

**TERMS OF REFERENCE**  
**FOR THE**  
**CONSULTANCY SERVICES FOR THE POST-IMPLEMENTATION PHASE OF THE**  
**PPA MIS COMPUTERIZATION PROJECT**

**1. PROJECT BACKGROUND**

1.1 The Contract for the PPA MIS Computerization Project expired last 31 August 2009. However, the Project was accepted on June 13, 2012. After PPA acceptance, the services of the project contractor was available for one (1) year covering the Warranty Period. The following application components were turned-over to PPA:

- Port Operations Management System
- Records Management System
- Legal Support Services System
- Real Estate Management System
- Accounting and Financial Management System
- Port Engineering Management System
- e-Procurement (ePROC) System
- Executive Information System

1.2 After the expiration of the Contract, PPA began to hire the services of individual consultant for the maintenance of its MIS Computerization Project. However, because of the implementation of the PPA Rationalization Plan, a moratorium on the hiring of individual consultants was implemented.

1.3 With the letter of the Governance Commission for GOCCs (GCG) dated 12 December 2014, PPA was authorized to hire highly technical IT Consultants limited to the positions that were hired in the past years. The GCG authorization was issued on the basis of the following:

1.3.1 The exigencies of PPA's port and administration operations nationwide require that its computerized system operates 24 hours a day 7 days a week.

1.3.2 There are no equivalent plantilla positions for the highly technical positions required, despite the Rationalization Plan.

1.3.3 The hiring of consultants on a contractual basis is more cost efficient to PPA as opposed to the extension of the Maintenance Contract Agreement with PPA's MIS Developer (Unisys).





1.3.4 The hiring of the IT Consultants would foster increased transparency, efficient transactions and increased financial gains for PPA.

1.4 Areas that need the services of IT experts are on: hardware, operating systems, server software, databases as well as matters relating to business implementation and support aspect of the computerized system

1.5 The required qualifications and/or skills of the Consultants are presented in the tables below. The bidder must accomplish the table and submit certification/documents attesting to the veracity of the responses and that support the procession of qualifications.

**1.5.1 APPLICATIONS EXPERT**

Parameter/Qualifications	Indicate COMPLIANT or NON-COMPLIANT
1. At least Seven (7) years' actual experience in development of an integrated computerized port system (i.e. composed of systems on port operations, finance, engineering, real estate management, records management, executive information system)	
2. A total of Ten (10) years' actual experience in Data Migration in Oracle Database and SQL Server:	
3. At Least Ten (10) years' actual experience in Oracle Programming	
4. A total of Four (4) years' actual experience in Managing Oracle Financials and Oracle projects	
5. A total of Ten (10) years' actual experience in SQL, PL/SQL and T-SQL	
6. At Least Five (5) years' actual experience in Data Warehousing (Data Marts and ETL)	
Signature Over Printed Name of Bidding Expert	

**1.5.2 DBA FOR ORACLE FINANCIAL EXPERT**

Parameter/Qualifications	Indicate COMPLIANT or NON-COMPLIANT
1. At least Seven (7) years' actual system implementation experience as Oracle DBA with a client engaged in port-related services	
2. A total of Five (5) years' Experience in setting-up and upgrading Databases for Oracle Application Release 11 and Release 12 in Linux Environment	





3. A total of Five (5) years' Experience in Oracle Application performance fine tuning, thru.	
3.1 Load balancing using Oracle Webcache	
3.2 Fail over on High Availability Cluster Multi-Processing implementation	
3.3 Parallel Concurrent Processing on Multi-node configuration	
4. A total of Five (5) years' Experience Oracle application design and implementation in a clustered environment, for Object Identifiers, Single Sign-on, Service Oriented-Architecture and Enterprise Resource Planning (Release 11 and Release 12)	
Signature Over Printed Name of Bidding Expert	

**1.5.3 SYSTEMS PERFORMANCE EXPERT- JAVA EXPERT**

Parameter/Qualifications	Indicate COMPLIANT or NON-COMPLIANT
1. A total of Five (5) years' experience in the application development using Java language, both Enterprise and Standard Editions	
2. At least a total of Three (3) years' experience in report development using the following application software:	
2.1 iReport	
2.2 Eclipse	
3. At Least Four (4) years' actual experience in Oracle Programming	
4. Knowledge on Oracle AFMS R12 interfaced with the Port Community customized Invoicing and Receipting	
Signature Over Printed Name of Bidding Expert	

**1.5.4 IMPLEMENTATION AND SUPPORT EXPERT - C# .Net EXPERT**

Parameter/Qualifications	Indicate COMPLIANT or NON-COMPLIANT
1. A total of Ten (10) years' experience in software and web development and design using C# .Net Application Tool	





