electronic money issuers
    - Security and Threat Analytics

f. capable to be setup in Kiosks with the required equipment, peripherals, and design specifications including system configuration common to all of the following ports:

PMO	Port	Kiosk Count
Batangas	Baseport Batangas	5
Mindoro	Baseport Calapan	5
Misamis Occidental / Ozamiz	Baseport Ozamiz	3
Zamboanga	Baseport Zamboanga	2
Bohol	Baseport Tagbilaran	2
Bicol	Matnog	2
Panay/Guimaras	Baseport Iloilo	2
Panay/Guimaras	Port of Dumangas	2
Davao	Babak / Samal	1
Zamboanga	Basilan	1

Kiosk must be transferrable and configurable to another site when the Authority so requires with no additional cost to PPA.

4. APPROVED BUDGET FOR THE CONTRACT

PPA intends to apply the sum of Five Hundred Million Pesos (PHP 500,000,000.00) inclusive of 12% VAT being the Approved Budget for the Contract (ABC) for the Supply, Delivery, Installation and Commissioning of Electronic Terminal Management System (ETMS) Inclusive of Cloud-Based Unified Electronic Ticketing Capabilities for the Philippine Ports.

5. BIDDER'S QUALIFICATION

5.1 Given the nature of the system and services required by PPA and to ensure the successful delivery and operation of the envisioned Project for a period of five (5) years, the prospective bidder must have the following current ISO certifications:

5.1.1 ISO 9001:2015
5.1.2 ISO 27001:2013
5.1.3 ISO 27017:2015
5.1.4 ISO 27018:2014
5.1.5 ISO 27701:2019

5.2 All certifications must be current and active at the time of bid submission.

5.3 To ensure that prospective bidder have the requisite experience and financial capacity to successfully deliver the project, the prospective bidder must have been:

5.3.1 In continuous operation with a total of ten years' combined experience as information system provider, software developer,

and systems integrator at the time of bid submission but experience for each type of service should not be less than one year.

5.3.2 Bidder must have completed a single contract similar to the contract to be bid whose value must be at least fifty percent (50%) of the ABC. Such project must be within the period of five (5) years at the time of bid submission. For this purpose, a similar contract means information and technology solution project either in a private or government entity with the same functionality as electronic terminal management or electronic ticketing system.

6. POST QUALIFICATION REQUIREMENTS

6.1 The prospective bidder must already have an available software of an Electronic Terminal Management Systems inclusive of Cloud-based Ticketing solution during post qualification.

6.2 The prospective bidder must conduct a self-rating using the form in Annex A of this TOR. The duly accomplished form must be submitted together with the technical proposal.

6.3 The prospective bidder must be able to conduct a systems demonstration for the purpose of verifying if functional requirements are at least 70% fit in accordance with the specifications provided in Annex A of this TOR.

7. SCOPE OF WORK

7.1 Deliver, install, deploy and implement an Electronic Terminal Management System with a cloud-based ticketing system, inclusive of server for Head Office and twenty-five (25) Kiosks distributed, installed and configured in PPA ports with network requirements.

7.2 Provide support services necessary to ensure exchange of information as well as hardware, software, network, databases and information systems/application systems which are fully integrated and operational.

7.3 Include in its Maintenance and Support Plan, among others, the following information:

7.3.1 Staffing plan and Number of Support Staff
7.3.2 Location and Operational Processes
7.3.3 Minimum Service Levels, such as:
7.3.3.1 Immediate Help desk response time for various classes of problems
7.3.3.2 On-site support within 4 hours of reported incident
7.3.3.3 Replacement of spare parts within 4 hours of reported incident
7.3.4 Usage statistics

7.4 Provide risk management plan detailing the strategies and appropriate measures to be undertaken. The plan should detail the following:

7.4.1 Risk Management Organization and Responsibilities
7.4.2 Risk Management Structure and Procedures for planning, identification, assessment, handling and monitoring.

7.5 Provide a Disaster Recovery Plan which must contain the comprehensive procedures necessary to resume business to its normal operation in the least possible time for emergency response, backup and recovery.

7.6 Provide a complete documentation for every deliverable. PPA shall own all documents and shall reserve the right to reproduce at no additional cost.

8. RESPONSIBILITY OF THE WINNING BIDDER

The winning bidder shall be responsible for the provision of the following components for the entire duration of the 5-year contract:

8.1 Technology

8.1.1 Electronic Terminal Management System inclusive of an Electronic Ticketing Software Application (with perpetual licensing and annual support and maintenance included for the whole duration of the Contract.)
8.1.2 Cloud Infrastructure (Compute and Storage)
8.1.3 Identity Access Management System
8.1.4 Virtualization System
8.1.5 Standards-based Server Operating System
8.1.6 Public Key Infrastructure (PKI) System
8.1.7 Standards-based RDBMS System
8.1.8 Standards-based Middleware System
8.1.9 Standards-based API Gateway System
8.1.10 Data Warehousing System
8.1.11 Reports Generation and Visualization System
8.1.12 Payment Aggregator and secure API connector services to standard, local, and international payment gateway systems, and/or electronic money issuers
8.1.13 Cloud security and Threat Analytics
8.1.14 Server and Network

8.2 Services

8.2.1 Supply, Delivery, Installation and Commissioning of an Electronic Terminal Management System with Electronic Ticketing System

8.2.2 Server and Kiosk Setup, Engineering, Implementation, and Support Services
8.2.3 Project and Technical Implementation Services
8.2.4 Systems Administration Services
8.2.5 Dedicated Technical and Helpdesk Support Staff
8.2.6 Operations Management Services
8.2.7 Private Vessel Integration Support Services (exclusive of customization or API development)

8.3 Network Connectivity

8.3.1 Provisioning of a minimum committed information rate (CIR) of 4mbps high-speed line broadband per terminal to connect deployed in the specified terminals to the cloud-based application or system and CIR of 200 mbps for Head Office.
8.3.2 The final bandwidth throughput per terminal will be commensurate with the number of installed kiosks but must not be lower than 4mbps CIR per port terminal.
8.3.3 Provisioning of network redundancy which shall be different from PPA's existing connection or provider.

8.4 Courseware Materials and Training Conducts

8.4.1 The winning bidder shall provide the courseware for training of administrators and private-vessel operator end-users that will use the ticketing system.
8.4.2 Training shall be conducted for designated administrators at the main office, and for end-users and functional line personnel in each of the 10 terminals.
8.4.3 Self-help user guides shall also be made available and accessible via the software system as an online FAQ service.

8.5 Post-Production Vessel Operator On-Boarding Support

8.5.1 The winning bidder must provide, upon successful deployment of the system into production environment, the necessary technical and functional support services to on-board private vessel operators onto the electronic ticketing system of the PPA.

8.5.2 The winning bidder must also provide, upon successful deployment of the system into a production environment, the necessary technical support services to assist the connectivity of private vessel operators using the PPA prescribed standard API web services.

8.5.3 The winning bidder shall be responsible in ensuring that all API terminations are secure and execute with minimal transactional latency.

8.6 Post-Production Software and Equipment Support and Maintenance

8.6.1 The winning bidder shall provide, upon the successful deployment of the system into production, 5 years of software support and maintenance services to PPA, at no additional cost to government, for the continued maintenance of the system inclusive of the application of security patches, functional de-bugging, and to ensure compliance to the service level uptime commitments as specified by the PPA.

8.6.2 The winning bidder shall also provide a replacement for all damaged kiosks and equipment that are covered under the prescribed warranty period, within 24-hours of being reported as inoperable or at the time the same has come to the knowledge of the service provider, whichever comes first.

8.7 Technical Support and Customer Help Desk

8.7.1 The winning bidder must provide the personnel for technical support and customer help desk services to assist technical administrators and users of the system in accordance with the minimum Service Level as specified in this TOR.

8.7.2 Services must be available eight (8) hours per day/ seven (7) days a week for a period of five (5) years.

9. OPERATIONAL AND FUNCTIONAL REQUIREMENTS, DESCRIPTIONS AND SPECIFICATIONS OF THE ELECTRONIC TERMINAL MANAGEMENT SYSTEM INCLUSIVE OF CLOUDBASED TICKETING SYSTEM

9.1 Electronic Terminal Management

BUSINESS REQTS (BRs)	FUNCTIONAL REQUIREMENTS (FRs)	
BR#1	Online	
	FR#1	Browser-based web application
	FR#2	Accessible via the internet anywhere, anytime as needed
	FR#3	Allows the user to make real-time look-up or update of data
BR#2	Secure	
	FR#1	Secure connections to data via the internet
	FR 2	Sensitive data is encrypted in accordance with data privacy policy
BR#3	Mobile Device Compatible	

	FR#1	Must provide an Android and iOS native mobile application
BR#4	Inter-operable with Other Systems	
	FR#1	Must provide API interfaces with PPA's current systems as well as systems external to PPA like the Bureau of Customs, terminal operator systems, other third-party systems, etc.
BR#5	Modularity and Portability	
	FR#1	Modular systems so that modules can be activated or deactivated as needed
	FR#2	The system grows with PPA's operations so that data volume and system transactions are still supported over time without system performance suffering
	FR#3	Must provide for a backup network connectivity service to ensure availability of connectivity
BR#6	Reports Configuration and Visualization	
	FR#1	Customizable reports that can be summarized or drilled down to detail level as needed
	FR#2	Filtering, sorting, and grouping options that allows the user to show as little or as much information as needed in a report
	FR#3	Supports highly customized or special ad hoc reports.
BR#7	Includes port/berth planning module	
	FR#1	Includes port map with berth information with allocation and scheduling that can be used during berthing meetings.
	FR#2	Interfaces with PPA's existing module of Notice of Arrival/Application for Berth and Anchorage (NOA/ABA) to capture vessel particulars and vessel arrival information that will be used for berth planning (e.g. Advanced vessel information with their measurements for berth planning, cargo information to estimate working time, etc.)
	FR#3	Facility for data input for berth/anchorage allocation which shall be available to shipping lines/stakeholders for real-time notification.
	FR#4	Interfaces with existing Vessel Traffic Management System (VTMS) and also allows data input or interface with other existing systems to capture real-time movement of vessels.
	FR#5	Interfaces with the sailing information module of the cloud-based ticketing system
BR#8	Includes gate information and ticketing module	
	FR#1	Captures and stores entrance and exit data of vehicles, pedestrians and cargo at the port gates.
	FR#2	Must have a facility to check in the system if vehicle, pedestrian and cargo is allowed for entry/release to/from the port.
	FR#3	Must have an integrated reporting module that can generate reports of cargo/vehicles and pedestrians which entered/exited through the gates.

