



TERMS OF REFERENCE

Supply, Delivery and Implementation of Philippine National Police-Internal Affairs Service (PNP-IAS) Computer Server with Structured Local Area Network (LAN) Cabling and Network Peripherals

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I. PROJECT OVERVIEW

The name of this project is **Supply, Delivery and Implementation of Philippine National Police-Internal Affairs Service (PNP-IAS) 1-Lot of Computer Server with Structured Local Area Network (LAN) Cabling and Network Peripherals.**

II. PROJECT OBJECTIVE

The project aims to procure computer server system and its network infrastructure as part of the digitization program of Philippine National Police-Internal Affairs Service (PNP-IAS).

III. TECHNICAL REQUIREMENTS

A. General Requirements

The Project requires for the procurement of the following:

Quantity	ITEM
2 units	Enterprise Server
1 unit	Firewall
1 unit	24-port Managed Switch
5 units	24-port Unmanaged Switch
3 units	Wireless Access Points
2 units	42U Cabinet Rack
2 units	Rack Mountable UPS
1 lot	LAN Cabling

The Project also covers the structured cabling of PNP-IAS office as shown in the network plan (Annex A).

B. Detailed Technical Requirements (Minimum)

QTY	ITEM	SPECIFICATION
2	Computer Server	
	Category	Branded and Brand New
	Processor	10 Core Processor or Better, 2.2 GHz
	Type	Rack Mount
	Memory	32-GB, 25MB L3 Cache or better
	Controller	Embedded 1 GB 4-port Network Adapter Smart HBA controller RAID 0/1/5/10/6 SAS
	Hard Disk	2x2TB 12G SAS 7.2K RPM (2.5 inch)

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		Hot swappable/hot plug functionality
	PCI Express Slots	3 PCIe slots (+3 PCI slots available with upgrade option, second processor required)
	Optical Drive	Must have Optical Drive
	Software	Proprietary or OEM with stacked licenses plus 5 CAL (Enterprise) Antivirus for server – 1 year subscription
	Features	SNMP or better
	Management	Management Console (standard), Intelligent Provisioning (standard)
	Power Supply and Fans	-2x500watts Power Supply Kit; -4 hot plug fans, redundant
	USB Port	USB 3.0 Rear and Front
	Warranty and Bundle	Server Warranty includes 3-year parts; 3-year labor; 3-year onsite support with next business day response; - 3 year 24x7 Support Physical 1 Server License; - With a 3 year 24x7 Server Support Service.

QTY	ITEM	SPECIFICATION
1	Network Firewall	
	Network Firewall	- up to 300 users; - 18xGE RJ45 (including 2xWAN ports, 1xMGMT port, 1xHA port, 14xSwitch Port) - 480GB onboard SSD storage - Management Software with Load Balancer - Security Features: Web Content Filtering; Block TCP/UDP packet floods; DoS attack protection; Port/Service blocking; Hardware DMZ port
	Encryption	DeS, Triple DES, AES or Better
	Form Factor	Rack Mount
	Accessories	Power cord, Drivers and Manuals
	Input Power	AC 230 V

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QTY	ITEM	SPECIFICATION
6	Network Switch	
	Category	Branded, brand new and latest model
	Form Type	Rack-mountable
	Ports	24-port
	Management	Web-based and/or Client-based
	Power Requirements	220/240 V (Auto-Volt)
	Accessories	Software Driver and Manual Power Cable

QTY	ITEM	SPECIFICATION
3	Wireless Access Points	
	Category	Branded, brand new and latest model
	Wireless Technology	IEEE 802.11b/g or latest
	Frequency Spectrum	2.4GHz/5.0GHz
	Interface/Ports	At least one (1) 10/100 Base TX/LAN or At least one (1) 10/100/1000/ Base T-LAN
	Wireless Signal Range	Indoors: 100 m Outdoors: 400 m or better
	Power Requirements	220/240 V (Auto-Volt)

2	Cabinet Racks	
	Category	Branded and brand new
	Rack Size; Height	19" standard; Minimum of 42U; closed-type
	Color	Black or dark color
	Integrated Features	Integrated rack mount 17" (or higher) flat panel (LCD) monitor console kit or better Integrated keyboard video monitor and mouse (KVM) switch Rack accessories
	Others	24-port patch panel Cable manager

2	UPS	
	Category	Branded and brand new

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	Output Power Capacity	3-kVA
	Input Voltage	110V-240V
	Output Voltage	220V AC
	Typical Recharge Time	3 hours or better
	Typical Backup at Full Load	Battery power backup time should be at least 3 minutes or better
	Interface Ports	DB9, RS-232, USB or better
	Form Factor	Rack-mount

