

# TERMS OF REFERENCE

## **Operations and Maintenance (O & M) (Services, Help Desk Support, Application and Infrastructure Support Services) Services for the NEA Business Intelligence Technology (NEA-BIT) System**

### **I. BACKGROUND**

The NEA, in its pursuit to improve its overall support to the ECs and streamline EC performance monitoring and in particular address the growing inconsistencies in reportorial submissions, has availed of the grant/technical assistance for a major IT systems upgrade from the European Union (EU) and administered by the World Bank (WB). This intricate systems upgrade was awarded by WB to a private Vendor who made the study, customized the design and development of the NEA BIT System in 2015 for the National Electrification Administration. In 2017, the Vendor continued to consistently provide support and maintain the system in two (2) years (under the EU-WB Grant) to ensure its optimum performance. The solution provided comprised of: a) Business Intelligence (BI), b) Web Portal for data submission and reporting and the complex ground-up c) Data Warehouse. The customized system was designed to receive and organize EC data submission through the web portal, which enabled a more sophisticated analysis of EC data, and provided timely feedback to ECs through the same channel. Due to the volume of data requirements from ECs, complexities of online operations, huge IT infrastructure (which an ordinary government agency like the NEA cannot provide) and security of data to be shared online, the NEA engaged the services of Cloud Service Provider (CSP), employing Infrastructure as a Service (IaaS) deployment service model. The system is currently operating under a proprietary platform/environment.

With this improved system, NEA & ECs have significantly enhanced effectiveness as it through data exploration, mining and analysis, enabling accurate and timely data to more effectively fulfill EC oversight function. Since NEA has started using the system and has since improved in its data analysis maturity for almost two (2) years in transition, NEA has been performing even deeper, more insightful, creative, and non-siloed analyses as a result of having data that are easily accessible through the system. The system which is mission critical, cannot be underscored as the EC reporting system is mandated under R.A 10531. Thus, contracting a new O & M provider is very critical due to transfer of special ICT skills, data/system migration, technology transfer and management at a limited period of time might cause business disruption both for NEA and ECs.

Moreover, data is made available to a broader set of electricity sector stakeholders including the Department of Energy (DOE), Energy Regulatory Commission (ERC), and other energy attached agencies. This generally simplified the harmonized reporting requirements across the sector and help ensure there is only one source of truth.

### **II. RATIONALE**

As anchored in NEA's commitment letter to the WB, NEA RE: Absorption of the Annual Software, Operating and Maintenance Cost of the Web Portal And Business Intelligence Project For the National Electrification Administration, NEA shall assume the full cost of the NEA Business Intelligence (BI) cloud-based IT system's operations and maintenance using its internally generated fund as approved by the DBM after the two year period of implementation July 28, 2017 up to July 2019.

As contained in the 2020 approved Corporate Operating Budget (COB) and 2020 Annual Procurement Plan, NEA now aims to sustain/continue the BI system's Operations and Maintenance through the following:

- Contract out the existing NEA Bit's Operations and Maintenance (O &M) Service Desk /Help Desk support, Application Management and Infrastructure Management of the existing NEA Business Intelligence (BI) System and Data Warehouse.
- Provide corrections of production incidences on application and functional support (service request) including the pending tasks for corrections and enhancements (FIT-PR) list according to priority to be provided.
- Maintain and manage the existing integrated infrastructure in cloud platform for a more secured storage, servers, and other support appliances operating 24 x 7 catering to a huge volume of data from the 121 ECs submitted through the Data Entry Templates (DET).
- Provide disaster recovery infrastructure management for high availability and business continuity of the NEA-BIT Project.
- Implement Change Management (CM).

### III. OBJECTIVES

1. To sustain, continue and make available the necessary Operations and Maintenance (O &M) Service Desk /Infrastructure Management and Application Management to the existing NEA Business Intelligence System, Web Portal and Data Warehouse.
2. To ensure that service levels are continuously met including corrections of production of incidences and functional support.
3. To efficiently manage the general ICT infrastructure support in production including cloud infrastructure management in coordination with the cloud provider and NEA.
4. Provide regular (monthly) monitoring and reporting of system performance, utilization, and efficiency and ensure that infrastructure is up and running.
5. To provide knowledge transfer and turn over before the end of the contract period.