	FR#4	Issues temporary gate pass ticket for vehicle/pedestrian/cargo.
	FR#5	Consolidates all cash ticket issued and interfaces the data to PPA's existing financial system.
BR#9	Interfaces to the PTB Operator's system	
	FR#1	Captures real-time information of passengers entering or exiting the Passenger Terminal Building (PTB) with interface to the gate management module.
	FR#2	Captures the name of passenger, age, gender and carrying vessel as well as the total Terminal Fee collected. This way, real time capture of data and information regarding passenger traffic will be easily recorded and transmitted to PPA higher management, including the early response to the request of some private and government entities.
	FR#3	Able to reconcile data from PTB Operator's System, Shipping Lines and other sources using analytics on the quality and correctness of information for real-time reconciliation of passenger embarking/disembarking
BR#10	Integrates passenger/terminal ticketing module	
	FR#1	Issues passenger ticket through the electronic booking module as specified in 9.2
	FR#2 FR#3	Consolidates all cash tickets issued for passenger ticket transactions and interfaces the data to PPA's existing financial system
BR#11	Captures and stores passenger's ticket information	
	FR#1	Interfaces with the shipping line's systems to capture the passenger manifest details needed: name of passenger, age and gender in order to obtain the needed passenger statistics of the total number of embarked/disembarked passengers, total passengers per age, and total passengers' gender.
BR#12	Integrates Roll-On/Roll-Off (RoRo) ticketing module	
	FR#1	Captures and stores RORO information needed for computation of charges/RoRo cash ticket
	FR#2	Issues the RoRo cash ticket through a mobile application or point of sale (POS) machine/software
	FR#3	Consolidates all cash tickets issued for Roro transactions and interfaces the data to PPA's existing financial system
BR#13	Integrates non-containerized cargo ticketing capability	
	FR#1	Captures and stores real-time cargo information needed for computation of charges of non-containerized cargoes
	FR#2	Issues the cargo ticket through a mobile application or Point-of-Sale (POS) machine/software
	FR#3	Consolidates all cash tickets issued for non-containerized cargoes and interfaces the data to PPA's existing financial system
BR#14	Creates repository of movement of cargo/vessel and pedestrian within the port area	

	FR#1	Supports monitoring of vehicle/person/cargo movement within the port premises.
	FR#2	Integrates a cargo storage module where PPA users can enter or view the actual location of cargo within the port area.
	FR#3	Integrates vehicle movement module where PPA users can enter or view the actual location of vehicle within the port area.
	FR#4	Integrates passenger/pedestrian module where PPA users can locate passenger/pedestrian within the port area.

9.2 Electronic Booking

9.2.1 The electronic booking module must be a multi-tenant, configurable and scalable solution that is fully responsive supporting use on any browser using any internet-connected endpoint device including mobile devices, tablets, desktop computers, as well as onsite kiosk machines.

9.2.2 PPA must have full control over the content of the electronic booking module. It should support "widget logic" functionality, allowing blocks of content to appear only conditionally, based on criteria including aspects of the customers making the booking and the content they are looking to book.

9.2.3 The following online functions must be supported by the Electronic Booking module:

9.2.3.1 Customer Login - The customer login for frequent travelers is available on all the booking pages.

9.2.3.2 Journey Booking – Must allow for journey booking that allow the listing of alternative departures and alternative prices in a best price overview that also allows the functionality to book passengers and vehicles (public utility and private).

9.2.3.3 Miscellaneous Journey-based items - Up-selling pages can be added to book on-board services such as meals and pre-purchased services on the journey.

9.2.3.4 Extras (Ashore Tickets – no Inventory) - Up-selling of simple services that are not connected to a journey can also be provided.

9.2.3.5 Pay for In-House Bookings - A log in feature using the booking number and a PIN code issued on the booking confirmation allows a passenger to pay for their booking in the web booking.

9.2.3.6 Enter Group Names - This feature provides the possibility for a group leader to go online and enter the individual names for everyone in their party.

9.2.3.7 Create and Modify Customer Profile - A customer profile can be created as part of the booking process by checking a box in the customer information page and

giving a password. Using the customer reference or email address and the password the customer can then update his personal information himself. There must be functionality for the recovery of lost password.

9.2.3.8 Save to Calendar - A booking can be saved to your calendar.

9.2.3.9 Tag Manager and E-Commerce Tracking – must include a tool for maintaining and configuring small snippets of code known as tags which need to be inserted into the web pages. Tags let you measure traffic and visitor behavior, understand the impact of online advertising and social channels, use remarketing and audience targeting, test and improve your site, and more.

9.2.3.10 Directions to Port – must provide the functionality to search for the route to a specific port and fetch the list of applicable departures from the port. The feature must be enabled with a standard maps API to calculate the directions and the time needed to arrive to the destination and it is possible to launch the maps application to start the navigation to the selected port.

9.2.3.11 Modify Booking, Including Remove Journey – must support the removal of a single journey from an existing booking without needing to go through the full booking flow to re-submit the changes. It must provide the functionality to select to remove a journey from the Booking Confirmation page and directly from the list of bookings generated.

9.2.3.12 Open Return Add-On – must provide a feature that enables the "Open Journey" option visible next to the return calendar.

9.2.3.13 Ashore Parking Module – must provide a feature that adds a parking booking to the customer's main booking.

9.3 Reservations and Ticketing

9.3.1 The reservations and ticketing module must include booking and data administration functionality as well as routines and management of batch jobs.

9.3.2 The base module for booking management process should hold the following functionalities that can be added or removed as needed:

9.3.2.1 Booking, amendment and cancellation of any services that are available in the system.

9.3.2.2 Booking history, possibility to view who, when and how a booking has been changed as well as the possibility to roll back the booking to a previous version and to reinstate a cancelled booking.

9.3.2.3 Supports the feature of Waiting Lists and Standby Lists. Controls are provided to limit the number of waitlists that can be booked against each of the primary on-board resource: Passengers, Vehicle and Cabins.

9.3.2.4 New bookings are not permitted against resources that are waitlisted unless the available space exceeds the waitlist count.

9.3.2.5 Product configuration controls if waitlist or standby is available at the fare being booked and a unique sequence number is assigned for each booking at individual departure level.

9.3.2.6 Waitlist status can be applied at booking row or whole journey level if anyone of the required resources unavailable.

9.3.2.7 Deposit and Balance payments must support specific quotation, confirmation and chaser documents which can be customized.

9.3.2.8 Multiple payments, in different currencies, using different payment types, can be registered to a booking and there is also support for deposits and balancing transactions.

9.3.2.9 Currently the following payment types must support the applicable validation routines: (Cash, Credit, Debit and Charge Cards, Invoices, or Vouchers).

9.3.2.10 Integrated cash reconciliation including routines for cashier statements and cashier reporting.

9.3.2.11 Printing of documents must support in-house and at-home printing of PDF format documents (tickets or reservations).

9.3.2.12 Routines can be scheduled to update and adjust information in the system. Amongst others the following routines are configured based on business rules:

9.3.2.13 Set Departure Status for Booking and Check-in

9.3.2.14 No show routine

9.3.2.15 Auto-cancellation routine

9.3.2.16 Accounting routine

9.3.2.17 Housekeeping routines

9.3.2.18 Invoicing or Statement of Account generation must be automated to produce invoices to print or send out as PDF files in emails based on the invoice settings on each credit customer.

9.3.2.19 Booking and Inventory Control for Passenger Traffic – must have the functionality for booking of passengers, including registration of passenger names and details, which can be made mandatory or optional based on route settings. Passenger types are user defined along with qualifying ages which may differ on a route-by-route basis with automatic assignment to generic Adult, Child and Infant classifications for Manifests and Port Reports.

Full contact details for phone, postal mail, email and mobile phone are collected for each booking or maybe imported from the Customer Register.

9.3.2.20 Must provide features for the use of dynamic booking templates to aid efficiency in the Port at the time of departure where similar bookings are required on a repetitive basis.

9.3.2.21 Booking and Inventory Control for Passenger Vehicle Traffic – Must provide features for vehicle booking to include recording of vehicle sizes, license plate details, country of registration and driver name which can be selected from a list drawn from the Passenger name list. Must provide features that enable vehicle pricing using parameters such as per unit or a combination of length, width and weight.

9.3.2.22 Booking and Inventory Control for Assigned Cabins - Functionality for booking cabins including the assignment of individual passenger names to their respective accommodations.

9.3.2.23 Cabin types and numbering sequences are defined by the user along with occupancy levels, features and facilities. Adjoining and adjacent cabin logic is supported along with controls limiting which cabins are suitable for cots and the number that can be accommodated.

9.3.2.24 Cabin assignment can be run as a pre-departure routine or in real time during the booking process. Gender based sharing is fully supported and rules can be configured.

9.3.3 Booking and Inventory Control for Assigned Seating - Functionality for booking sleeper seats including the assignment of individual passenger names to their respective seat.

9.3.3.1 Seat assignment can be run as a pre-departure routine or in real time during the booking process.

9.3.3.2 Seats can be defined for both graphical and list-based selection during the booking process if pre-assigned seating is required.

9.3.3.3 Pricing can be varied based on the location and desirability of the seat in order to generate additional revenues.

9.3.3.4 Access to premier areas of the vessel can also be inventory controlled with the added feature of being able to have magnetic, barcoded or RFID access cards generated in order to control physical access.

9.3.4 Template Booking – This feature makes it possible to create booking templates to be used for quick booking. By using a Booking Template, the User can create new bookings with pre-defined values. The booking template can consist of one or more departures.

9.3.5 Freight and Commercial Vehicle Booking - Trucks, lorries and freight units can be booked by dimensions, keep license plate and

unit ID details, country of registration as well as driver name. Unit pricing can be per unit or a combination of length, width and weight. Supplements and charges can be added based on length or weight. A Commercial Vehicle Register fulfils a similar role for freight bookings where regularly shipped units can be setup along with their characteristics. Information about shipper, transporter and consignee can be registered as well as cargo content and custom classes. Also, hazardous goods can be set up and a request for shipment process for Dangerous cargo can be managed.

9.3.5.1 Dangerous Goods (IMDG) - Must support IMDG codes (i.e., "International Maritime Dangerous Goods codes") in the Cargo booking form when defining hazardous goods loaded on a cargo vehicle.

9.3.5.2 Cargo Content and Customs Codes – Must provide a feature that enables the PPA to define Customs Codes in the Cargo booking form.

9.3.5.3 Yielding - The reservation module supports multiple Pricing Models which can be linked to Yield 'Buckets' to support revenue management strategies if required. Dynamic or Fluid Pricing where the price varies based on the current booked load and/or the time remaining to departure can be combined within a revenue management structure or deployed independently based on operator preferences and market conditions.

9.3.6 The ticketing module must be designed to make the ticket sales process for new passengers not to exceed 10 minutes and for returning passengers, not to exceed 5 minutes. The user experience must feature functions that enable anyone with sales experience to sell tickets or guide new users through the ticketing process. It must have the following features:

9.3.7 Journeys - Multiple journeys can be sold from the same ticket office and you can control how much of the schedule that can be made available for sales.

