



TERMS OF REFERENCE FOR THE SUPPLY, DELIVERY, INSTALLATION, INTEGRATION, TESTING AND COMMISSIONING OF IDENTITY AND ACCESS MANAGEMENT WITH ACTIVE DIRECTORY FOR DATABASE MANAGEMENT SYSTEM

I. OVERVIEW

PAGASA's information system is composed of a number of independent platforms. The current set-up of each of these systems has independent access rights, privileges, and user credentials. There were no centralized system that governs these major components into one. If a new information system is to be commissioned, a new registration process has to be done. Repeating the registration process makes the workflow inefficient and exposes other existing systems to security threats. The solution to address these dilemmas is to have an Identity and Access Management System (IAMS) that will support all policies and functionalities across different information management systems. IAMS supports the policies and functionalities that enable granular user access to the organization's information technology resources and data. Hence, the World Meteorological Organization (WMO) categorizes IAMS as one of the core IT infrastructure of Climate Database Management System (CDMS). This also makes IAMS a mandatory requirement in CDMS as specified in the WMO No. 1131.

The implementation of this project will provide a single directory for authentication solution in managing access rights and access control to different systems, further allowing for user provisioning and de-provisioning while having a central location of security credentials. This also enables PAGASA to comply with one of the mandatory requirements of the WMO in relation to CDMS as outlined in the WMO No. 1131.

II. APPROVED BUDGET FOR THE CONTRACT (ABC)

The approved budget for the project amounts to **Thirty Four Million Pesos (PhP 34,000,000.00)** inclusive of VAT and all applicable government taxes.

III. QUALIFICATIONS OF THE BIDDER

(Please refer to Section II. Instructions to Bidders, the Bid Data Sheet and Checklist of Eligibility and Technical Requirements of the Bidding Documents)

IV. DELIVERY PERIOD AND PLACE OF DELIVERY

The winning bidder shall deliver all hardware and software components including the delivery of the system but not limited to installation and configuration within the period of

nine (9) months at the PAGASA Central Office located at PAGASA Science Garden Complex, BIR Road, Diliman Quezon City, and / or the proposed offsite data center.

V. BID PROPOSAL CONTENTS

The prospective bidder is expected to comply and respond in accordance with the specific instructions to bidders and submit all the documentary requirements under the Checklist of Eligibility, Technical and Financial Requirements. The submission of documentary requirements must be properly arranged in order and with label.

The prospective bidder shall respond paragraph by paragraph and shall clearly indicate compliance to all the required specifications (*Please see Section VI. TECHNICAL SPECIFICATIONS*) and shall specify the number of days or schedules within which to complete the delivery of all the goods required (*Please see Section VII. SCOPE OF WORK*).

The prospective bidder shall be required also to include in this proposal, original descriptive literatures and unamended brochures of all equipment/materials to be supplied. If applicable, plans, drawings and diagrams/configurations must likewise be provided.

These details will allow the **PAGASA-Bids and Awards Committee** to fully evaluate and determine compliance from the prospective bidders.

The following are additional requirements which will be part of the technical bid documents:

- Prospective bidders shall include certificates of experience within the five (5) year period in the installation, configuration, troubleshooting and other technical support services of the software, hardware and database of the system they are offering.
- Prospective bidder must submit certificate of partnership with the application system developers of PAGASA-MIS in conjunction to the existing support and warranty until December, 2020.
- Prospective bidders shall submit their proposed network and system diagram.
- Prospective bidders shall submit a Gantt chart showing the proposed schedule for the project.
- Prospective bidders must provide a list of their on-site local and warm body technical support to be deployed for the project accompanied by curriculum vitae and proof of their competency such as, but not limited to diplomas and certificates.
- Proposed Service Level Agreement which clearly indicates that technical support shall be provided no longer than four (4) hours on the time of the call, 24 x 7.

VI. TECHNICAL SPECIFICATIONS

The winning bidder shall supply, deliver, install, integrate, test, and commission the Identity and Access Management with Active Directory for Database Management System with the following minimum specifications:

I. SOLUTION ARCHITECTURE

Specification	
Provide Active Directory Infrastructure for PAGASA-MIS with a 3-site topology across the Primary Site, the DR sites, and the existing PAGASA cloud infrastructure for at least 3 years	
Provide application customization to PAGASA-MIS for Active Directory Integration by the existing application software provider.	
Provide a solution that is capable of utilizing high availability functionalities of virtualized environments (i.e. virtual machine movement across virtualized hosts)	
Provide a solution that should cater for at least 1,000 users	
Provide capability for PAGASA’s Virtual Desktop Interface (VDI) integration with proposed Active Directory Infrastructure	