### IV. KEY ROLE DEFINITIONS

- **CLIENT:** NEA is the primary client and the main Client of the outputs.
  - **VENDOR** shall take responsibility for the provision of Operations and Maintenance which will include Service Desk, Technology Management (inclusive of the the Contractor Level & Cloud Infrastructure) Application Management and Change Management as well as any handover support.
  - **CLOUD PROVIDER:** shall hosts the infrastructure/platform. However, the vendor who will provide the Technology Management services shall have the co-responsibility/accountability in the management of the infrastructure in cloud being the service provider for operations.
  - **PRODUCT VENDOR:** The product vendor will provide all the software tools to develop and operate the complete BI Systems and Web Portal.

### V. APPROVED BUDGET FOR THE CONTRACT

The approved budget for the Contract (ABC) is **Ten Million Pesos (P 10,000,000)**, inclusive of all applicable taxes and will be sourced from the NEA Corporate Operating Budget. The proposal shall be itemized based on the flowing service line:

COST should be broken down as follows:

Service Line	Price
1.) Service Desk	
2.) Infrastructure Management	
3.) Application Management	
4.) Contingency/Others	
<b>TOTAL</b>	<b>PHP 10,000,000.00</b>

## VI. GENERAL SCOPE OF WORK

The overall scope of work includes:

### VI.1 User Management

The Service Desk (SD) will serve as the Single Point of Contract (SPOC) for all IT concerns/issues of the users from NEA and the ECs. The SD shall provide Level 1 IT support such as:

- Receive inbound technical concerns via calls, web portal, and email by logging received Incident and Service Requests
- Provide technical analysis and First Call Resolution (FCR)
- Escalate tickets to concerned groups, track and monitor ticket updates
- Serve as Single Point of Contact between end-users and IT
- Analyze and report ageing tickets to concerned group
- Provide Dashboard Reports and Monthly Operations Reports, and other reports as maybe required by client.

### VI.2 Application Management

**A. Application Management Services** shall cover corrections of production incidences and functional support.

#### Correctives (Incidences)

A1.)Data Modification due to program error- refers to data modification services for erroneous system data on the web portal or BI reports caused by a faulty program

A.2)Program Error Correction – Refers to program error correction services for online or batch program problems that may occur in the application covered in this proposal.

**B. Functional Support (Service Request)** shall include the activities that are not expected before hand and do not require program/code modification. The duration to resolve this request which is usually short shall be agreed with NEA in the Service Level Agreement (SLA).

The following requests should be addressed:

B.1.)Investigation - Refers to requests for an upfront identification of causes of problems/errors that occurred on the application, and that can be resolved.

B.2)Data Modification (User Error) – Refers to data modification services for erroneous system data on an implemented application system caused by wrong inputs/handling by users affecting the application and requiring reversal or correction of such inputs.

B.3)Data Modification (Exception) – Refers to data modification services for erroneous system data in the covered platforms, applications and interfaces as requested by users for exception handling.

B.4) System Maintenance - Refers to the facilitation of special system configuration requests, updating of existing system table files, reconfiguration of system settings and initiated optimizations. It shall also include activities surrounding the operation and maintenance of a system such as support to training, testing or provision of test data, and manual initiation of system processes.

B.5) Other related request which maybe required by NEA not included in the above list.

### **C. Enhancements**

This service shall involve the creation of a new functionality or modification of the current functionalities of the web portal which are new government requirements.

- Change in an enhancement caused by business needs
- Update of forms needed to change in government requirements
- Development and addition of new functionalities in the system

The other definite scope/planned enhancements shall be defined and agreed upon prior to the start of the service. Likewise the technology stack shall also be clearly defined in the proposal.