9.3.8 Multi-leg Journeys - If a journey has several stops, the alternative ports should be presented as options.

9.3.8.1 Open outward, open return - Tickets can be sold with no connection to a particular sailing, only connected to a certain route. These tickets take no capacity, until they are either changed to a fixed journey or scanned to at the gangway to a particular departure.

9.3.8.2 Multiple tickets on one payment – Users can create multiple bookings in one go. All bookings can be paid for in one transaction.

9.3.8.3 Ticketing Cloning – Allows users to clone a ticket (frequently booked voyages) in the shopping basket. An

identical booking then gets added to the shopping basket.

9.3.8.4 Retrieving existing bookings - Allows users to retrieve an existing ticket or booking by entering a booking number. The booking details should be shown in a popup where you can check-in or cancel the booking.

9.3.8.5 Validating e-tickets and ticket books - The ticketing module must have the capability to scan a QR code on a printed ticket or on via a mobile phone.

9.4 Sailing Information

The sailing information module presents details on vessel trip schedule as well as special messages to customers on terminal screens or via the passenger's own devices. Sailing information from the schedule setup in the reservations system should be displayed together with specific message that is configurable in real time. The following features must be available:

9.4.1 Location settings - For each location or port, you should be able to configure what information is displayed and how many departures and arrivals to be visible. Several screens can show the same information at the same location.

9.4.2 Departure Information - The departure information from the reservation system lists all sailings and scheduled times. You can add expected departure times which will, if later than scheduled time, display a delay in the departure information on the information screens. You can also display if a sailing is cancelled and any type of messages you would like to display together with the arrival or departure information.

9.4.3 Integration - The port information module should be fully web-based to have the ability to integrate in several mode of displays including passengers' own devices.

9.5 Back-Office Administration

The back-office and administration module must allow PPA and assigned users to configure the ticketing system. The following required modules and features of the Product and Pricing module are described below:

9.5.1 Data Registry, Product Brochure or Catalog - A container for a set of data registries and products set by the administrator.

9.5.2 Required Rules Definition Features:

9.5.2.1 Package Rules – this feature makes it possible to define whether the booked Product(s) should be booked as a Package by defining a Package Rule on the Product. A Package can include both journey and ashore services.

9.5.2.2 Pax Included Rules - The Pax included rule is used to limit the allowed number of passengers to be booked as included in a vehicle when booking a Product where the Pax included rule is defined. The Pax included rule consists of two tabs, Pax included rule and Pax included definitions.

9.5.2.3 Product Type - The Products to be sold in the booking form allows products to be divided into different Product Groups (Product Types). One or several Product Types can be applied to an existing Product. The Product Type definitions can be used as a target marked segment and does not fulfil any other function in the system. Product Type is also included in some reports. When searching for Products, either in the booking form or in the Product Definition form, it is possible to search by Product.

9.5.2.4 User Group Rule - All Users in the system must belong to different User Groups. It is possible to define a User Group Rule on a Product to limit the User Groups allowed to book the Product. Only Users belonging to a User Group included in the User Group Rule will be able to use the Product. It is possible to limit the allowed User Groups further by defining rules for when the Product is possible to book or amend.

9.5.2.5 Insurance Rule - By applying a Product Insurance Rule on the Product, administrators can limit the possible Insurance Categories when booking a Product. It is possible to book the Product without selling any Insurance. If the Product does not have an Insurance Rule defined, any Insurance Category can be booked and no validation against booked quantity will be done.

9.5.2.6 Amendment Free Rule – Makes it possible to define an Amendment fee rule to be triggered when changing a booking. The Amendment fee rule can be configured to only be triggered if the value of the journey or the booked Category Group (or both) decreases. A separate Category should be used as Amendment fee. The Category Group must be connected to Module M and the checkbox "Extras" should be ticked. The Category should have checkbox "Fee" ticked in the Category structure, indicating that this Category is to be used as a fee. Categories defined as Fee will be available to choose in the Amendment fee rule form. The Amendment fee is calculated when the booking is saved. Cancellation (i.e., delete) of one journey can trigger an amendment fee calculation but the fee will be calculated from the Cancellation rule stated in the Amendment fee.

9.5.2.7 Ashore Rule - An Ashore Rule for the Product, makes it possible to define which services (hotels, restaurants, tourist venues, etc.) are allowed to be booked with the

active Product and to specify whether certain Category is mandatory or not allowed.

9.5.2.8 Cancellation Rule - The system will display a message when cancelling the booking, telling the User how much the cancellation fee would be charged. The User can either proceed with the cancellation or choose to return to the booking. Cancellation fees are calculated based on:

9.5.2.8.1.1 Cancellation Rule defined on the booked Product.

9.5.2.8.1.2 Ashore Cancellation Rule defined for a Premise.

9.5.2.8.1.3 Default Cancellation Rule defined as a System Parameter.

9.5.2.9 Category Rule - The Product Category Rule can be used to limit which Categories and combinations of Categories that can be booked when using a Product where the Category Rule is defined.

9.5.2.10 Discount Rule - It is possible to attach a Discount rule to a Product. This rule can be used for example as an "Early Booking Discount" or special discount when booking through internet. The Discount rule is also used to calculate rebate when using a Promotion Code in the booking. Discount Rules can also be configured as Each N Free (for example "Buy one, Get one for free"). When the User books a Product where Discount rule is defined, the system will alert the User that a discount can be triggered, the text "DISCOUNT" is displayed in the booking price/booking balance field.

9.5.2.11 Price Rule - Price Rules must be defined for the Product for the pricing procedure to collect the prices when creating bookings. When a Product is linked to a certain Price Rule, the Price Rule controls the Price Groups to be concerned when booking a Product for a specific period. The actual Category prices are defined in the Price Groups, and Price Group(s) should be connected to the Price Rule.

9.5.2.12 Product Price Group - By assigning a Product Price Group on a Product, it is possible to override the ordinary prices for the Product for a specific departure only.

9.5.2.13 Promotion Rule - The Product Promotion Rule is an exception rule which can be defined on Product to limit the promotions available on that Product.

9.5.2.14 Supplement Rule - A Supplement rule can be defined on a Product to make it possible to add for example Port Fees, Taxes or other Booking Fees to a booking without using booking attachments. The Supplements work in a similar way as booking attachments but are attached to a Product by using the Product Supplement Rule. It is

also possible to define Booking Attachment(s) to be added to the Supplement category. Dynamic Supplements (calculated as % or amount based on booked items) must support on Journey level. When verifying Discount Rule and/or Supplement Rule, the system will first check for a definition where both Agent and Customer exist. Both must exist in the booking for the definition to apply, otherwise the system will continue to search for the next best match.

9.5.2.15 Journey Definition Rule - The Journey Definition Rule can be used to limit available departures for a certain Product. When defining a Journey Definition Rule, the Vehicle Type controls the outbound definition rule. If the same Journey Definition Rule should apply for more than one Vehicle Type (for example both HI Speed and M/S), separate rows must be defined for all Vehicle Types.

9.5.2.16 Yield Rule - It is possible to limit capacity for certain Categories by using the Yield function. Yield Groups and Yield Capacity must be set up, and a Yield Rule should be defined on the Product. When booking this Product, Yield Capacity will be reduced. The Product can be booked only if there is Yield Capacity available.

9.5.2.17 Currency Rule - It is possible to limit a Product to be sold using a single currency or multiple currencies.

9.5.2.18 Deposit Rule - The Deposit fee rule enables the system to calculate deposit fees as well as deposit and final payment with separate due dates.

9.5.2.19 Document Rules – must allow the attachment files in the e-mail depending on the booked Product(s) by defining a Document Rule on the Product. The documents to be attached are defined in the Document Rule form.

9.5.2.20 Price Print Rule - By defining a Price Print rule on a Product, individual row prices can be hidden on some confirmation layouts and grouped package prices will be displayed instead.

9.5.2.21 Agent Rule - The agent rule is used to limit the sale to certain agents. A Product limited by an Agent rule will not be displayed in the Product Search form for an Agent not included in the Agent Rule.

9.6 The system must have the following ancillary features and capabilities as described below:

9.6.1.1 Booking Attachments - The Booking Attachments are used for defining rules for booking rows that should be created automatically by the system when a booking row with a certain Category combination is booked. The automatically generated rows will be connected to the row that triggered their creation.

9.6.1.2 Multilingual document support (Translations of predefined texts) - Text translations are used as labels in different documents, mostly when reports are created in the system. The standard reports that can be printed from within many of the Registry Maintenance forms are built up by these miscellaneous texts.

9.6.1.3 Blacklist – This feature allows administrators to flag unwanted guests to a blacklist either indefinitely or for a limited time to stop them from creating new bookings. Bookings and name list entries in bookings must be compared to the blacklist when they are created, modified, and during payment and check-in. Users must be able to configure email alerts to a supervisor when blacklisted guests try to book.

9.6.1.4 Automatic Booking Transfer - The Automatic Booking Transfer moves bookings from one departure to another. When bookings are transferred, it is possible to compose an information message to be sent as SMS and/or e-mail in different languages to customers booked on a specific departure.

9.6.1.5 Crew Management – This feature allows administrators to create, manage, and administer Crew member information.

9.7 Passenger Digital Identity

The system must have a module that will establish the digital identity of the passenger when using self-service booking. The digital identity should be verifiable during booking. The digital identity can be applied by the customer online and may be supplemented by physical valid government IDs.

9.8 Authentication, Verification, and Digital Vaulting

The system must be integrated to a platform for authenticating all documents that are produced by the system. The authenticated documents should be verifiable.

9.9 Integration

9.9.1 The system must be capable of integrating via APIs with third-party or external systems as may be required by PPA. The secure API system must be cloud-based.

9.9.2 The system must be capable of interfacing with PPA's computerized accounting system for the reporting of collection and remittance.

9.9.3 The system must be capable of interfacing with PPA's existing application used in port operations to capture relevant data such as passenger traffic, berth occupancy, etc.

9.10 Public Key Infrastructure (PKI)

Must provide for the authentication of users and devices that are part of the PPA Harmony-PASS network using PKI. The PKI will enforce a zero-trust security environment to protect the PPA infrastructure and digital assets.

9.11 Identity Access Management (IAM)

The system should include an IAM tool to manage users accessing the PPA Harmony System.

9.12 Payment Channel Aggregation System

Must provide the secure and encrypted API-based payment channel management capabilities that enable secure connectivity with external payment gateway systems, banking systems, and electronic money issuer systems. It must feature the capability for a provenance-enforced, immutable, and automated disaggregation and direct remittance of payments to ensure that fare payments due private vessel operators are directly remitted to the private vessel operator's nominated back accounts, and to ensure that fees and payments due the Authority are likewise directly remitted to the nominated government depository account of the Authority. The provider must employ the highest level of industry security and standards, high availability, and support for the channel aggregation services.

