# TERMS OF REFERENCE (TOR) INSTALLATION OF QUEZON CITY QC-eSERVICES PLATFORM CLOUD HOSTING, WEB APPLICATION FIREWALL & SECURITY SERVICES

# I. RATIONALE AND BRIEF BACKGROUND

To support the President's call for all government agencies and LGUs to move more and more of government services online, the Quezon City Local Government (QC LGU) is further enhancing its online environment with respects to robustness, reliability, availability serviceability and security. This will ensure that the City's web infrastructure will be capable of handling the growing portfolio of QC-eServices.

#### II. PROJECT DESCRIPTION

The project's objective is to provide the local government of Quezon City with a cloud environment which is stable, secure, and scalable for its QC-eServices core platform. This includes an appropriate content distribution network as well as a web application firewall to protect user data.

### III. PROJECT SCOPE OF WORK

The system will have the following components:

**Technical Specifications:** 

- a. Scalable Cloud Hosting for QC-eServices core systems that can support the load from QC city hall office staff users, web and API calls of online service providers, and the projected usage of QC residents and nonresidents alike. The Cloud Hosting for QC-eServices core systems will encompass both production and test environments. The components should be able to meet the maximum specifications listed below at any time, and for the whole duration of the contract if required.
- b. The QC LGU wishes to not only quickly move on-premises applications to the cloud, but to also appropriately modernize these applications to maximize the capabilities of the cloud environment. The contractor shall therefore need to also be a provider of applications development & modernization services for at least the past five years. The contractor will need to submit a completed contract for applications modernization as part of its post-qualification.

Туре	Maximum Specifications	Max count
Virtual Machine	2 vCPUs, 4 GB RAM	78
Virtual Machine	2 vCPUs, 7.5 GB RAM	2
Virtual Machine	2 vCPUs, 4 GB RAM	8
Virtual Machine	2 vCPUs, 3.75 GB RAM	2
Virtual Machine	1 vCPUs, 3.75 GB RAM	8
Persistent Disk	18,880 GB	1
Snapshot Storage	94,150 GB	1
Managed Relational Database	2 vCPUs, 7.5 GB RAM SSD Storage: 2,403.0 GiB Backup: 0 GiB	1
Managed Relational Database	2 vCPUs, 7.5 GB RAM SSD Storage: 100.0 GiB Backup: 0 GiB	9
Managed Relational Database	2 vCPUs, 7.5 GB RAM SSD Storage: 240.0 GiB Backup: 0 GiB	1
Managed Relational Database	4 vCPUs, 8 GB RAM SSD Storage: 100.0 GiB Backup: 0 GiB	1
Managed Relational Database	2 vCPUs, 7.5 GB RAM SSD Storage: 374.0 GiB Backup: 0 GiB	1
Managed Relational Database	1 vCPU, 3.75 GB RAM SSD Storage: 456.0 GiB Backup: 0 GiB	1
Managed Relational Database	2 vCPUs, 7.5 GB RAM SSD Storage: 728.0 GiB Backup: 0 GiB	1
Managed Relational Database	12 vCPU, 16 GB RAM SSD Storage: 603.0 GiB Backup: 0 GiB	1
Managed Relational Database	1 vCPU, 3.75 GB RAM SSD Storage: 578.0 GiB Backup: 0 GiB	1
Managed Relational Database	2 vCPUs, 4 GB RAM SSD Storage: 100.0 GiB Backup: 0 GiB	2
Managed Relational	14 vCPU, 20 GB RAM	1

Database	SSD Storage: 2,603.0 GiB	
,	Backup: 0 GiB	
	2 vCPUs, 7.5 GB RAM	
Managed Relational	SSD Storage: 393.0 GiB	
Database	Backup: 0 GiB	1
Managed File Storage &	Singapore Standard Tier: 14,336	
Backup	GiB	1
	Singapore	
	Forwarding rules: 73	
	Inbound data processed: 10,000	
	GiB	
	Outbound data processed: 10,000	
Load Balancer	GiB	1
	Volume of monitoring data: 5,120	
Cloud Monitoring	MiB	1
	Policies: 2	
	Rules: 2	
Web Application Firewall	Incoming requests: 1,000,000	1

- c. Cloud hosting services must support the use of open-source server operating systems, open-source web servers, and open-source databases.
- d. Cloud hosting services must be capable of supporting online access to web applications from users located anywhere in the world and must not have geographical limitations.
- e. OCloud hosting service must have a user-accessible dashboard and portal for metrics and to allow for modifications to allocated server resources.
- f. Cloud hosting services must keep logs of network traffic, usage, and connection metrics.
- g. Cloud hosting service should work seamlessly with QC existing productivity and email solutions.
- h. Provision for a Web Application Firewall or WAF, whether as part of the hosting service itself or from a reputable third-party.
- All data captured by the system shall remain in the property of the City, and the cloud-based storage that contains the data will be owned, controlled and maintained by the City with no additional cost.
- j. Includes technical administration and support services to manage cloud-hosting service and WAF configuration with the allocation of the following remote personnel:
  - Professional Cloud Architect (3) responsible for conversion of QC-eServices requirements into a custom-fit cloud architecture and design and is primarily accountable for code, execution and quality reviews of the cloud solution.

