



Republic of the Philippines
PUBLIC ATTORNEY'S OFFICE

Tanggapan ng Manananggol Pambayan
Kagawaran ng Katarungan
DOJ Agencies Building, NIA Road corner East Avenue, 1104 Quezon City

Bids and Awards Committee

TERMS OF REFERENCE (TOR)

PROCUREMENT OF INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT) EQUIPMENT FOR THE IMPLEMENTATION OF PUBLIC ATTORNEY'S OFFICE (PAO) LAN INFRASTRUCTURE PROJECT

(Through Public Bidding Pursuant to 2016 Revised Implementing Rules and Regulations of Republic Act No. 9184)

1. The Public Attorney's Office (PAO) is authorized to procure ICT equipment for the implementation of PAO LAN INFRASTRUCTURE PROJECT to be charged against Agency Specific Budget, R.A. No. 11518, General Appropriation Act for FY 2021.
2. The Local Area Network (LAN) Infrastructure Project for FY 2021 of the Public Attorney's Office (PAO) will enable its various regional and district offices located in different parts of the country to connect to the Central Office through a safe and secure network system. Moreover, this project will consolidate and organize the existing Information and Communications Technology (ICT) capabilities of the Central Office into an integrated working network system capable of handling its current operational needs with room for expansion to address its foreseeable ICT requirements. (See accompanying Existing Network Layout Design and Proposed Network Layout Design)
3. This project aims to:
 - a. Improve the internal communication line of the office, including the connectivity between various end users;
 - b. Consolidate the available ICT resources into an integrated network system;
 - c. Establish a central storage / database for official files;
 - d. Set up a LAN backbone thru structured cabling installation, router/switches commissioning, and internet sharing in the Central Office; and
 - e. Maximize access to the internet.

4. Project Requirements

This project will entail establishing a LAN system that will allow 750 users (62 from the Central Office, and 2 users for each of the 344 field offices of PAO) to connect to a server. Specifically:

A) In the Central Office:

- 1) Establishment of a server;

- 2) Establishment of a central storage / database for select official files to accommodate the existing Human Resources Management Information System (HRMIS) of the PAO;
- 3) Institute a suitable security mechanism and safeguard;
- 4) Consolidation of the six existing Internet Service Providers;
- 5) Provision of structured cabling from the server setup up to the access switches and points to be placed in the six Services/Divisions; (See accompanying Building Floor Plans); and
- 6) Provision of multi-functional network printers.

B) In the Regional and District Offices:

- 1) Enable the users from the field offices to connect to the server via remote-to-site connection;
- 2) Institute a suitable security mechanism and safeguard; and
- 3) Provision of multi-functional network printers.

APPROVED BUDGET FOR THE CONTRACT

The bidder shall bid for the item described in this Terms of Reference, which shall not exceed the Approved Budget for the Contract in the amount of **NINETEEN MILLION SEVEN HUNDRED SEVENTY-FOUR THOUSAND EIGHT HUNDRED PESOS (Php 19,774,800.00)**, inclusive of all taxes applicable and bank and government charges payable.

TECHNICAL SPECIFICATIONS

LOT 1				
APPROVED BUDGET FOR THE CONTRACT				
(Php 8,309,400.00)				
Delivery: 15 to 90 calendar days after issuance of notice to proceed.				
Payment terms: Immediately after the issuance of inspection and acceptance report for the complete delivery of goods.				
Please See the following Annexes:				
A (TOR LAN Infrastructure Project - Floor plan 4th floor);				
B (TOR LAN Infrastructure Project - Floor plan 5th floor);				
C (TOR LAN Infrastructure Project - NETWORK LAYOUT);				
D (TOR LAN Infrastructure Project -Floor Plan - Ceiling Height and Column Dimension)				
Item	Quantity	Specification		
Server (Php 1,647,700.00)	2	Form Factor	Rackmount	
		Processor	16 Cores	
			32 Threads	
			22 MB Cache or higher	
				2.3 GHz or higher
		I/O and Ports	Network Options: 2 x 10GbE	
		Front Ports	1 x Dedicated iDRAC micro-USB	
			1 x USB 2.0	
			1 x USB 3.0; 6 x USB 2.0/3.0	
Memory	128 GB 3200 MT/s or Higher			
Memory Type	LRDIMM/RDIMM			
Storage	Up to 8 or 18 x 3.5" SAS/SATA			