9.13 Security and Threat Analytics Specifications

The bidder must ensure the security of the production systems (traffic, applications, and database systems). This must include vulnerability and penetration testing (VAPT), along with regular threat monitoring services to ensure the security of the system, throughout the contract period.

9.14 Service Kiosks

a. The in-terminal kiosk/s will allow passenger to book and purchase desired tickets, as well as enable customers to settle purchases using available electronic payment facilities. This implementation will cover the implementation of 25 kiosks distributed across 10 ports, as specified in Section 3.f of this TOR.

b. Kiosk must be transferrable to another site when the Authority so requires with no additional cost to PPA.

c. Kiosk systems must come with the following required components:

- Touch Screen
- Speaker
- QR Code Reader
- RFID Reader
- Paper Ticket Printer
- Paper of durable construction and resistant to fading.

The minimum required specifications of kiosks are indicated in the table below:

Item	Module Name	Qty	Specifications
1	Edge Computer	1	• Core i3 7100U Processor • SO-DIMM DDR4-2400, 8GB * 1 • RJ45 * 2 • SATA 2.5" SSD, SATA3, 3D TLC, 512GB * 1 • USB3.0 * 4 • RS232 * 4 • Win10 IoT
2	Touch Screen	1	• 21.5 inch • Pixels H x V: 1920 x 1080 • Response Time: 18ms • Contrast Ratio: 3000:1 • Video Connectors: • 1 x VGA HDDB-15 pin • 1 x DVI • 1 x HDMI • Touch-Screen Connector: 1x USB • Power Source: 12VDC • Dimensions : 500.4 x 297.0 x 47.8 mm
3	Speaker	1	• Output Power : 200W (P.M.P.O.) • Power : DC 5V • Response frequency : 120Hz~18KHz • Dimensions : (W)73x(H)73x(D)69mm

4	Uninterruptible Power Supply (UPS)	1	• Capacity : 800VA • Back-up Time : 18-35 min. • Input/Output : 220V ±5% • Frequency : 50 or 60 Hz ±10% (auto sensing)
5	Paper Ticket Printer (Printout Ticket)	1	• Instruction Set : Compatible with ESC / POS print instruction set. • Print speed : Max:250mm/s. • Paper rolls outer diameter / inner diameter: Max:150mm; min:18mm. • Power : DC24V/2A • Dimensions : 141.1*288.4*180.5mm
6	RFID Reader	1	• NFC Reader Protocol : SupportISO14443 type A/B • Operating Frequency : 13.56MHZBaud Rate : 115200bps • Supply Voltage : DC5V ±5%
7	Credit Card swipe machine	1	• Processor : 32-bit Secure Microprocessor running Linux based OS • Display : 2.4" Color TFT LCD |320x 240 Pixels • Magnetic Stripe : ISO7810,7811, 7813 Triple Track, Bi-Directional • User Card : ISO7816 ID-1 1.8V/3V/5V T=0, T=1Power Supply : DC5V/1A
8	QR Code Reader	1	• Image Sensor : 800x800 CMOS Illumination : White LED

			• Scan Modes : Sense Mode, Continuous Mode
9	Housing	1	• Stainless Steel Housing plus paint • Security Lock

9.15 Required Standard Reports

The system must provide a set of standard reports with features to enable users to create ad hoc or specialized reports with the feature capability to present a report in varied formats as required by the PPA. The reports that must come standard with the system as specified below:

9.15.1 Bill of Lading
9.15.2 Commercial Accounts Report
9.15.3 Freight/Cargo Consignment
9.15.4 Cargo Load List
9.15.5 Persons with Disability Report
9.15.6 Dangerous Goods
9.15.7 Cargo Manifest
9.15.8 Passenger Manifest
9.15.9 Reservation Liability Report
9.15.10 Other Income Report
9.15.11 Late Cancellation Report
9.15.12 Commercial Accounts/Agents Report
9.15.13 Expired Booking Report
9.15.14 Boarded Packages Report
9.15.15 Manual Price Audit Report
9.15.16 Daily Digital Payments Report
9.15.17 Account Journal Report

Additional tools should be provided for other PPA report, data mining and integration requirements. For the following purposes, the production data should be replicated to a dedicated report on-premise server located in the nominated Primary Data Center of the PPA:

- Queries and reports can be run without affecting the performance of the live system.
- Comparative reports can be created and re-used based on static points in time.
- Optimal performance in a management information environment.
- Exported data can be ported to third party applications or data warehouse for ongoing analyses.

9.16 HCI Server with the following minimum specifications:

9.16.1 Three (3) nodes with the following minimum requirements per node:

- Dual Processor, 12C 2.2GHz Processor
- 256GB memory-Tru DDR4
- Boot Drive 2 x M.2 480 GB
- 50TB usable storage capacity
- 4 x 1/10 GbE RJ-45
- Two Hot Swap power supply
- Rack mountable from with appropriate server rack
- With Systems Management
- Loaded with the Required Operating System/Software

9.16.2 10 KVA - Online - Uninterruptible Power Supply

9.17 Other Considerations

9.17.1 Provide complete reference materials to properly use the system, including Brochures, Training Manuals, Quick guides, technical manuals for the use of end-users and administrators.

9.17.2 Provide complete documentation and turn-over all administrator/root passwords and other account credentials, when necessary for complete and unencumbered access to the system, its services and related databases.

9.17.3 Documentation must be written in English of durable construction with concise and high-quality presentation.

9.17.4 Provide the list of hardware, network resources and application to be provided which will be required for the project.

9.17.5 Acquire from BIR the required registration for all machines as well as the accreditation for the Permit to Use computerized application/software which will be needed for the implementation of this project.

10. IMPLEMENTATION REQUIREMENTS

To safeguard the interests of the PPA, the winning bidder must comply with the conditions for implementation specified in this section.

10.1 Inspection and Tests:

10.1.1 The Philippine Ports Authority-Head Office shall have the right to inspect and/or test the software, equipment, and peripherals to confirm conformity with the Terms of Reference and Contract. The winning bidder shall furnish test equipment, instrumentation, personnel and supplies necessary to perform all testing. PPA-Head Office shall be given a five (5) working day notice prior to tests.

10.1.2 Burn-in tests will be conducted on the different IT Equipment which shall be delivered. It shall be series of hardware intensive tests for a period of 12 to 24 hours or more to determine defective component during the burn-in period.

10.2 Availability of Spare Parts: The winning bidder shall submit a photocopy of the certification of manufacturer guaranteeing the availability of all spare parts for the next ten (10) years to constitute compliance with the requirement under Section 25.2 of the Implementing Rules and Regulations (IRR) of Republic Act (RA) 9184

10.3 Duration: The total duration of the Technical Implementation Phase of the project must not exceed eight (8) months from the issuance of the Notice to Proceed (NTP).

10.4 Managed Services Duration: The total duration for the managed services will be five (5) years from the date of final delivery acceptance of the Technical Implementation Phase of the project.

10.5 Ownership and Confidentiality of Data

10.5.1 All data/information related to the ETMS Project shall be owned by the Philippine Ports Authority (PPA)

10.5.2 All data/information related to the development of the information system that may be shared by PPA in the course of evaluating the various modules, functions and features of the customized solution, shall remain confidential and shall not be copied, divulged, transmitted or shared in any way to third parties.

10.5.3 All required software/technology licenses purchased for the system solution shall be named under the Philippine Ports Authority.

10.5.4 The Winning bidder shall ensure that personal information recorded in the system shall be treated with confidentiality through a non-disclosure agreement.

10.5.5 The Winning bidder shall abide by the provisions stipulated in the Data Privacy Act.

10.6 Deployment Period:

The system must be deployed within the specified duration from the PPA's issuance of NTP, as follows:

Component	Deployment Period (in calendar days)
Fully Configured Cloud Infrastructure Environment, Installation and Setup of Foundational Software and Database Services and Components	NTP + 10 days

Component	Deployment Period (in calendar days)
Installed and Fully Functional ETMS and e-Ticketing Software System	NTP + 20 days
Fully configured, UAT-ready ETMS and e-Ticketing Software System	NTP + 40 days
Completed provisioning of API standard specifications to 15 Vessel Operators	NTP + 60 days
Configuration of Payment Aggregation Service and Integration to the PPA specified Third Party Payment Gateway system	NTP + 80 days
Completed Deployment and Training to five (5) initial major ports (inclusive of the delivery, setup, configuration, and testing of Kiosks)	NTP + 90 days
Fully configured the following data registries and data marts: Passenger Registry, Vessel Registry, Voyage Registry	NTP + 100 days
Security Hardened ETMS and e-Ticketing Software System	NTP + 120 days
Completed Deployment and Training to five (5) additional high traffic ports (inclusive of the delivery, setup, configuration, and testing of Kiosks)	NTP + 130 days
Fully Tested ETMS with Cloud based e-Ticketing Software System	NTP + 140 days

10.7 Deployment Organization

The deployment organization must consist of the following minimum project personnel:

10.7.1 Senior Project Manager

- 10+ years' experience in Project Management
- Manage cross-channel project process from strategy development to creative design, development, and implementation.
- Manage QA/QC of deliverables
- Ability to accurately scope a project, including effort and budget estimations, resourcing, dependencies, deliverables, exclusions, etc.
- Create and maintain project schedules, resource plans, budgets, risk plans, communication plans, etc. that accurately reflect the scope of work but also consider client expectations and business objectives.
- Conduct evaluations including lessons learned and preparation of any follow-on action recommendations as required.

- Deliver projects within scope and budget whilst ensuring the work is of the highest quality.
- Work with finance and account team to maintain costs tracking and revenue reconciliation reports.
- Identify, evaluate, and manage external partners as required to supplement internal skills or resource gaps.

10.7.2 Technical Software and Integration Lead

- 5+ years' experience in latest technical software integration concepts.
- Package, deploy and administer the software platform for a development, testing, validation, demonstration and operational purposes.
- Manage and maintain the platform infrastructures.
- Configure Cloud platform to meet the project requirements with cybersecurity implications identification.
- Gather requirements, design, code and test software components and/or their integration process as assigned by the Project Manager.
- Work in an agile, cross-functional team, actively engaging to support the success of the team.
- Solve complex technical integration problems and to work collaboratively with the rest of the team to build a shared approach consensus.

10.7.3 Senior Business Analyst and Training Specialist

- Gather requirements using interviews, document analysis, requirements workshops, surveys, site visits, business process descriptions, use cases, scenarios, business, and workflow analysis.
- Evaluate information gathered from multiple sources, reconcile conflicts, and decompose high-level information into details.
- Communicate and collaborate with external and internal customers to analyze information needs and functional requirements and deliver the following as needed: (Functional requirements - Business Requirements Document, Use Cases, and Interface designs).
- Work with users to define concepts and under direction of superior, execute plans and serves as the conduit between the customer community (internal and external customers) and the software development team.
- Develop requirements specifications according to standards and collaborate with developers and subject matter experts to establish the technical vision and analyze tradeoffs between usability and performance needs.