2. At least three (3) years' actual experience in the development and implementation of applications with government regulatory requirements such as Electronic Procurement based on the Revised IRR RA 9184	
3. At least five (5) years' experience as Implementation Support personnel in the port community	
Signature Over Printed Name of Bidding Expert	

**1.5.5 SYSTEMS PERFORMANCE EXPERT - ORACLE FORMS AND REPORTS EXPERT**

Parameter/Qualifications	Indicate COMPLIANT or NON-COMPLIANT
1. A Total of Three (3) years' experience in the application development using Oracle Forms and Reports based on Oracle Financials R12 application	
2. At least two (2) years' experience in development of applications with government regulatory requirements such as National Government Accounting System (NGAS)/ BIR Regulations/ Electronic Procurement using Oracle Reports based on Oracle Financial Application	
3. At least three (3) years' experience on setting up Oracle Financials R12 application for the port community	
4. At least five (5) years' experience in system presentation and trainings	
Signature Over Printed Name of Bidding Expert	

**1.5.6 TECHNICAL (IT NETWORK) EXPERT**

Parameter/Qualifications	Indicate COMPLIANT or NON-COMPLIANT
1. A total of Five (5) years' actual systems development experience with a client engaged in port-related services having multi-port systems, as follows:	
1.1 Port Operations Management	
1.2 Port Real Estate Management	





1.3 Port Engineering Projects Management	
1.4 Port Accounting and Financial Management	
1.5 eProcurement	
1.6 Executive Information System	
2. A total of Five (5) years' Experience in Server Hardware and Operating Systems	
2.1 IBM X-series (Intel-based) Server	
2.2 Windows 2000 Advanced Server	
2.3 Windows 2003 Enterprise Edition	
2.4 Red Hat Linux 4.0	
3. A total of Five (5) years' experience in Database and DB Management	
3.1 MS SQL Server 2000	
3.2 Oracle 10g	
3.3 Oracle Enterprise Manager (EM)	
3.4 Oracle Enterprise R12 (EBS)	
3.5 Oracle RAC and ASM	
4. A total of Five (5) years' experience in Server Applications:	
4.1 Websphere Application Server Advanced Edition 4.0.7	
4.2 Hummingbird Server DM	
4.3 Crystal Enterprise	
5. A total of Five (5) years' experience in Network Monitoring and Security Tools/Software:	
5.1 Symantec Norton Anti-Virus/ e-Scan	
5.2 Visualis (Network Monitoring Software)	
5.3 Patrol (Database Monitoring System)	
5.4 CISCO Wide Area Application Services 4.1	
5.5 CISCO Works LMS 3.1	
5.6 CISCO Call Manager, Cisco IP Phones, CISCO Unity	
Signature Over Printed Name of Bidding Expert	



1.6 All applicants shall submit the following documents stated below:

1.6.1 Certification of Registration (BIR Form no. 2303)

1.6.2 Sworn statement of the applicant that there is no existing contract which prohibits him to apply for the position.

## **2. PROJECT DESCRIPTION**

### **2.1 Project Duration**

The services of the Consultants shall cover a period of Six (6) months, renewable, subject to end-users' recommendation and PPA approval.

### **2.2 Project Scope**

The services to be rendered shall cover the systems identified in Section 1.1 hereof and for all PPA sites composed of the Head Office, twenty-six (26) PMOs and the terminals under their jurisdiction, including MICT under PMO NCR.

## **3. OBJECTIVE**

The main objective of the project is for PPA to maintain its existing applications. Specifically, the following are intended:

- To provide any corrective measures
- To implement any system changes due to policy change
- To improve system performance
- To enable business and technical users to acquire sufficient knowledge and level of expertise in the application and use of the different systems
- To equip the technical personnel with knowledge and in the use and maintenance of the Central Facility resources – servers/equipment, operating systems, databases and software
- To provide technical advice/assistance on systems improvement





## 4. SCOPE OF SERVICES

### 4.1 General

- Provide services in a very professional, diligent and prompt manner.
- Submit promptly monthly progress reports and Assessment and/or Completion Report in accordance with the schedule of work to be drawn by ICTD. The report formats to be used shall be prepared by the Experts/System Performance Support Specialist and approved by PPA.
- Exercise frugality, economy and best effort to keep reimbursable costs down to the minimum without impairing the quality of services rendered.
- Report constantly, or as required, to the ICTD Manager on the status and development of the engagement.