			(HDD/SSD)
			6 X 1TB HDD 10,000rpm, 12BGps, or higher
		Operating System	- should be installed in SSD/HDD
			- should be licensed
			- should be the latest version
			- should be in 64-bit professional edition
			- should have official compatibility with active directory
			- should have official compatibility with existing Office 365 or 2019 productivity tools
			- should have official compatibility with .net framework
			- should be able to connect in MS SQL server
		- min. of 5 client access	
		Management	Embedded / At-the-Server iDRAC9
			iDRAC RESTful API with Redfish
			iDRAC Direct
		Open Manage Integrations	Quick Sync 2 BLE/wireless module
			BMC® Truesight; Microsoft® System Center
			Redhat® Ansible® Modules
			Microsoft System Center
		Power Supply	VMware® vCenter
			Dual, Hot-plug, Redundant, 495W or higher
		Security	Cryptographically signed firmware
			Secure Boot
			Secure Erase
			Silicon Root of Trust
			System Lockdown (requires OpenManage Enterprise)
			TPM 1.2/2.0, TCM 2.0 optional
		Supported Operating Systems	Canonical® Ubuntu® LTS
			Citrix® Hypervisor®
			Microsoft® Windows Server® LTSC with Hyper-V
			Red Hat® Enterprise Linux
			SUSE® Linux Enterprise Server
			VMware® ESXi®
		Storage Controllers	Internal Controllers
			PERC H330, H730p, H740P, HBA330, H330
		RAID	1/5/6/10
		Software RAID	S140
		External HBAs (non-RAID)	12Gbps SAS HBA

		External PERC (RAID)	H840
		Boot Optimized Storage Subsystem	HWRAID 2 x M.2 SSDs 120GB or 240 GB
		Slots	PCIe
			8 x Gen 3 slots (4 x 8); 8 x Gen 3 slots (4 x 16)
		Video Card	1 x VGA
		Warranty	3 years for parts; 3 years for labor; 3 years for on-site services min.
			With 7 days replacement
		Installation and Configuration	Includes delivery, installation, setup, configuration, testing, and training
			Includes 24 x 7 stress test
			Includes turnover of license
UPS for Server (Php 646,100.00)	2	Form Factor	Rack Mount
		Output power capacity	4.5KWatts / 5.0kVA or Higher
		Output Voltage	230V
		Input Voltage	230V
		Generator Compatible	Yes
		Cold-Start capable	Yes
		Output Socket	at least 2 x C19 and 6 x C13
		Interface Port(s)	USB, RJ-45, RS485, RS232
		Connection	Hardwired
		Battery Life	2 years min.
		Warranty	3 years for parts; 3 years for labor; 3 years for on-site services min.
		Installation and Configuration	Includes delivery, installation, setup, configuration, and testing
Network Attached Storage (Php 867,500.00)	1	Form Factor	Rack Mount
		Processor	2.1 GHz 6/8 Core+C76 or Higher
		Raid Support	Single Disk, JBOD, RAID Levels: 0, 1, 5, 6, 10, 50, 60, RAID Global Hot Spare, Expand Multiple Raid Group (vdev)
		RAM	8GB DDR4 with ECC min.
		Capacity	At least 120TB; expandable to 550TB or higher
		Bays	12 x 2.5"/3.5" SATA HDD/SSD, Hot-plug
		Network Interface	At least 4 Gigabit LAN Ports; optional 10Gbps LAN Optical SFP+, optional 10Gbps LAN Copper 10GBase-T
		Ports	At least two (2) USB3.0 ports
		Power Supply	Dual Redundant; Input: 100-240VAC
		Others	With software

			With sliding rail kit
		Certification and Compatibility	Canonical® Ubuntu® LTS
			Citrix® Hypervisor®
			Microsoft® Windows Server® LTSC with Hyper-V
			Red Hat® Enterprise Linux
			SUSE® Linux Enterprise Server
			VMware® ESXi®
		Warranty	5 years for parts; 5 years for labor; 5 years for onsite service
		Installation and Configuration	Includes delivery, installation, setup, configuration, testing, and training
			Includes turnover of OS license
Server / Data Cabinet (for Server Room Appliances) (Php 176,200.00)	1	Form Factor	Free Standing Server Cabinet
		Airflow	Front-to-rear
		Color	Black
		Material	Steel
		Type	Free-Standing
		Overall Depth	At least 900mm
		Overall Width	At least 600mm
		Rack Units	42U
		Warranty	5 years
		Installation and Configuration	Includes delivery, installation, and setup
Server / Data Cabinet (for Access Switches) (Php 167,400.00)	6	Form Factor	Free Standing Server Cabinet
		Airflow	Front-to-rear
		Color	Black
		Material	Steel
		Type	Wall mount
		Overall Depth	At least 600mm
		Overall Width	At least 600mm
		Rack Units	12U
		Warranty	5 years
		Installation and Configuration	Includes delivery, installation, and setup
Core Switch (Php 261,700.00)	1	Form Factor	Rack Mount
		Connectivity	Wired
		Switch Type	Managed
		Ports	24 ports x 10/100/1000; 4 SFP
		Fan Module	Front to rear airflow
		Warranty	3 years for parts; 3 years for labor; 3 years for on-site services min.
		Installation and Configuration	Includes delivery, installation, setup, configuration, testing, and training
Distribution Switch (Php 458,000.00)	2	Form Factor	Rack Mount
		Connectivity	Wired
		Switch Type	Managed
		Ports	24 ports x 10/100/1000; 4 SFP
		Fan Module	Front to rear airflow