### **D. Infrastructure Management**

Infrastructure Management is an integrated service that will help manage the IT infrastructure as follows:

#### **D.1 General Infrastructure Support**

- Ensure 100% reliability, availability and performance standards including operational tasks such as regular back-up, disaster recovery and business continuity
- Provide security to cover best practices including secure coding, vulnerability scanning, and monitoring, firewalls and data privacy concerning personal information. Should be compliant with the Data Privacy requirement as required by R.A. 10173 or the Data Privacy Act for personal information and other ICT governing Laws and issuances.
- Provide all technical system support for the day to day operations on-site and in cloud (contracted cloud Service Provider) including the following:
  - Storage management
  - System programming & capacity planning
  - Performance tuning
  - Installation and maintenance of system software products
  - Regular monitoring and reporting system of performance utilization, and efficiency.
- Provision of technical advice and support to the following :
  - 1.) Application development and maintenance staff, as required.
  - 2.) Service Desk /and Authorized Users as necessary
  - 3.)Application Development and Maintenance (ADM)
  - 4.)In-depth analysis of operations data environment on behalf of availability management
  - 5.)Execute the planned changes in capacity requirements

- 6.)Perform annual disaster recovery tests with end-users
- 7.)Create handover documentation, diagnostic scripts
- 8.)Establish system tuning and performance processes
- 9.)Execute security measures for the Storage and Back-up infrastructure

**D.2 Disaster Recovery (DR) Infrastructure Management**

- Performs and submits monitoring report to NEA to ensure that the infrastructure is up and running
- Implements procedures and tools to operate the availability systems based on submitted manual of implementation.
- Provides up-to-date documented Disaster Recovery (DRP) Plan/Business Continuity (BCP)Plan
- Performs annual disaster recovery mock drills.

**VI.3 Technical Scope**

Vendor shall provide the following service lines, covering the platforms listed:

Service Line	Component	Technology/Platform
Service Desk	N/A	OTRS (Ticketing Tool)
Technology Management	N/A	Existing Cloud Services
Application Management	Web Portal	ASP Net, Angular JS
	ETL/Datawarehouse	SSIS
	Front End/Reports	SSAS,SSRS,PowerBI and others

No disruption of operations or delay shall be allowed cause by the Vendor’s inability to implement the project upon commencement of the NTP (after issuance of Notice to Proceed -NTP). Application of penalties for delays and or Termination of the contract shall be applied if the Vendor cannot implement what has been stated in the contract or meet what is in the SLA.

**VI.4 Service Schedule and Location**

**VI.4.1) Contract Duration and Support Hours**

The Vendor shall provide the following support hours:

Service Line	Location/ Support Hours
Service Desk	Offsite 24 x 7 support
Application Management	Offsite 8x 5 (normal business hours) Mondays-Fridays: excluding holidays
Infrastructure Management	Offsite 8 x 5 (normal business hours) Mondays-Fridays: excluding holidays

**VI.4.2 Service Delivery Location**

Off-site support location shall be at the Vendor’s Office. Vendor should have a designated technical support office within their premise and if possible within NEA Office. The Service

Manager shall regularly visit NEA at an agreed frequency at least twice a month, or as deemed necessary by NEA.

Whenever necessary, NEA may provide tools and network access for the delivery of the support services (ex. for remote desktop support, network access testing, etc.)

### VI.4.3 Service Organization

The Vendor must have a minimum of five (5) years experience as a firm in the Operations and Maintenance (O & M) of Business Intelligence, Web Portal and Data Warehouse in cloud under Microsoft platform or equivalent environment, locally (5 years) and abroad.

Must have an Office and local support in the Philippines for **more than 5 years** supporting similar IT based projects in cloud/traditional platform.

The Vendor's required service organization should identify the roles and responsibilities within the Operations and Maintenance Service as follow. The Vendor shall ensure the Team will deliver the expected level of service.

Below is the required/proposed Team Profile of the Vendor. Must include submission of Curriculum Vitae of each identified personnel which include work experience, education, training, certification and other necessary information which shall be required by NEA.

ROLE	MAIN RESPONSIBILITIES
Account Manager	Provides contact for account level concerns such as new engagements or new directions for the service
Service Delivery Manager (SDM)	Act as a single point of contact from Vendor for service level deliverables and concerns; Manages the tasks of the team to ensure that they are delivered on time
Service Desk Lead/Team	Receives all calls from the users and logs/updates tickets in OTRS (ticketing tool)
Infrastructure Management Lead and team	Maintains the health of all environments (Development, Test and Production) and ensuring infrastructure availability of the solution in cloud and in the contractor's side during prescribed operating hours.
Application Management Lead and team	Addresses reported application issues and deploys enhancements to the application per user specification.