### 4.2 APPLICATIONS EXPERT

- 4.2.1 Act as Team Lead of the Experts hired for the post-implementation phase of the PPA MIS Computerization Project;
- 4.2.2 Formulate procedure/workarounds to handle system performance issues of the existing installed and/or in-use application systems;
- 4.2.3 Design and develop ad-hoc report/s required by the management based on the existing Oracle Solution;
- 4.2.4 Provide advice on the formulation of technical solutions of the following modules:
  - 4.2.6.1 ePayment System covering the additional module on OOP and rental billing
  - 4.2.6.2 Revision of the AFMS Budget Module covering the additional module for processes from NBA to BUR
  - 4.2.6.3 On-line Port Charges Exemption System covering web service, ETL of Data Conversion
    - PEZA Registered Companies
    - Pilot – HRD Group of Companies
    - Batch 1 Companies
    - Batch 2 Companies
    - BOI Registered Companies
  - 4.2.6.4 Revision of Oracle customized Tax Reports
- 4.2.5 Formulate technical solutions for the following filed Change Requests:
  - 4.2.7.1 Port operation management system related to vessel charge (reference # 2015-11-05-015)





4.2.7.2 External reporting requirements (reference # 2015-07-31-004)

**4.2.7.3 Revision of the Asset Assignment Report (reference # 2014-06-19-004)**

- 4.2.6 Assist the System Function Team to review, analyse and recommend solution on issues recorded by the Helpdesk;
- 4.2.7 Assist ICTD to strategize and plan in the on-going and upcoming post implementation activities;
- 4.2.8 Provide other related services, as required and where applicable, towards the attainment of the objective of the project/engagement;
- 4.2.9 Prepare a monthly accomplishment report, which will be submitted to the Authority.

### **4.3 DBA FOR ORACLE FINANCIAL EXPERT**

- 4.3.1 Optimize the identified system modules caused by "System Slowdown" , All table objects indexes with capacity plan
- 4.3.2 Perform maintenance of the Current set-up of the Oracle Servers
- 4.3.3 Attend to the maintenance and upgrade (if necessary) of System Software
- 4.3.4 Attend to the maintenance of the Disaster Recovery Sites
- 4.3.5 Act as 2nd level of Support of the PROMPT System (related to Oracle DB)
- 4.3.6 Conduct, along with the Applications Expert, sessions for ICTD development and technical groups on more detailed technical aspects of the system, examples, database schema, program/logic behaviour and application interfaces and links;
- 4.3.7 Provide other related services, as required and where applicable, towards the attainment of the objective of the project engagement;
- 4.3.8 Prepare a monthly accomplishment report, which will be submitted to the Authority.

### **4.4 SYSTEM SUPPORT PERFORMANCE EXPERT – JAVA EXPERT**

- 4.4.1 Act as a technical support in the post implementation of the revised FIRST application;
- 4.4.2 Implement and act as a technical support in the implementation of the enhanced Cargo Handling Operator Module(CHO) under the Port Operations



Management System;

4.4.3 Conduct technical training on JAVA related to FIRST and CHO applications;

4.4.4 Program coding for the following filed Change Requests:

4.4.4.1 External reporting requirements (reference # 2015-07-31-004)

4.4.4.2 Billing and collection (reference # 2015-07-30-002)

4.4.4.3 Accounts Receivable integration to Collection (reference # 2015-05-04-002)

4.4.4.4 Collection for Senior Citizen/Person with Disability/Student revised process

4.4.5 Assist PPA in the implementation of PTB Operator System interface with the POMS;

4.4.6 Provide other related services, as required and where applicable, towards the attainment of the objective of the project engagement;

4.4.7 Prepare a monthly accomplishment report, which will be submitted to the Authority.

#### **4.5 IMPLEMENTATION AND SUPPORT EXPERT – C#.NET EXPERT**

4.5.1 Provide 2<sup>nd</sup> level of support in the implementation of Electronic Data Interchange thru Webservice technology such as Online Port Charge Exemption

4.5.2 Conduct technical training on Electronic Data Interchange

4.5.3 Conduct, along with the Applications Expert, sessions for ICTD development and technical groups on more detailed technical aspects of the system, examples, database schema, program/logic behavior and application interfaces and links;

4.5.4 Recommend approaches and strategies for a more effective transfer of technology knowledge;

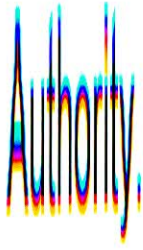
4.5.5 Assist in the Implementation of the enhanced PPA eProcurement System;