II. INFRASTRUCTURE

Specification	
General	
2 x Rack mount servers	
Server Specifications	
Intel Xeon Platinum 2.1Ghz minimum	
24 cores per socket	
24 cores per server (1 socket occupied)	
128 GB RAM minimum, expandable to 3TB	
Minimum 2 x hard drive, 1.2TB storage minimum (raw) total	
1 x Raid Controller	
1 x Single Port 16Gb Fiber Channel HBA	
1 x Dual Port 10Gb + Dual Port 1Gb Network Card	
Redundant Power Supply	
Additional Requirements for Infrastructure	
Cables, screws, railings, etc. that are not explicitly specified but are required for proper functionality of the infrastructure	

III. SOFTWARE

Software Modules	
Active Directory	
<ul style="list-style-type: none"> • Provide Domain Controllers in the Primary, DR, and existing Cloud infrastructure 	
<ul style="list-style-type: none"> • Provides hierarchical structure that stores information about objects on the network 	
<ul style="list-style-type: none"> • Software licenses and components that are not explicitly specified but are required for proper functionality of the software solution 	
<ul style="list-style-type: none"> • Provide a ready directory infrastructure for PAGASA's Virtual Desktop Infrastructure (VDIs) 	
<ul style="list-style-type: none"> • Provide a ready directory structure for PAGASA HR System 	
Identity and Access Management	
<ul style="list-style-type: none"> • Provide account management functions to PAGASA-MIS (provision, deprovision, suspend, etc.) 	
<ul style="list-style-type: none"> • Provide Role-based Access Control, integrating with PAGASA-MIS 	
<ul style="list-style-type: none"> • Provide Compliance Management reports and monitoring for PAGASA-MIS 	
<ul style="list-style-type: none"> • Provide Password Management for PAGASA-MIS 	
<ul style="list-style-type: none"> • Provide a ready identity and access management system for PAGASA's HR System 	
<ul style="list-style-type: none"> • Cloud-based deployment for managed infrastructure 	
PAGASA Mobile Application	
<ul style="list-style-type: none"> • Display latest data from nearest station / selected station 	
<ul style="list-style-type: none"> • Display forecast and other PAGASA weather and hydrological service products 	
<ul style="list-style-type: none"> • Display and push notifications and warnings from PAGASA forecasters (depending on area) 	
<ul style="list-style-type: none"> • Must use/leverage PAGASA's existing cloud infrastructure 	
<ul style="list-style-type: none"> • Display current maps and composite radar 	
<ul style="list-style-type: none"> • Must be available to most common mobile platforms 	

VII. SCOPE OF WORK

The scope of work covers the supply, delivery, integration, installation, testing, training and commissioning of Identity and Access Management with Active Directory for Database Management System. The works and services to be performed under this contract shall essentially consist of, but not limited to, the following:

1. Installation: Hardware Components
2. Installation: Software and Network Components

<ul style="list-style-type: none"> • Deployment of highly available domain controllers for all sites (Primary, DR, and Cloud)
<ul style="list-style-type: none"> • Configure a single Active Directory integrated DNS forward lookup zone to serve as the primary namespace for this AD deployment
<ul style="list-style-type: none"> • Configure Active Directory Sites and Services to model the IP subnets as it relates to production network infrastructure
<ul style="list-style-type: none"> • Customize the PAGASA-MIS system for authentication to the AD Infrastructure
<ul style="list-style-type: none"> • Configure additional fields to PAGASA-MIS for AD Integration
<ul style="list-style-type: none"> • Customization of PAGASA Mobile application
3. Installation: Database Components
<ul style="list-style-type: none"> • Migration of users from PAGASA-MIS to AD Infrastructure
4. Installation of electrical requirements, wirings, cabling, etc.
<ul style="list-style-type: none"> • Must provide equipment configuration/layout including networking
5. Training and Testing
<ul style="list-style-type: none"> • On-site training for two (2) weeks (Food to be provided to twenty (20) participants by the winning bidder)
<ul style="list-style-type: none"> • System acceptance

GENERAL NOTES:

Prior to the undertaking of the project, **the winning bidder** should submit, provide and comply with the following:

1. Kick-off meeting must be conducted in coordination with the end-user in which the details of the project will be discussed. The schedule and venue will be advised by the end-user.
2. List of personnel that will undertake the project (programmer, supervisor, project manager, etc).
3. Proposed technical plans, network diagrams, manuals and configuration scripts, datasheets, brochures and other documents essential to the project. Two (2) hard copies, book bind, presentable and soft copies.

VIII. WARRANTIES

1. Three (3) years warranty on all hardware and software.
2. Availability of technical support on 24/7 via email, phone, or SMS during the warranty period.
3. For severe or critical issues on the Security Module, Database and/ or, an SLA of 4 hours response time in 3 years term should be available.

4. Proof of Product: Datasheets/Brochures with indications of certified Standards.
5. The winning bidder shall neither assign, transfer, pledge nor subcontract any part or interest therein.

IX. TRAINING OF PERSONNEL

Agency Personnel should be provided with training to operate all proposed hardware and software. They should also be able to perform first (1st) level trouble shooting and problem identification with documented guide books and references.