- Professional Cloud Developer (5) responsible for management of cloud environments and implementation of instances required by QC-eServices platforms.
- Professional Data Engineer (1) responsible for the review and management of the data pipeline and processing efficiency of the instances maintained by QC-eServices platforms.
- Professional Cloud Security Engineer (1) responsible for ensuring the security of the Web Application Firewall and other cloud configurations of the instances maintained by QC-eServices platforms.
- k. Includes local support from the service provider for one (1) year.
- l. Provides maintenance for one (1) year.

# IV. AREA OF COVERAGE

The cloud hosting service and web application firewall will be used by QC LGU to host and protect its QC-eServices core platform and associated core web applications.

## V. PROJECT STANDARDS AND REQUIREMENTS

The following are the minimum qualifications and requirements for the Supplier or Bidder:

#### i. Track Record

- a. The service provider must be in the same industry as per DTI or SEC filing for at least eight (8) years.
- b. The service provider must be an operational company for at least Nine (9) years.
- c. The service provider must have satisfactorily implemented a similar project within the last three (3) years.
- d. The service provider should have implemented a public sector cloud-hosting project with a single completed contract amounting to at least fifty percent (50%) of the ABC.
- e. The service provider must have at least two (2) years experience in providing cloud hosting subscription services in the public sector.

# ii. Organization

- a. The service provider must have updated Platinum status in PHILGEPS.
- The service provider must be a duly registered company with an DTI or SEC filing.
- c. The service provider must be filed with DTI or SEC as an IT company with the purpose of software development and the supply of IT-related goods and services.
- d. The service provider must have a valid and current registration certificate from the National Privacy Commission.
- e. The service provider must have a Certificate of Service Completion with at least three (3) National Agencies in the Philippines.

- f. The service provider must be a PREMIER/highest level partner of the Cloud Services Provider for the cloud solution being offered. The bidder will be required to submit the appropriate Partnership Level certification from its associated Cloud Services Provider
- g. The service provider shall guarantee that the system shall abide with the DATA PRIVACY ACT OF 2012

#### iii. Manpower

- a. The service provider must have the required personnel as regular, full-time employees of the company and support the cloud services to the agency.
- b. They must be Filipino citizens, regular & full-time employees of the service provider, and must provide proof of nationality, company ID and Certificate of Employment. Each employee must possess one (1) certificate being required, and that employee should not coincide with other certifications.
  - i. Three (3) Professional Cloud Architect (Qualification)
    - At least four (4) years experience in managing IT related projects.
    - Graduate of any 4-year computer course or IT related course.
    - Must have a certificate on cloud architecture.
  - ii. Five (5) Professional Cloud Developer
    - At least two (2) years experience in managing IT related projects.
    - Graduate of any 4-year computer course or IT related course.
    - Must have a certificate on cloud developer.
  - iii. One (1) Professional Cloud Security Engineer
    - At least four (4) years experience in managing IT related projects; solutioning of cyber security threats.
    - Graduate of any 4-year computer course or IT related course.
    - Must have a certificate as a cloud security engineer.
  - iv. One (1) Professional Data Engineer (either you integrate in your Admin and Tech support quote Qualifications and the other functions)
    - At least four (4) years experience in managing IT related projects.
    - Graduate of any 4-year computer course or IT related course.
    - Must have a certificate on cloud Data engineer.

## VI. <u>DELIVERY SCHEDULE</u>

The project to be implemented within sixty (60) calendar days upon the issuance of the Notice to Proceed (NTP). While, the duration of the service is one (1) year from the date of the implementation.

#### VII. APPROVED BUDGET FOR THE CONTRACT

The Approved Budget for this Contract (ABC) amounts to Thirty Two-Million Pesos only (PHP 32,000,000.00) VAT inclusive.

#### **COST DERIVATION**

Software Development Cost: (if applicable or the Hosting Components)

Туре	Count	Cost
Virtual Machine	98	
Persistent Disk	1	
Snapshot Storage	1	
Managed Relational Database	21	
Managed File Storage & Backup	1	
Load Balancer	1	
Cloud Monitoring	1	
Web Application Firewall	1	
Hosting components Sub-total		
Documentation, Training Modu		
Technical & Customer Service S		
GRAND TOTAL (VAT Inc.)	₱32,000,000.00	

#### VIII. BASIS OF PAYMENT

- a. Upon confirmation by QC LGU ITDD of the availability and deployment of the cloud hosting service, the QC LGU will release NINETY-NINE percent (99%) of the total winning bid amount to the service provider.
- b. One year from date of implementation, the retention amount of ONE percent (1%) of the total winning bid amount shall be released to the service provider.

# IX. PENALTIES FOR BREACH OF CONTRACT

Failure to deliver the services according to the standards and requirements set by the City shall constitute an offense and shall subject the Contractor to penalties and/or liquidated damages pursuant to RA 9184 and its revised Implementing Rules and Regulations.

# X. CANCELLATION OR TERMINATION OF CONTRACT

The guidelines contained in RA 9184 and its revised IRR shall be followed in the termination of any service contract. In the event the City terminated the Contract due to default insolvency, or for cause, it may enter negotiated procurement pursuant to RA 9184 and its IRR.

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