		Warranty	3 years for parts; 3 years for labor; 3 years for on-site services min.
		Installation and Configuration	Includes delivery, installation, setup, configuration, testing, and training
Access Switch (Php 293,900.00)	6	Form Factor	Rack Mount
		Connectivity	Wired
		Switch Type	Non-Managed
		Ports	24 ports x 10/100/1000; 4 SFP/ Non-Gigabit Ports
		Others	Supports POE or later versions
		Warranty	3 years for parts; 3 years for labor; 3 years for on-site services min.
		Installation and Configuration	Includes delivery, installation, setup, configuration, testing, and training
Access Point (Php 77,700.00)	6	Form Factor	Ceiling Mount
		Specifications	Dual Band
			Supports speed up to 450 mbps at 2.4 GHZ
			Supports speed up to 1300 mbps at 5 GHZ
		Others	Supports Seamless Roaming, MU-MIMO, Band Steering, Beamforming, Load Balance, Airtime Fairness
		Others	Supports POE or later versions
		Warranty	2 years for parts; 2 years for labor; 2 years for on-site services min.
Installation and Configuration	Includes delivery, installation, setup, configuration, testing, and training		
Firewall Appliance (Php 643,600.00)	1	Form Factor	Rack Mount
		Features	Admin Control
			Networking
			User Authentication
			URL Filtering
			Bandwidth Management
			Monitoring Reporting
			Mail Protection
			Firewall & Security Features
			VPN unrestricted unlimited
			Centralized Management System
			High Availability
			Firmware and General Updates
			Advanced Malware Protection
			Intrusion prevention system
		Anti Spam Service	
		Unified Threat Protection(UTP)	
24x7 Support			
Compatible with Ipsec, SSL			
Warranty	3 years for parts; 3 years for labor; 3 years for on-site services min.		
Installation and Configuration	Includes delivery, installation, setup, configuration, testing, and training		

SQL Standard 2019 (Php 2,218,300.00)	8	Installation and Configuration	Includes delivery, installation, setup, configuration, testing, and training
			Includes turnover of license
Virtualization Technology Software (Php 478,800.00)	1	Specifications	2 x Virtualization platform license for 1 processor
			1 x VM management license
			With graphical user interface (GUI)
		Min. of 3 hosts	
Support	3 years support and subscription		
			Includes turnover of license
Network Cabling Services (Php 372,500.00)	1	Scope	Interconnecting server, firewall Appliance, core, Distribution and access switches, and access points (See accompanying Planned LAN System Diagram and Building Floor Plan)
		Specifications	Cat cables(Must be Blue to Determine the backbone layout network)
			RJ45 (unshielded)
			Pipe (If needed)
			Plastic Molding (if needed)
Remote to site network layout pattern			

LOT 2

**APPROVED BUDGET FOR THE CONTRACT
(Php 3,603,600.00)**

Delivery: 15 to 90 calendar days after issuance of notice to proceed.

Payment terms: Immediately after the issuance of inspection and acceptance report for the complete delivery of goods.

Anti-virus	1	Type	Server-type; Endpoint Security with Unified Endpoint Management
		Users	Min. of 2,400 licenses/users
		Compatibility	Supported OS: Windows, Mac and Linux
			Will run on 2GB RAM Device
		Features	Anti-Ransomware
			Vulnerability Scan
			Patch Management
			Phishing Protection
			Browsing Protection
			Data Loss Prevention
			File Activity Monitoring
			Roaming Platform
			Asset Management
			IDS/IPS Protection
			Web Security and Web Filtering
Advanced Device Control			
Application Control			
Firewall Protection			
Email Protection			
Spam Protection			