- Be the liaison between the business units, technology teams and support teams and provide training needs of the project.

10.7.4 Network and Hardware Engineer

- 5+ years' experience as Network/Hardware Engineer
- Maintain and control computer networks, peripherals and any computer environment related to configurations, hardware programs software, and structures software for the project.
- Troubleshoot, diagnose, and resolve problems, as well as implement and design network solutions related to the project.

10.7.5 Software Test Engineers

- 5+ years' experience as Software Test Engineer
- Configure, operate, and maintain the project's software including development, test, and live environment.
- Define, document, analyze, perform and interpret /configure onboarding requirements.
- Investigate and resolve operational problems in conjunction with other technical personnel.
- Identify and document software problems and support the design of a solution.
- Provide technical support and advice to other IT groups.
- Participate in the development, maintenance and refinement of internal quality control and reliability programs involved in the project.
- Define and implement test scripts and configure the system to be deployed for the project both in test and live environment.
- Document/update the configuration/installation documentation.
- Establish and maintain developmental and operational documentation for integration aspect of the project.
- Aid in the diagnosis and resolution of test anomalies to include system /network analysis and reconfiguration.
- Support field incident condition replication and resolution related to the system under test; generate user documentation for solution implementation or work around.
- Support the security accreditation efforts for the assigned system.

10.7.6 Software / Database Developer

- 10+ years' experience in software/database development
- Operational support on various databases. Knowledge and ability to support other infrastructure areas such as windows servers and storage is a must.
- Responsible for the implementation, configuration, maintenance, integration, and performance of critical RDBMS Databases related and integrated with the project.
- Manage configuration requirements, including adding new database instance and migrating database instance in the group.
- Database Performance Tuning and Optimization (PTO)
- Work with internal IT teams and external vendors in problem resolution.
- Support Infrastructure refresh, Audit and Cyber Security requirements for the project
- Perform routine work such as administering the daily backup jobs, restoration of backup data and monitoring of RDBMS scheduled jobs.
- Keep track of every incident and ensure proper follow-through with updates to the PPA's incident tracking system.
- Able to standby after normal office hours and go onsite to resolve any IT issues (if remote option is not viable).
- Share technical expertise and provide mentorship and cross-training to PPA IT Team.

10.7.7 Reports and Visualization Developer

- 5+ years' experience in reports and visualization development
- Strong reporting and visualization skills using recent business intelligence tools and those existing tools in PPA.
- Good conceptual knowledge on the Semantic Layer, BI Reports/Dashboards, Analytics and Data Science
- Sophisticated knowledge and extensive experience in writing standard query language.
- Excellent conceptual knowledge of Data Warehousing, Databases
- Create documentation and deliver training to business users on the use of developed tools to drive user adoption.

11. DELIVERABLE REQUIREMENTS AND SCHEDULE OF PAYMENTS

Payment which shall be made in Philippine Currency, shall be per milestone according to the following schedule:

Milestone	% on Contract Price
Site Preparation: For on-premise hardware to be installed, site preparation shall be performed by the project contractor in the location that will be specified in the Contract.	
Delivery of Project Inception Report	10.00%
Delivery of Detailed Project Implementation and Management Plan	1.00%
Delivery of Detailed Functional Use Cases and Workflow Specifications	1.00%
Delivery of Detailed Inventory of Software Components	0.25%
Delivery of Systems Architecture	1.00%
Delivery of Data Architecture and Complete ERD	1.00%
Delivery of Detailed Data Flow Design	1.00%
Delivery of Data Quality Management Design	1.00%
Delivery of Data Warehousing Design	1.00%
Delivery of Integration Architecture	1.00%
Delivery of Inventory of Reports and Visualization Artifacts	0.25%
Delivery of Private Vessel Operator Functional On-boarding Procedure, Methodology, and Plan	1.00%
Delivery of ETMS with e-Ticketing Functional Test Scripts	0.50%
Delivery of the Detailed Technical Support and Customer Help Desk Design	0.50%
Delivery of the Detailed Design of the API Web Service Endpoint for Private Vessel Operators	0.50%
Delivery of the Detailed Design of the Payment Aggregation Service	0.50%
Delivery of the Detailed Design of the API Web Service Endpoint for Payment Gateways	0.50%
Delivery of the Security, VAPT, and Threat Monitoring Design and Plan	0.50%
Delivery of the Full Technical Deployment Design	0.50%
Delivery of the Installed and Staging-Environment Configured Technology Infrastructure Environment and Associated Licenses/Subscriptions inclusive of: • Cloud IaaS • Virtual Machines • Storage • Middleware • Database • API Gateway • Electronic Terminal Management with Electronic Ticketing System	6.00%
Delivery and On-site Installation of 14 Internet Connected Kiosk Equipment	6.00%

Delivery and On-site Installation of 11 Internet Connected Kiosk Equipment	5.00%
Delivery of a Fully Tested and Operational Electronic Ticketing System	3.00%
Delivery of a Fully Tested Standard API Web Service Endpoint for Vessel Operators	3.00%
Delivery of a Fully Tested Standard API Web Service Endpoint for Payment Gateways	3.00%
Delivery of a Fully Operational Data Warehouse System	3.00%
Delivery of 15 PPA-Specified Reports and Fully Functional Reports and Visualization System	3.00%
Commissioning of 25 Kiosk Ticketing Systems	5.00%
Production Go-Live of Full System	10.00%
Completion of 1/10 Manage Services 6-month Period	2.00%
Completion of 2/10 Manage Services 6-month Period	2.00%
Completion of 3/10 Manage Services 6-month Period	2.00%
Completion of 4/10 Manage Services 6-month Period	2.00%
Completion of 5/10 Manage Services 6-month Period	2.00%
Completion of 6/10 Manage Services 6-month Period	2.00%
Completion of 7/10 Manage Services 6-month Period	2.00%
Completion of 8/10 Manage Services 6-month Period	2.00%
Completion of 9/10 Manage Services 6-month Period	2.00%
Completion of 10/10 Manage Services 6-month Period	2.00%
Completion of 5 Year Managed Service Period (end of 5th year)	10.00%

12. DELIVERY PERIOD (ACCEPTANCE AND TURN-OVER OF THE PROJECT)

ETMS is intended to service both the ticketing needs of private vessel operators and the data gathering, profiling, sharing, and monitoring requirements of PPA. To simplify the delivery acceptance process of this turnkey system and service, PPA shall ensure that the supplier has successfully delivered:

12.1 A secure, fully functional, and fully tested online ticketing system meeting the specifications as detailed in this TOR within the specified delivery period. The testing includes functional, integration, regression, and penetration testing.

12.2 A secure and fully tested standard API web service endpoint for use to connect a minimum of 15 private vessel operators.

12.3 A secure, fully configured, and tested payment aggregation system with the capability to automate the disaggregation of payment transactions and the ability to push disaggregated transactions to specific authorized settlement banks.

12.4 A secure and fully tested standard API web service endpoint connecting the electronic ticketing system (payment aggregation) to the payment gateway service of PPA.

12.5 A fully configured and operational data warehouse and repository that is accessible via a secure standard API web service endpoint.

12.6 A fully configured and operational reports and visualization system. This includes the creation of 15 additional reports (5 management reports, 5 regulatory reports, and 5 financial reports) as specified by PPA. This is exclusive of the standard reports that comes as part of the requirements of electronic ticketing system.

12.7 Has successfully installed 25 fully tested and operational kiosks across 10 terminal locations each site equipped with a minimum of 4 Mbps leased line internet broadband connection within the specified delivery period.

12.8 Upon completion of all the works covered under the eight (8) months Technical Implementation Phase, the project contractor shall turn over the project to PPA as completed for the issuance of the certificate of completion for the Technical Implementation Phase.

12.9 On the date indicated on the certificate of completion for the Technical Implementation Phase, the start of the effectivity of the five (5) year managed services phase shall commence.

12.10 Upon Completion of all works covered under the five (5) year managed services phase, the project contractor shall initiate and request for the issuance of the certificate of completion for the five (5) year managed services phase.

However, the delivery period may be extended, upon written request of the project contractor and upon written approval by PPA, in the event of unforeseen circumstances such as natural disaster, pandemic/epidemic, civil unrest, armed conflict (force majeure) that might occur during the project implementation and affect the progress in the completion of the project. The period of extension shall be in accordance with the actual condition and upon confirmation by PPA.

13. WARRANTY

13.1 The project contractor shall provide, post-production service and equipment warranty for all components of the system (covering all hardware and equipment) components as specified in this TOR, at no additional cost to government.

13.2 The project contractor shall ensure that all hardware equipment is covered by a replacement/maintenance agreement throughout the term of the contract.

13.3 The project contractor shall ensure that all subscriptions, licenses, and support agreement remain active throughout the duration of the contract.

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Department Manager, POSD

GERVACIO ALFREDO N. BALATBAT
Acting Department Manager, ICTD

MATRIX OF FUNCTIONAL SPECIFICATION
FOR POST QUALIFICATION (70%)

ANNEX A

1. Electronic Terminal Management System

BUSINESS REQTS (BRs)	FUNCTIONAL REQUIREMENTS (FRs)		AVAILABLE (Y/N)	F.R. No.
BR#1	Online			
	FR#1	Browser-based web application		1
	FR#2	Accessible via the internet anywhere, anytime as needed		2
	FR#3	Allows the user to make real-time look-up or update of data		3
BR#2	Secure			
	FR#1	Secure connections to data via the internet		4
	FR#2	Sensitive data is encrypted in accordance with data privacy policy.		5
	FR#3	Schema for internal and external data exchange with staging area repository for data access so there will be no direct access to PPA's computerized system to ensure application security, data protection, integrity and security.		6
BR#3	Mobile Device Compatible			
	FR#1	Must provide an Android and iOS native mobile application		7
BR#4	Inter-operable with Other Systems			
	FR#1	Must provide API interfaces with PPA's current systems as well as systems external to PPA like the Bureau of Customs, terminal operator systems, other third-party systems, etc.		8
BR#5	Modularity and Portability			
	FR#1	Modular systems so that modules can be activated or deactivated as needed		9
	FR#2	The system grows with PPA's operations so that data volume and system transactions are still supported over time without system performance suffering		10
	FR#3	Must provide for a backup network service to ensure continuous availability of connectivity		11
BR#6	Reports Configuration and Visualization			
	FR#1	Customizable reports that can be summarized or drilled down to detail level as needed		12
	FR#2	Filtering, sorting, and grouping options that allows the user to show as little or as much information as needed in a report		13
	FR#3	Supports highly customized or special ad hoc reports.		14
BR#7	Includes port/berth planning module			