The following NEA BIT Counterpart Team shall be created for Operations and Maintenance

#### NEA counterpart

ROLE	Responsibilities
NEA Project Sponsor	Provides the direction on the service
NEA Project Manager	Act as a single point of contact from NEA for service level deliverables and concerns  Decides the final priority assignment to the tickets ( incidents and sequence of deployment for enhancements)
NEA ITCSD Director  NEA Sustainability Team	Oversight -NEA BIT Overall System Process Lead  Assist the decision maker in the overall Planning and implementation of the Sustainability Plan
NEA Users	Reviewers-NEA personnel responsible for

	acknowledging/reviewing the submitted DETs of ECs Report Viewers- responsible for safekeeping and distribution of all downloaded Operational reports.
NEA System Administrator	Responsible in creating and managing system settings, user accounts, and profiles. May also maintain Master Data on behalf of Master Data manager
EC Users	Responsible for accomplishing, submitting, revising and resubmitting DETs. Also accountable for the correctness and accuracy of the submitted data through the DETs and final outcome of Operational Reports.

### VI.4.3 Demand Management

To properly control the demand of work of NEA, at any peaks or lows during the service, and to properly align the vendor's productive capacity with NEA's demands, sufficient capacity will be ensured all throughout the service. The monitoring of man-hour allocation shall be performed regularly, usually on monthly basis. The provider shall submit the proposed Workload for Application Management.

Any deviation from the baseline shall be communicated to the provider 1 month before it happens to ensure the efficient allocation of the resources.

### VI.4.4 Service Level Agreement

Service Level Agreements (SLAs) shall be provided to monitor, control and govern the IT outsourced services by NEA on the following:

#### Proposed Application Management SLAs

Propose SLAs for the Application Management Service should be based on the following format:

INDICATOR	DESCRIPTION	PRIORITY	SLA TARGET
<b>Incident Response</b>	Percentage of incidents logged by user via OTRS ticketing tool responded	5	1hour
	within the agreed response time versus total number of incidents logged in the OTRS ticketing tool	4	1hour
<b>Incident Resolution</b>	Percentage of incidents resolved within the agreed resolution time versus total number of resolved and outstanding overdue incidents	3	7 working days, must be resolved/ or provided a work-around
		2	Within 10 days or have a valid/agreed target date for resolution
		5	Must be resolved/provided a workload within 15 business days or have a valid/agreed target date resolution
		4	Within 10 days or have a valid/agreed target date for resolution
		3	Must be resolved/provided a workload within 15 business days or have a valid/agreed target date resolution

2	Resolution prioritization and schedule will be assessed together with NEA gleaned from current and queued Development & Testing Tasks
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To properly control the demand of the different needs of NEA, at any peaks or lows during the service, and to properly align the vendor’s productive capacity with NEA’s demand

<b>Functional Support (Service Request)</b>	Percentage of tasks completed within the agreed completion time versus total number of completed and overdue tasks.	N/A	Schedule will be agreed upon with NEA
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The provider shall adhere to industry methodology standards for incident resolution. Priority Levels shall be based on business and service impacts. The Priority Levels shall determine how the tickets will be handled. Both the Vendor and NEA shall finalize the Priority Levels to be applied during the Service and upon start of the service.

Below are the recommended parameters for each priority level.

**Sample Parameters per Priority Level**

**5 – VERY HIGH**

- Loss of critical functionality including business and/or IT components and/or Operational service/s creating significant business delivery impact (either Financial, reputational and/or regulatory in nature)
- Critical loss of production service/s affecting ability to perform business during a time of critical business operating window.

**4- HIGH**

- Loss of functionality or imminent loss of functionality including business and/or IT components and/or operational service/s creating major business and/or service impact (either financial, reputational and/or regulatory in nature)
- Major loss of production service/s affecting NEA’s ability to perform the business during an agreed service delivery window and/or business operating window.