QTY	ITEM	SPECIFICATION
1	LAN Cabling	
	Protocol	<ul style="list-style-type: none"> - Ethernet Protocol (802.3 family) - 10 Mbps – 10 Base – T Ethernet (IEEE 802.3) - 100 Mbps – 100/1000 Base – TX Fast Ethernet (IEEE802.3u) - 1000 Mbps – 10/100/1000 Base – T/TX Gigabit Ethernet (IEEE802.3z) - 10 Gigabit – 10Gbase – R Ethernet (IEEE802.3ae) - Latest Network Cabling
	Standard Cable Type	<ul style="list-style-type: none"> - Cat6 for 10 Mbps – Base – T(802.3) or for 100 Mbps – Fast Ethernet (802.3u) - Cat 6 for Gigabit Ethernet (802.3z) - Optical Fiber Optics for 10 – Gigabit – 10 G Base – R (802.3ae) - Cat 6e or latest for 10 Gigabit 10Base R (802.3ae) - Latest Technology cabling for compatible protocol
	Number of Nodes	100 nodes
	Cabling Service Requirement	Cabling Layout Design and labelling

C. Installation

The supplier shall provide the necessary installation, setup and configuration services of all deliverables, to include but not limited to hardware, software, network, and electrical.

The installation shall commence after the Committee on Inspection and Acceptance (CIA) inspected the delivered items as to quantity and specifications based on the agreed contract.

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D. Training - Training for at least three (3) personnel on the following:

- a. Operating System Management Training; and
- b. Technical training on management of firewall and switches;

E. TECHNICAL SUPPORT AND WARRANTY

Quality assurance is expected from the SUPPLIER, such that any error or fault in any hardware, peripherals, pre-installed mandatory software and installation tools delivered during the implementation shall be acted upon, resolved, mitigated and/or replaced accordingly at no cost to the organization. Likewise, upon final project acceptance, the SUPPLIER is required to after sales service and assurance that all equipment and installation are accurate, complete, operable, uncompromised, and error-free during warranty period.

All IT Equipment must be covered with warranty of at least three (3) years on parts and services.

In addition, the following are required from the SUPPLIER:

1. Remote and on-site support. The bidder should have its own Technical Support team, based in the Philippines to perform the technical support duties for the procuring entity covering all functions of the embedded archiving system.
2. At least 4 hours response time and a resolution time within 12 hours pertaining to any technical issues.

IV. PROJECT DURATION

The project's duration shall not be more than the specified number of days in the Schedule of Activities. The Supplier is expected to follow the scheduled delivery **strictly**. Extending the period of delivery (45 days from Notice to Proceed) of the machines will subject the Supplier to liquidated damages as stipulated in RA No. 9184.

V. APPROVED BUDGET

The Philippine National Police (PNP)' Approved Budget for the Contract (ABC) for the Supply, Delivery and Implementation of Philippine National Police-Internal Affairs Service (PNP-IAS) Computer Server with Structured Local Area Network (LAN) Cabling and Network Peripherals is Three Million Eight Hundred Six Thousand Two Hundred Twelve Pesos and Seventy-two Centavos (Php3,806,212.72).

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VI. SCHEDULE OF ACTIVITIES

Activities	Timeline	Remarks
Delivery of the Items	45 days after Notice to Proceed	The location of the delivery shall be at PNPIAS Camp BGen Rafael T Crame, Quezon City.
Inspection as to Quantity	2- 3 days	Logistics Officers, CIA, TWG, Observers and the Supplier shall inspect the delivered items
Installation and Configuration	5 days after the Inspection as to Quantity	Supplier shall install and configure the system to be witness by the TWG of the CIA
Test and Evaluation	5 to 10 days	TWG shall test and evaluate the delivered items to be witness and assists by the Supplier
Acceptance	1 to 3 days	CIA will deliberate the result of the TWG test and evaluation
Trainings	To be scheduled by PNP IAS	Supplier to issue Affidavit of Undertaking to conduct training as soon as PNP IAS communicates the availability of the participants of the training/s

VII. POST-QUALIFICATION

The Post-qualification of the items to be delivered will be based on the submitted brochures.

VIII. TESTING AND EVALUATION

The visual test, conformity with the specifications, and functional test shall be conducted in accordance with PNP Memorandum Circular No. 2016-079 "Guidelines in the Conducts of Test for PNP Various Equipment/Devices" and the Bidding Documents and Terms of Reference.