MATRIX OF FUNCTIONAL SPECIFICATION
FOR POST QUALIFICATION (70%)

	FR#1	Interfaces with existing Vessel Traffic Management System (VTMS) and allows data input or interface with other existing systems to capture real-time movement of vessels.		15
	FR#2	Includes port map and berth information with allocation and scheduling that can be used during berthing meetings.		16
	FR#3	Interfaces with PPA's existing module of Notice of Arrival/Application for Berth and Anchorage (NOA/ABA) to capture vessel particulars and vessel arrival information that will be used for berth planning (e.g., Advanced vessel information with their measurements for berth planning, cargo information to estimate working time, etc.)		17
	FR#4	Facility for data input for berth/anchorage allocation which shall be available to shipping lines/stakeholders for real-time notification.		18
	FR#5	Interfaces with the sailing information module of the cloud-based ticketing system		19
BR#8	Includes gate information and ticketing module			
	FR#1	Captures and stores entrance and exit data of vehicles, pedestrians and cargo at the port gates.		20
	FR#2	Must have a facility to check in the system if vehicle, pedestrian and cargo is allowed for entry/release to/from the port.		21
	FR#3	Interfaces to a payment gateway and generates temporary gate pass cash tickets to be issued to clients		22
	FR#4	Integrates with defined government system repository through API where the data shall be stored and connects to PPA's existing operational and financial system.		23
	FR#5	Generates end-of-day sales and consolidated reports based on cash tickets issued for temporary gate pass ticket transactions.		24
	FR#5	Generates reports of cargo/vehicles and pedestrians which entered/exited through the gates.		25
BR#9	Interfaces to the PTB Operator's system			
	FR#1	Captures real-time information of passengers entering or exiting the Passenger Terminal Building (PTB) with interface to the Passenger Digital Identity of the cloud-based ticketing system and gate information and ticketing module.		26

MATRIX OF FUNCTIONAL SPECIFICATION
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	FR#2	Captures the name of passenger, age, gender and carrying vessel as well as the total Terminal Fee collected. This way, real time capture of data and information regarding passenger traffic will be easily recorded and transmitted to PPA higher management, including the early response to the request of some private and government entities.		27
	FR#3	Able to reconcile data from PTB Operator's System, Shipping Lines and other sources using analytics on the quality and correctness of information for real-time reconciliation of passenger embarking/disembarking.		28
BR#10	Integrates passenger/terminal ticketing module			
	FR#1	Integrates with the booking module of the unified electronic ticketing as specified in 9.2		29
	FR#2	Interfaces to a payment gateway and generates passenger/ terminal cash tickets to be issued to clients		30
	FR#3	Integrates with defined government system repository through API where the data shall be stored and connects to PPA's existing operational and financial system.		31
	FR#4	Generates end-of-day sales and consolidated reports based on cash tickets issued for passenger/terminal ticket transactions		32
BR#11	Captures and stores passenger's ticket information			
	FR#1	Interfaces with the shipping line's systems to capture the passenger manifest details needed: name of passenger, age and gender in order to obtain the needed passenger statistics of the total number of embarked/disembarked passengers, total passengers per age, and total passengers' gender.		33
BR#12	Integrates Roll-On/Roll-Off (RoRo) ticketing module			
	FR#1	Captures and stores RORO information needed for computation of charges/RoRo cash ticket		34
	FR#2	Interfaces to a payment gateway and generates RoRo cash tickets to be issued to clients		35
	FR#3	Integrates with defined government system repository through API where the data shall be stored and connects to PPA's existing operational and financial system.		36
	FR#4	Generates end-of-day sales and consolidated reports based on cash tickets issued for RoRo ticket transactions		37
BR#13	Integrates non-containerized cargo ticketing capability			
	FR#1	Captures and stores real-time cargo information needed for computation of charges of non-containerized cargoes.		38
	FR#2	Interfaces to a payment gateway and generates non-containerized cargo cash tickets to be issued to clients		39
	FR#3	Integrates with defined government system repository through API where the data shall be stored and connects		40

		to PPA's existing operational and financial system.		
	FR#4	Generates end-of-day sales and consolidated reports based on cash tickets issued for non-containerized cargo ticket transactions.		41
BR#14	Creates repository for relative location of cargo and vehicle within the port area.			
	FR#1	Maintains repository of vehicle and cargo's relative location within the port area.		42
	FR#2	Supports vehicle and cargo monitoring where PPA users can view the location details of cargo and vehicle within the port premises		43

2. Cloud-based Ticketing System

BUSINESS REQTS (BRs)	FUNCTIONAL REQUIREMENTS (FRs)			
BR#15	Electronic Booking			
	FR#1	multi-tenant, configurable and scalable solution that is fully responsive supporting use on any browser using any internet-connected endpoint device including mobile devices, tablets, desktop computers, as well as onsite kiosk machines.		44
	FR#2	support "widget logic" functionality, allowing blocks of content to appear only conditionally, based on criteria including aspects of the customers making the booking and the content they are looking to book.		45
	FR#3	Customer Login - The customer login for frequent travelers is available on all the booking pages.		46
	FR#4	Journey Booking – Must allow for journey booking that allow the listing of alternative departures and alternative prices in a best price overview that also allows the functionality to book passengers and vehicles (public utility and private).		47
	FR#5	Miscellaneous Journey-based items - Up-selling pages can be added to book on-board services such as meals and pre-purchased services on the journey.		48
	FR#6	Extras (Ashore Tickets – no Inventory) - Up-selling of simple services that are not connected to a journey can also be provided.		48
	FR#7	Pay for In-House Bookings - A log in feature using the booking number and a PIN code issued on the booking confirmation allows a passenger to pay for their booking in the web booking.		49

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	FR#8	Enter Group Names - This feature provides the possibility for a group leader to go online and enter the individual names for everyone in their party.		50
	FR#9	Create and Modify Customer Profile - A customer profile can be created as part of the booking process by checking a box in the customer information page and giving a password. Using the customer reference or email address and the password the customer can then update his personal information himself. There must be functionality for the recovery of lost password.		51
	FR#10	Save to Calendar - A booking can be saved to a calendar.		52
	FR#11	Tag Manager and E-Commerce Tracking – must include a tool for maintaining and configuring small snippets of code known as tags which need to be inserted into the web pages. Tags let you measure traffic and visitor behavior, understand the impact of online advertising and social channels, use remarketing and audience targeting, test and improve your site, and more.		53
	FR#12	Directions to Port – must provide the functionality to search for the route to a specific port and fetch the list of applicable departures from the port. The feature must be enabled with a standard maps API to calculate the directions and the time needed to arrive to the destination and it is possible to launch the maps application to start the navigation to the selected port.		54
	FR#13	Modify Booking, Including Remove Journey – must support the removal of a single journey from an existing booking without needing to go through the full booking flow to re-submit the changes. It must provide the functionality to select to remove a journey from the Booking Confirmation page and directly from the list of bookings generated.		55
	FR#14	Open Return Add-On – must provide a feature that enables the "Open Journey" option visible next to the return calendar.		56
	FR#15	Ashore Parking Module – must provide a feature that adds a parking booking to the customer's main booking.		57
BR16	Reservations and Ticketing			
	FR#1	must include booking and data administration functionality as well as routines and management of batch jobs.		58
	FR#2	Must have booking amendment and cancellation of any services that are available in the system.		59
	FR#3	Booking history, possibility to view who, when and how a booking has been changed as well as the possibility to roll back the booking to a previous version and to reinstate a cancelled booking.		60
	FR#4	Supports the feature of Waiting Lists and Standby Lists. Controls are provided to limit the number of waitlists that can be booked		61

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		against each of the primary on-board resource: Passengers, Vehicle and Cabins.		
	FR#5	New bookings are not permitted against resources that are waitlisted unless the available space exceeds the waitlist count.		62
	FR#6	Product configuration controls if waitlist or standby is available at the fare being booked and a unique sequence number is assigned for each booking at individual departure level.		63
	FR#7	Waitlist status can be applied at booking row or whole journey level if anyone of the required resources unavailable.		64
	FR#8	Deposit and Balance payments must support specific quotation, confirmation and chaser documents which can be customized		65
	FR#9	Multiple payments, in different currencies, using different payment types, can be registered to a booking and there is also support for deposits and balancing transactions.		66
	FR#10	Payment types must support the applicable validation routines: (Cash, Credit, Debit and Charge Cards, Invoices, or Vouchers).		67
	FR#11	Integrated cash reconciliation including routines for cashier statements and cashier reporting.		68
	FR#12	Printing of documents must support in-house and at-home printing of PDF format documents (tickets or reservations).		69
	FR#13	Routines can be scheduled to update and adjust information in the system. Amongst others the following routines are configured based on business rules: • Set Departure Status for Booking and Check-in • No show routine • Auto-cancellation routine • Accounting routine • Housekeeping routines • Invoicing or Statement of Account generation must be automated to produce invoices to print or send out as PDF files in emails based on the invoice settings on each credit customer.		70
	FR#14	Booking and Inventory Control for Passenger Traffic – must have the functionality for booking of passengers, including registration of passenger names and details, which can be made mandatory or optional based on route settings. Passenger types are user defined along with qualifying ages which may differ on a route-by-route basis with automatic assignment to generic Adult, Child and Infant classifications for Manifests and Port Reports. Full contact details for phone, postal mail, email and mobile phone are collected for each booking or maybe imported from the Customer Register.		71
	FR#15	Must provide features for the use of dynamic booking templates to aid efficiency in the Port at the time of departure where similar bookings are required on a repetitive basis.		72

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	FR#16	Booking and Inventory Control for Passenger Vehicle Traffic – Must provide features for vehicle booking to include recording of vehicle sizes, license plate details, country of registration and driver name which can be selected from a list drawn from the Passenger name list. Must provide features that enable vehicle pricing using parameters such as per unit or a combination of length, width and weight.		73
	FR#17	Booking and Inventory Control for Assigned Cabins - Functionality for booking cabins including the assignment of individual passenger names to their respective accommodations.		74
	FR#18	Cabin types and numbering sequences are defined by the user along with occupancy levels, features and facilities. Adjoining and adjacent cabin logic is supported along with controls limiting which cabins are suitable for cots and the number that can be accommodated.		75
	FR#19	Cabin assignment can be run as a pre-departure routine or in real time during the booking process. Gender based sharing is fully supported and rules can be configured.		76
	FR#20	Booking and Inventory Control for Assigned Seating - Functionality for booking sleeper seats including the assignment of individual passenger names to their respective seat.		77
	FR#21	Seat assignment can be run as a pre-departure routine or in real time during the booking process.		78
	FR#22	Seats can be defined for both graphical and list-based selection during the booking process if pre-assigned seating is required.		79
	FR#23	Pricing can be varied based on the location and desirability of the seat in order to generate additional revenues.		80
	FR#24	Access to premier areas of the vessel can also be inventory controlled with the added feature of being able to have magnetic, barcoded or RFID access cards generated in order to control physical access.		81
	FR#25	Template Booking – This feature makes it possible to create booking templates to be used for quick booking. By using a Booking Template, the User can create new bookings with pre-defined values. The booking template can consist of one or more departures.		82
	FR#26	Freight and Commercial Vehicle Booking - Trucks, lorries and freight units can be booked by dimensions, keep license plate and unit ID details, country of registration as well as driver name. Unit pricing can be per unit or a combination of length, width and weight. Supplements and charges can be added based on length or weight. A Commercial Vehicle Register fulfils a similar role for freight bookings where regularly shipped units can be setup along with their characteristics. Information about shipper, transporter and consignee can be registered as well as cargo content and custom classes. Also, hazardous goods can be		83