**3-NORMAL**

- Insignificant loss, potential loss or compromise to a single infrastructure/application component or operational services which has minimal or no production service availability impact.
- Other incidents which do not fall under the categories of 5 and 4
- Outage or issue affecting an individual user, not business critical, and therefore can be addressed at a later time.

**2-LOW**

- Minor issues or defects that impact individual users. These are trivial issues – like aesthetics on the User Interface etc.

The Service Delivery Manager shall monitor the performance and efficiency of the service. Thus, it is important to define a workload which is aligned with the real situation and requirements of the service. The Commitment value of each SLA shall be discussed and agreed with NEA prior to the start of the service.

#### VI.4.5 Documentation and Reporting

1. Complete documentation of the Proposal is required (binded) which should include Gantt Charts (schedules), methodologies, schematic Diagrams, flow charts, analysis and process flow.

Documentation and reporting to be submitted shall include periodic status reports of the activities performed, to ensure the maintenance and continual improvement of the service. The provider shall periodically develop reports, derived from NEA's Service Desk Ticketing Tool. The list of reports, information to be reported and the frequency of the reporting shall be agreed upon prior to the start of the service.

The following reports shall be provided to NEA, together with other reports that may be required.

Report	Purpose	Contents
Operational Report with Analytics		<ul style="list-style-type: none"> <li>• Statistics of Open and Resolved Cases</li> <li>• Details of Processed Requests, including priority level, type of request, status, and diagnosis</li> <li>• Trending of Received Cases</li> <li>• Other analytics/Reports which maybe required</li> </ul>
SLA Report	To analyze the fulfilment Of the SLAs during the Indicated period	SLA Critical Tickets status Demand Base lining (baseline vs. consumed) Issues/recommendations /risks Other highlights /considerations which Maybe required by NEA
Service Improvement Plan	To propose and explain improvements plans This report will be provided on an as needed basis	<ul style="list-style-type: none"> <li>• Reviews of the processes Concerned</li> <li>• Purpose</li> <li>• Suggested Plans of Action for improvement</li> <li>• Priority</li> <li>• Request for Approval</li> <li>• Proposed Implementation</li> <li>• Schedule</li> </ul>

The reports shall include the following information:

- Profile of tickets
- Ticket trend analysis
- Service level attainment
- Reasons for not attaining the service levels, if any, and recommendations to meet and/or improve service levels.
- Improvements made if service levels are attained
- Performance and other supporting documents
- Other reports that maybe required by NEA

#### VII. OTHER REQUIREMENTS

- The existing Vendor shall help, cooperate and fully support during the transition if the project will be awarded to another Vendor by allowing them to study and assess the existing NEA BIT System prior to procurement.

- The Vendor and NEA shall discuss and agree if there will be changes on the SLA's before the renewal of the services.
- The support hours and location will follow the details in the service hours and location section. In case NEA will require a different support hour, both shall agree and come up with a harmonize decision.
- NEA shall provide access to the necessary information to support the work, provided that the disclosure of the information is not in violation of any applicable confidentiality and privacy laws as well as policies of NEA.
- Service Desk and Application Support will work primarily off-site, within the provider's premises, except in special situations where some members of the team will need to work in NEA premises, such as Meetings, Presentations and Problem Isolation (if needed). In such instances.
- NEA may provide a work area for the provider, with the necessary facilities such as network connection, internet connection and other equipment (if needed) as stated in the previous agreed Project Plan of NEA. Bit.
- The contracting of the identified Cloud Infrastructure/facilities is not included in this proposal.

## **VIII. TERM/PROJECT DURATION**

Twelve (12) months or One year duration of the Contract.

### **VIII.1 Terms and Conditions of Pricing**

In determining the proposed price for the service the following shall be observed:

- Price should be inclusive of VAT, in Philippine Peso and is valid until one year from the date of submission.
- Billing shall be progressive on a monthly basis upon presentation and completion of the required deliverables as stated in the scope of work.
- The Vendor shall not replace the assigned employee/staff or agents involved in this project within the entire duration of the Contract.

## **TECHNICAL WORKING GROUP**

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