4.5.6 Provide other related services necessary to the attainment of the objective of the project/engagement;





4.5.7 Prepare a monthly accomplishment report, which will be submitted to the



#### **4.6 SYSTEM PERFORMANCE EXPERT – ORACLE FORMS AND REPORTS EXPERT**

- 4.6.1 Act as 2nd level of Support of the PROMPT System (related to Oracle Financial – APIs);
- 4.6.2 Assist ICTD functional team in investigating and providing resolutions to issues/errors encountered by the end-users;
- 4.6.3 Perform remote and On-site monitoring application development on customized oracle reports and oracle forms modules as requested by functional user;
- 4.6.4 Implementation of the AFMS-Budget Management module as “Lead Developer”;
- 4.6.5 Technical support in the resolution of AFMS-FIRST incident reports;
- 4.6.6 Provision of second level of support in the AFMS-FIRST (both on-line and off-line transactions) module;
- 4.6.7 Perform modification on customized objects by developing or adding new features/functionalities that are critical to the application as requested by process owners, including interface programs that will integrate legacy system to Oracle Application;
- 4.6.8 Closely coordinate with Oracle Metalink regarding issues raised by PPA end-users. This includes monitoring of the raised incidents to Oracle, testing and implementation of the solution acquired from Oracle Metalink;
- 4.6.9 Conduct, along with the Applications Expert, sessions for MISD development and technical groups on more detailed technical aspects of the system, examples, database schema, program/logic behaviour and application interfaces and links;
- 4.6.10 Prepare a monthly accomplishment report, which will be submitted to the Authority.

#### **4.7 TECHNICAL (IT NETWORK) EXPERT**

- 4.7.1 Conduct skills inventory of PPA’s technical group;
- 4.7.2 Identify skills gaps and provide/recommend solutions to reduce or eliminate the





- gaps identified;
- 4.7.3 Conduct training and hands-on, as necessary, for the technical group of ICTD in the use of maintenance of the servers, server software, databases and DBMS, communication and network facilities and monitoring tools and software;
  - 4.7.4 Conduct offsite visits to assess local area network configuration and setup and identify deficiencies and/or inefficiencies, if any. Undertake measures/re-configuration activities, or recommend solutions, as the case may be, to correct the deficiencies, reduce or eliminate the inefficiencies;
  - 4.7.5 Demonstrate, as required, the application of appropriate approach, techniques and tools to enhance the performance of the systems facilities – servers, database, communication, etc.;
  - 4.7.6 Undertake the initial set-up and configuration of network and communication at the ports, where applicable and as required;
  - 4.7.7 Conduct, along with the Applications Expert and the Implementation and Support Expert, where necessary, sessions for ICTD development and technical group on more detailed and technical aspects of the system, examples, database schema, program/logic behaviour and application interfaces links;
  - 4.7.8 Undertake, and teach where necessary, script writings;
  - 4.7.9 Recommend, where applicable, approaches and strategies for a more effective transfer of technology;
  - 4.7.10 Submit a monthly accomplishment report based on the agreed deliverables set by the Authority;
  - 4.7.11 Provide support and maintenance on all PPA's server especially the Oracle Database server. This also includes the Linux and Windows servers (WEBSHERE, Hummingbird, Anti-virus, etc);
  - 4.7.12 Provide support and maintenance on PPA communications facility (CISCO CALL MANAGER and IP PHONES);
  - 4.7.13 Provide support on security devices such as Cisco ASA, Ironport Web and Email security appliances;
  - 4.7.14 Provide support and maintenance on networking appliances such as Cisco Routers, Switches Wireless Access Points, and Application Accelerators;
  - 4.7.15 Render technical support in the implementation of acquired solution from



Oracle Metalink;

4.7.16 Provide other related services necessary to the attainment of the objective of the project/engagement;

4.7.17 Prepare a monthly accomplishment report, which will be submitted to the Authority.

## 5. PPA RESPONSIBILITIES

5.1 Provide working area and other resources such as supplies, office desk/table, computers, telephones, fax machines and other paraphernalia;

5.2 Provide connection to PPA's network;

5.3 Provide access to PPA documents, records and data that may be required, subject to PPA clearance;

5.4 Promptly process payment of professional fee subject to the submission of the monthly progress report and Assessment and/or Completion Report;

5.5 Promptly process claims for reimbursable expenses upon presentation of complete travel documents and after review and verification by PPA of the documents submitted.

## 6. BUDGET

The budget for the engagement of the services of the Consultant, inclusive of 12% VAT, is as follows

<b>Consultant</b>	<b>Monthly Rate</b>	<b>Total</b>
Applications Expert	200,000	1,200,000
DBA for ORACLE Financial Expert	130,000	780,000
System Performance Expert – Java Expert	85,000	510,000
Implementation and Support Expert – C#.NET	85,000	510,000
System Performance expert – Oracle Forms and Reports Expert	85,000	450,000
Technical (IT) Network Expert	130,000	780,000
<b>TOTAL</b>	<b>715,000</b>	<b>4,230,000</b>





## 7. SOURCE OF FUNDING

The budget for this Consultancy Project is to be sourced from PPA Corporate Funds

APPROVED BY:

A handwritten signature in black ink, appearing to read 'AG', is written over a horizontal line.

ARMANDO L. GUZMAN

Chairman Procurement of Goods and Asst. General Manager-Finance & Admin