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		set up and a request for shipment process for Dangerous cargo can be managed.		
	FR#27	Dangerous Goods (IMDG) - Must support IMDG codes (i.e., "International Maritime Dangerous Goods codes") in the Cargo booking form when defining hazardous goods loaded on a cargo vehicle.		84
	FR#28	Cargo Content and Customs Codes – Must provide a feature that enables the PPA to define Customs Codes in the Cargo booking form.		85
	FR#29	Yielding - The reservation module supports multiple Pricing Models which can be linked to Yield 'Buckets' to support revenue management strategies if required. Dynamic or Fluid Pricing where the price varies based on the current booked load and/or the time remaining to departure can be combined within a revenue management structure or deployed independently based on operator preferences and market conditions.		86
	FR#30	The ticketing module must be designed to make the ticket sales process for new passengers not to exceed 10 minutes and for returning passengers, not to exceed 5 minutes. The user experience must feature functions that enable anyone with sales experience to sell tickets or guide new users through the ticketing process.		87
	FR#31	Journeys - Multiple journeys can be sold from the same ticket office and you can control how much of the schedule that can be made available for sales.		88
	FR#32	Multi-leg Journeys - If a journey has several stops, the alternative ports should be presented as options. • Open outward, open return - Tickets can be sold with no connection to a particular sailing, only connected to a certain route. These tickets take no capacity, until they are either changed to a fixed journey or scanned to at the gangway to a particular departure. • Multiple tickets on one payment – Users can create multiple bookings in one go. All bookings can be paid for in one transaction.		89
	FR#33	Ticketing Cloning – Allows users to clone a ticket (frequently booked voyages) in the shopping basket. An identical booking then gets added to the shopping basket.		90
	FR#34	Retrieving existing bookings - Allows users to retrieve an existing ticket or booking by entering a booking number. The booking details should be shown in a popup where you can check-in or cancel the booking.		91

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	FR#35	Validating e-tickets and ticket books - The ticketing module must have the capability to scan a QR code on a printed ticket or on via a mobile phone.		92
BR17	Sailing Information			
	FR#1	Location settings - For each location or port, you should be able to configure what information is displayed and how many departures and arrivals to be visible. Several screens can show the same information at the same location.		93
	FR#2	Departure Information - The departure information from the reservation system lists all sailings and scheduled times. You can add expected departure times which will, if later than scheduled time, display a delay in the departure information on the information screens. You can also display if a sailing is cancelled and any type of messages you would like to display together with the arrival or departure information.		94
	FR#3	Integration - The port information module should be fully web-based to have the ability to integrate in several mode of displays including passengers' own devices.		95
BR18	Back-Office Administration			
	FR#1	Data Registry, Product Brochure or Catalog - A container for a set of data registries and products set by the administrator.		96
	FR#2	Integration - The port information module should be fully web-based to have the ability to integrate in several mode of displays including passengers' own devices.		97
	FR#3	Package Rules – this feature makes it possible to define whether the booked Product(s) should be booked as a Package by defining a Package Rule on the Product. A Package can include both journey and ashore services.		98
	FR#4	Pax Included Rules - The Pax included rule is used to limit the allowed number of passengers to be booked as included in a vehicle when booking a Product where the Pax included rule is defined. The Pax included rule consists of two tabs, Pax included rule and Pax included definitions.		99
	FR#5	Product Type - The Products to be sold in the booking form allows products to be divided into different Product Groups (Product Types). One or several Product Types can be applied to an existing Product. The Product Type definitions can be used as a target marked segment and does not fulfil any other function in the system. Product Type is also included in some reports. When searching for Products, either in the booking form or in the Product Definition form, it is possible to search by Product.		100

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	FR#6	User Group Rule - All Users in the system must belong to different User Groups. It is possible to define a User Group Rule on a Product to limit the User Groups allowed to book the Product. Only Users belonging to a User Group included in the User Group Rule will be able to use the Product. It is possible to limit the allowed User Groups further by defining rules for when the Product is possible to book or amend.		101
	FR#7	Insurance Rule - By applying a Product Insurance Rule on the Product, administrators can limit the possible Insurance Categories when booking a Product. It is possible to book the Product without selling any Insurance. If the Product does not have an Insurance Rule defined, any Insurance Category can be booked and no validation against booked quantity will be done.		102
	FR#8	Amendment Free Rule – Makes it possible to define an Amendment fee rule to be triggered when changing a booking. The Amendment fee rule can be configured to only be triggered if the value of the journey or the booked Category Group (or both) decreases. A separate Category should be used as Amendment fee. The Category Group must be connected to Module M and the checkbox "Extras" should be ticked. The Category should have checkbox "Fee" ticked in the Category structure, indicating that this Category is to be used as a fee. Categories defined as Fee will be available to choose in the Amendment fee rule form. The Amendment fee is calculated when the booking is saved. Cancellation (i.e., delete) of one journey can trigger an amendment fee calculation but the fee will be calculated from the Cancellation rule stated in the Amendment fee.		103
	FR#9	Ashore Rule - An Ashore Rule for the Product, makes it possible to define which services (hotels, restaurants, tourist venues, etc.) are allowed to be booked with the active Product and to specify whether certain Category is mandatory or not allowed.		104
	FR#10	Cancellation Rule - The system will display a message when cancelling the booking, telling the User how much the cancellation fee would be charged. The User can either proceed with the cancellation or choose to return to the booking.		105
	FR#11	Category Rule - The Product Category Rule can be used to limit which Categories and combinations of Categories that can be booked when using a Product where the Category Rule is defined.		106
	FR#12	Discount Rule - It is possible to attach a Discount rule to a Product. This rule can be used for example as an "Early Booking Discount" or special discount when booking through internet.		107

		The Discount rule is also used to calculate rebate when using a Promotion Code in the booking. Discount Rules can also be configured as Each N Free (for example "Buy one, Get one for free"). When the User books a Product where Discount rule is defined, the system will alert the User that a discount can be triggered, the text "DISCOUNT" is displayed in the booking price/booking balance field.		
	FR#13	Price Rule - Price Rules must be defined for the Product for the pricing procedure to collect the prices when creating bookings. When a Product is linked to a certain Price Rule, the Price Rule controls the Price Groups to be concerned when booking a Product for a specific period. The actual Category prices are defined in the Price Groups, and Price Group(s) should be connected to the Price Rule.		108
	FR#14	Product Price Group - By assigning a Product Price Group on a Product, it is possible to override the ordinary prices for the Product for a specific departure only.		109
	FR#15	Promotion Rule - The Product Promotion Rule is an exception rule which can be defined on Product to limit the promotions available on that Product.		110
	FR#16	Supplement Rule - A Supplement rule can be defined on a Product to make it possible to add for example Port Fees, Taxes or other Booking Fees to a booking without using booking attachments. The Supplements work in a similar way as booking attachments but are attached to a Product by using the Product Supplement Rule. It is also possible to define Booking Attachment(s) to be added to the Supplement category. Dynamic Supplements (calculated as % or amount based on booked items) must support on Journey level. When verifying Discount Rule and/or Supplement Rule, the system will first check for a definition where both Agent and Customer exist. Both must exist in the booking for the definition to apply, otherwise the system will continue to search for the next best match.		111
	FR#17	Journey Definition Rule - The Journey Definition Rule can be used to limit available departures for a certain Product. When defining a Journey Definition Rule, the Vehicle Type controls the outbound definition rule. If the same Journey Definition Rule should apply for more than one Vehicle Type (for example both HI Speed and M/S), separate rows must be defined for all Vehicle Types.		112

MATRIX OF FUNCTIONAL SPECIFICATION
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	FR#18	Yield Rule - It is possible to limit capacity for certain Categories by using the Yield function. Yield Groups and Yield Capacity must be set up, and a Yield Rule should be defined on the Product. When booking this Product, Yield Capacity will be reduced. The Product can be booked only if there is Yield Capacity available.		113
	FR#19	Currency Rule - It is possible to limit a Product to be sold using a single currency or multiple currencies.		114
	FR#20	Deposit Rule - The Deposit fee rule enables the system to calculate deposit fees as well as deposit and final payment with separate due dates.		115
	FR#21	Document Rules – must allow the attachment files in the e-mail depending on the booked Product(s) by defining a Document Rule on the Product. The documents to be attached are defined in the Document Rule form.		116
	FR#22	Price Print Rule - By defining a Price Print rule on a Product, individual row prices can be hidden on some confirmation layouts and grouped package prices will be displayed instead.		117
	FR#23	Agent Rule - The agent rule is used to limit the sale to certain agents. A Product limited by an Agent rule will not be displayed in the Product Search form for an Agent not included in the Agent Rule.		118
BR#19	Ancillary Features			
	FR#1	Booking Attachments - The Booking Attachments are used for defining rules for booking rows that should be created automatically by the system when a booking row with a certain Category combination is booked. The automatically generated rows will be connected to the row that triggered their creation.		120
	FR#2	Multilingual document support (Translations of predefined texts) - Text translations are used as labels in different documents, mostly when reports are created in the system. The standard reports that can be printed from within many of the Registry Maintenance forms are built up by these miscellaneous texts.		121
	FR#3	Blacklist – This feature allows administrators to flag unwanted guests to a blacklist either indefinitely or for a limited time to stop them from creating new bookings. Bookings and name list entries in bookings must be compared to the blacklist when they are created, modified, and during payment and check-in. Users must be able to configure email alerts to a supervisor when blacklisted guests try to book.		122

