

**TERMS OF REFERENCE (TOR)**

**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.

Type	Maximum Specifications	Max Count
Virtual Machine	4 vCPU, 4GB RAM	1
Virtual Machine	1 vCPU, 8GB RAM	1
Virtual Machine	2 vCPU, 4GB RAM	2
Virtual Machine	2 vCPU, 4GB RAM	5
Virtual Machine	2 vCPU, 4GB RAM	5
Virtual Machine	2 vCPU, 4GB RAM	66
Virtual Machine	1 vCPU, 4GB RAM	12
Virtual Machine	2 vCPU, 8GB RAM	2

Type	Maximum Specifications	Max Count
Persistent Disk	28.220 TB	1
Managed Relational Database	1 vCPU, 4GB RAM 456 GB Storage	2
Managed Relational Database	12 vCPU, 20GB RAM 728 GB Storage	2
Managed Relational Database	2 vCPU, 4GB RAM 393 GB Storage	1
Managed Relational Database	2 vCPU, 4GB RAM 578 GB Storage	1
Managed Relational Database	2 vCPU, 7GB RAM 100 GB Storage	10
Managed Relational Database	2 vCPU, 7GB RAM 2 TB Storage	1
Network Attached Storage	8TB HDD	1
Load Balancer	Forwarding rules: 47 Inbound data processed: 100 GiB Outbound data processed: 100 GiB	1
Virtual Machine	2 vCPU, 4GB RAM	22
Managed Relational Database	4 vCPU, 15GB 200 GB	4
Managed Relational Database	10 vCPU, 20GB 200 GB	1
Virtual Machine	1 vCPU, 4GB RAM	1
Virtual Machine	2 vCPU, 8GB RAM	1
Virtual Machine	2 vCPU, 4GB RAM	3
Virtual Machine	4 vCPU, 16GB RAM	1
Virtual Machine	6 vCPU, 24GB RAM	1
Virtual Machine	1 vCPU, 4GB RAM	1
Virtual Machine	1 vCPU, 6GB RAM	1
Virtual Machine	1 vCPU, 2GB RAM	1
Virtual Machine	2 vCPU, 16GB RAM	1
Persistent Disk	4022 GB	1
Managed Relational Database	2 vCPU, 12GB 658 GB	1
Virtual Machine	1 vCPU, 2GB RAM	1
Virtual Machine	1 vCPU, 4GB RAM	2
Virtual Machine	2 vCPU, 4GB RAM	1
Persistent Disk	840 GB	1
Managed Relational Database	1 vCPU, 4GB 168 GB	1
Logging	N/A	1
Networking	N/A	1

Type	Maximum Specifications	Max Count
Resource Monitoring Dashboard	N/A	1
Web Application Firewall	Policies: 15 Rules: 15 Incoming requests: 100,000,000	1
Cloud DNS	Managed Zones: 10 Queries: 100,000,000	1
Cloud CDN	Cache egress - Asia/Pacific: 1,024 GiB	1
API Gateway	N/A	1
Serverless Functions	Region: Singapore Invocations: 2,000,000 RAM (GiB-seconds): 1,000,000 per month CPU (GHz-seconds): 1,400,000 per month Networking: 9,765.625 GiB per month Minimum number of instances: 2	1
Managed Relational Database	4 vCPU, 15GB SSD Storage: 1,024.0 GiB Backup: 2,048.0 GiB Not highly available	1
Managed Relational Database	4 vCPU, 15GB SSD Storage: 1,024.0 GiB Not highly available	1
Blob Storage	Total Amount of Storage: 1,024 GiB Class A operations: 1 million Class B operations: 1 million	1
Pub/Sub	Volume: 100 GiB Subscriptions: 1 Retained acknowledged subscriptions: 1	1

- b. Cloud hosting services must support the use of open-source server operating systems, open-source web servers, and open-source databases.
- c. 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.
- d. Cloud hosting service must have a user-accessible dashboard and portal for metrics and to allow for modifications to allocated server resources.
- e. Cloud hosting services must keep logs of network traffic, usage, and connection metrics.

- f. Cloud hosting service should work seamlessly with QC existing productivity and email solutions.
- g. Provision for a Web Application Firewall or WAF, whether as part of the hosting service itself or from a reputable third-party.
- h. Includes technical administration and support services to manage cloud-hosting service and WAF configuration with the allocation of the following remote personnel (refer to attach qualifications)
  - Professional Cloud Architect (1) - 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 (1) - 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.
- i. Includes enhanced support from the cloud provider for one (1) year.
- j. 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:

Track Record

- a. The service provider must be in the same industry as per their SEC or DTI filing for at least eight (8) years.
- b. The service provider must be an operational company for at least eight (8) years.
- c. The service provider must have satisfactorily implemented a similar project within the last one (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 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.

#### Organization

- a. The service provider must have updated Platinum status in PHILGEPS.
- b. The service provider must be a duly registered corporation with a SEC or DTI filing.
- c. The service provider must be filed with the SEC or DTI 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 an active and updated registration with the National Privacy Commission.
- e. The service provider shall guarantee that the system shall abide with the DATA PRIVACY ACT OF 2012 to ensure that the personal information is protected.
- 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

#### Manpower

- a. The service provider must have the required personnel in section (III-h) as regular, full-time employees of the company.

#### VI. PROJECT DEVELOPMENT AND DEPLOYMENT DURATION

Project to be implemented sixty (60) days upon issuance of the Notice to Proceed. The duration of service is one (1) year from date of implementation.

#### VII. APPROVED BUDGET FOR THE CONTRACT

The Approved Budget for the Contract (ABC) amounts to Twenty Nine Million Pesos PHP29,000,000.00 (VAT inclusive).

**COST DERIVATION**

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

Type	Count	Cost
Virtual Machine	131	
Persistent Disk	3	
Managed Relational Database	26	
Network Attached Storage	1	
Load Balancer	1	
Logging	1	
Networking	1	
Resource Monitoring Dashboard	1	
Web Application Firewall	1	
Cloud DNS	1	
Cloud CDN	1	
API Gateway	1	
Serverless Functions	1	
Blob Storage	1	
Pub/Sub	1	
Sub-total		
Documentation, Training Module and Training		
Technical & Customer Service Support		
Grand Total (VAT Inc.)		

VIII. **BASIS OF PAYMENT**

- a. Upon confirmation by QC LGU ITDD of the renewed availability & 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.

Reviewed and endorsed by:



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**MICHAEL VICTOR N. ALIMURUNG**  
City Administrator



Noted:



**ROWENA T. MACATAO**  
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