MATRIX OF FUNCTIONAL SPECIFICATION
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	FR#4	Automatic Booking Transfer - The Automatic Booking Transfer moves bookings from one departure to another. When bookings are transferred, it is possible to compose an information message to be sent as SMS and/or e-mail in different languages to customers booked on a specific departure.		123
	FR#5	Crew Management – This feature allows administrators to create, manage, and administer Crew member information.		124
BR#20	Passenger Digital Identity			
	FR#1	The system must have a module that will establish the digital identity of the passenger when using self-service booking. The digital identity should be verifiable during booking. The digital identity can be applied by the customer online and may be supplemented by physical valid government IDs.		125
BR#21	Authentication, Verification, and Digital Vaulting-			
	FR#1	The system must be integrated to a platform for authenticating all documents that are produced by the system. The authenticated documents should be verifiable.		126
BR#22	Integration			
	FR#1	The system must be capable of integrating via APIs with third-party or external systems as may be required by PPA. The secure API system must be cloud-based.		127
	FR#2	The system must be capable of interfacing with PPA's computerized accounting system for the reporting of collection and remittance.		128
	FR#3	The system must be capable of interfacing with PPA's existing application used in port operations to capture relevant data such as passenger traffic, berth occupancy, etc.		129
BR#23	Public Key Infrastructure (PKI)			
	FR#1	Must provide for the authentication of users and devices that are part of the PPA Harmony-PASS network using PKI. The PKI will enforce a zero-trust security environment to protect the PPA infrastructure and digital assets.		130
BR#24	Identity Access Management (IAM)			
	FR#1	The system should include an IAM tool to manage users accessing the PPA Harmony System.		131
BR#25	Payment Channel Aggregation System			

MATRIX OF FUNCTIONAL SPECIFICATION
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	FR#1	Must provide the secure and encrypted API-based payment channel management capabilities that enable secure connectivity with external payment gateway systems, banking systems, and electronic money issuer systems.		132
	FR#2	It must feature the capability for a provenance-enforced, immutable, and automated disaggregation and direct remittance of payments to ensure that fare payments due private vessel operators are directly remitted to the private vessel operator's nominated back accounts, and to ensure that fees and payments due the Authority are likewise directly remitted to the nominated government depository account of the Authority.		133
	FR#3	The provider must employ the highest level of industry security and standards, high availability, and support for the channel aggregation services.		134
BR#25	Security and Threat Analytics Specifications			
	FR#1	The bidder must ensure the security of the production systems (traffic, applications, and database systems).		135
	FR#2	Must include vulnerability and penetration testing (VAPT), along with regular threat monitoring services to ensure the security of the system, throughout the contract period.		136
	Note: This must be specified in the bidder's technical documentation			
BR#26	Service Kiosks			
	FR#1	The in-terminal kiosk/s will allow passenger to book and purchase desired tickets, as well as enable customers to settle purchases using available electronic payment facilities. This implementation will cover the implementation of 25 kiosks distributed across 10 ports, as specified in Section 3.f of this TOR.		137
	FR#2	Kiosk must be transferrable to another site when the Authority so requires with no additional cost to PPA.		138
	FR#3	Kiosk systems must come with the following required components: • Touch Screen • Speaker • QR Code Reader • RFID Reader • Paper Ticket Printer • Paper of durable construction and resistant to fading.		139
	Note: This must be specified in the bidder's technical documentation			

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BR#27	Required Standard Reports			
	FR#1	The system must provide a set of standard reports with features to enable users to create ad hoc or specialized reports with the capability to present a report in varied formats as required by the PPA.		140
	FR#2	Additional tools should be provided for other PPA reports, data mining and integration requirements.		141
		TOTAL RATING (TR) (No. of available FR)		
		PERCENTILE RATING (PR)= Available FR/141*100		

Section VIII. Checklist of Technical and Financial Documents

Checklist of Technical and Financial Documents

I. TECHNICAL COMPONENT ENVELOPE

Class "A" Documents

Legal Documents

☐ (a) Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages);
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.

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.

Other documentary requirements under RA No. 9184 (as applicable)

☐ (n) *[For foreign bidders claiming by reason of their country's extension of reciprocal rights to Filipinos]* Certification from the relevant government office of their country stating that Filipinos are allowed to participate in government procurement activities for the same item or product.

☐ (o) Certification from the DTI if the Bidder claims preference as a Domestic Bidder or Domestic Entity.

25 FINANCIAL COMPONENT ENVELOPE

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

☐ (b) Original of duly signed and accomplished Price Schedule(s).

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

BID FORM

Date : _____
Project Identification No. : _____

To: [name and address of Procuring Entity]

Having examined the Philippine Bidding Documents (PBDs) including the Supplemental or Bid Bulletin Numbers [insert numbers], the receipt of which is hereby duly acknowledged, we, the undersigned, offer to [supply/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.

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: _____

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

For Goods Offered from Abroad

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

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

Name: _____

Legal Capacity: _____

Signature: _____

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

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

For Goods Offered from Within the Philippines

Name of Bidder _____ Project ID No._____ Page ___of___

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

Name: _____

Legal Capacity: _____

Signature: _____

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

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]

Contract Agreement Form for the Procurement of Goods (Revised)
[Not required to be submitted with the Bid, but it shall be submitted within ten (10) days after receiving the Notice of Award]

CONTRACT AGREEMENT

THIS AGREEMENT made the _____ day of _____ 20_____ between [name of PROCURING ENTITY] of the Philippines (hereinafter called "the Entity") of the one part and [name of Supplier] of [city and country of Supplier] (hereinafter called "the Supplier") of the other part;

WHEREAS, the Entity invited Bids for certain goods and ancillary services, particularly [brief description of goods and services] and has accepted a Bid by the Supplier for the supply of those goods and services in the sum of [contract price in words and figures in specified currency] (hereinafter called "the Contract Price").

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.

2. The following documents as required by the 2016 revised Implementing Rules and Regulations of Republic Act No. 9184 shall be deemed to form and be read and construed as integral part of this Agreement, viz.:

   i. Philippine Bidding Documents (PBDs);
      i. Schedule of Requirements;
      ii. Technical Specifications;
      iii. General and Special Conditions of Contract; and
      iv. Supplemental or Bid Bulletins, if any

   ii. Winning bidder's bid, including the Eligibility requirements, Technical and Financial Proposals, and all other documents or statements submitted;

      Bid form, including all the documents/statements contained in the Bidder's bidding envelopes, as annexes, and all other documents 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;

   iii. Performance Security;

   iv. Notice of Award of Contract; and the Bidder's conforme thereto; and

   v. Other contract documents that may be required by existing laws and/or the Procuring Entity concerned in the PBDs. Winning bidder agrees that additional contract documents or information prescribed by the GPPB that are subsequently required for submission after the contract execution, such

as the Notice to Proceed, Variation Orders, and Warranty Security, shall likewise form part of the Contract.

3. In consideration for the sum of [total contract price in words and figures] or such other sums as may be ascertained, [Named of the bidder] agrees to [state the object of the contract] in accordance with his/her/its Bid.

4. The [Name of the procuring entity] agrees to pay the above-mentioned sum in accordance with the terms of the Bidding.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of the Republic of the Philippines on the day and year first above written.

[Insert Name and Signature]	[Insert Name and Signature]
[Insert Signatory's Legal Capacity]	[Insert Signatory's Legal Capacity]
for:	for:
[Insert Procuring Entity]	[Insert Name of Supplier]

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

Omnibus Sworn Statement (Revised)
[shall be submitted with the Bid]

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]

Performance Securing Declaration (Revised)
[if used as an alternative performance security but it is not required to be submitted with the Bid, as it shall be submitted within ten (10) days after receiving the Notice of Award]

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

PERFORMANCE SECURING DECLARATION

Invitation to Bid: [Insert Reference Number indicated in the Bidding Documents]

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

I/We, the undersigned, declare that:

1. I/We understand that, according to your conditions, to guarantee the faithful performance by the supplier/distributor/manufacturer/contractor/consultant of its obligations under the Contract, I/we shall submit a Performance Securing Declaration within a maximum period of ten (10) calendar days from the receipt of the Notice of Award prior to the signing of the Contract.

2. I/We accept that: I/we will be automatically disqualified from bidding for any procurement contract with any procuring entity for a period of one (1) year for the first offense, or two (2) years for the second offense, upon receipt of your Blacklisting Order if I/We have violated my/our obligations under the Contract;

3. I/We understand that this Performance Securing Declaration shall cease to be valid upon:

    a. issuance by the Procuring Entity of the Certificate of Final Acceptance, subject to the following conditions:
        i. Procuring Entity has no claims filed against the contract awardee;
        ii. It has no claims for labor and materials filed against the contractor; and
        iii. Other terms of the contract; or

    b. replacement by the winning bidder of the submitted PSD with a performance security in any of the prescribed forms under Section 39.2 of the 2016 revised IRR of RA No. 9184 as required by the end-user.

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]

NET FINANCIAL CONTRACTING CAPACITY (NFFC) COMPUTATION

A. The values of the bidder's current assets and current liabilities shall be based on the data submitted to the BIR, through its Electronic Filing and Payment System (EFPS).

		Year 20
1.	Total Assets	
2.	Current Assets	
3.	Total Liabilities	
4.	Current Liabilities	
5.	Net Worth (1-3)	
6.	Net Working Capital (2-4)	

B. The Net Financial Contracting Capacity (NFCC) based on the above data is computed as follows:

NFCC = [(Current asset minus current liabilities) (15)] minus the value of all outstanding or uncompleted portions of the projects under ongoing contracts, including awarded contracts yet to be started, coinciding with the contract to be bid

NFCC = Php _____

K = 15

Herewith attached are certified true copies of the income tax return and audited financial statement: stamped "RECEIVED" by the BIR or BIR authorized collecting agent for the immediately preceding year.

Submitted by:

_____
Name of Supplier/Distributor/Manufacturer

_____
Signature of Authorized Representative

STATEMENT OF THE BIDDER'S ONGOING GOVERNMENT AND PRIVATE CONTRACTS, INCLUDING CONTRACTS AWARDED BUT NOT YET STARTED

This is to certify that _____ has the following ongoing government and private contracts, including contracts awarded but not yet started:

NAME OF THE CONTRACT	DATE OF THE CONTRACT	CONTRACT DURATION	OWNER'S NAME & ADDRESS	KINDS OF GOODS/SERVICES DELIVERED	AMOUNT OF CONTRACT	VALUE OF OUTSTANDING CONTRACT	DATE OF DELIVERY

*PROOF OF CONTRACT TO BE PRESENTED AT POST-QUALIFICATION.

_____ _____

Name and Signature of Authorized Representative Date

STATEMENT OF THE BIDDER'S SINGLE LARGEST COMPLETED CONTRACT (SLCC) SIMILAR TO THE CONTRACT TO BE BID

This is to certify that _____ has completed the following:

NAME OF THE CONTRACT	DATE OF THE CONTRACT	CONTRACT DURATION	OWNER'S NAME & ADDRESS	KINDS OF GOODS	AMOUNT OF COMPLETED CONTRACT/S	DATE OF DELIVERY	END USER'S ACCEPTANCE OR OFFICIAL RECEIPT(S) OR SALES INVOICE ISSUED FOR THE CONTRACT*

*TO BE ATTACHED TO THE STATEMENT

_____
Name and Signature of Authorized Representative

_____
Date