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NATIONAL POLICE COMMISSION  
PHILIPPINE NATIONAL POLICE  
**INFORMATION TECHNOLOGY MANAGEMENT SERVICE**  
Camp BGen Rafael T. Crame, Quezon City



## **TERMS OF REFERENCE**

# **PROCUREMENT OF ICT EQUIPMENT FOR DICTM ANNEX, NHQ BUILDING**

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## **TABLE OF CONTENTS**

### **I. INTRODUCTION**

### **II. PROJECT OBJECTIVES**

### **III. SCOPE OF WORK**

Supplier's Scope of Work

1. Hardware
2. Installation

### **IV. DETAILED TECHNICAL REQUIREMENTS**

### **V. WARRANTIES AND GUARANTEES**

### **VI. APPROVED BUDGET**

### **VII. REFERENCES**

## I. INTRODUCTION

The Philippine National Police (PNP) recognizes the fast-paced environmental changes brought about by the advancement of technology. The PNP takes opportunity with the use of modern technology by setting up the organization's framework for the harmonization of all ICT efforts which paves way to the procurement of the needed hardware equipment for the upgrade of the Technological capability of DICTM.

With the fast-growing IT industry and the rapid development of new IT solutions, the PNP organization ensures to keep abreast with the digital era, and heads toward Digital Transformation.

## II. PROJECT OBJECTIVE

The main objective of the procurement of ICT Equipment for DICTM Annex is to upgrade the technological capability of DICTM, thereby increasing the productivity of their day to day office activities in the accomplishment of their mission.

## III. SCOPE OF WORK

This project will be procured through "competitive bidding" under the category of **goods**. This method of procurement is open to participation by any interested party and which consists of the following processes: advertisement, pre-bid conference, receipt and opening of bids, evaluation of bids, post-qualification and award of contract.

### Supplier's Scope of Work:

The supply and delivery of ICT equipment includes software and accessories but not limited to the following:

#### 1. HARDWARE

ITEM	QUANTITY
1. Desktop Computer	8
2. Laptop	2
3. CCTV	3
6. Digital Video Recorder	1
4. External Hard Disk	8
5. LED Smart TV, 40 inches	1
6. LED TV, Ultra High Definition, 75 inches	1
7. Network Switch	1
8. Printer, 3 in 1	2
9. Rack Cabinet	1
10. Router, Dual Band	2
11. Router, Triband	1
12. Scanner	1
13. UPS	8
14. Web Camera	9
15. Wi-Fi Adapter	8

## 2. INSTALLATION

The supplier shall provide the necessary installation, setup and configuration services of all deliverables, and to include the installation of anti-virus software and office application in all desktop computers and laptops.

## IV. DETAILED TECHNICAL REQUIREMENT

Below are the minimum specifications of the required items to be procured:

QTY	ITEM	SPECIFICATIONS	
8	<b>Desktop Computers</b>		
	Category	Branded and Brand New	
	Processor	8 cores, 16 threads base clock 3.0 GHz or higher, 12 MB cache	
	Motherboard	Compatible with processor	
	Form Type	Proprietary Design/Manufacturer's Standard	
	Memory (RAM)	16 GB DDR4 or higher (2x8GB)	
	Storage	2TB HDD + 128 M.2 SSD	
	Video Controller	Video Card 4GB DDR5 or higher	
	Sound Controller	Sound card or onboard sound controller with speaker	
	Monitor	22" LED	
	Keyboard/mouse	USB Keyboard and USB optical mouse	
	Optical Drive	DVD-RW or latest optical drive	
	Networking	Onboard Gigabit Ethernet Controller	
	Standard I/O Ports		4 USB Ports with at least 1 USB 3.0
			VGA, DVI or HDMI
			Mic/Headphone combination or separate port
	Power Supply Wattage	500 Watts or higher	
	Software		Latest Professional Licensed Operating System
			Latest Licensed Anti-Virus
			Latest Licensed Commercial Use Office Application (Perpetual)
Accessories	CD Installer/Driver/Manual		
Other Peripherals	Mic/Headphone combination or separate port		
Warranty	At least three (3) years after sales support on parts and service. Brand is at least 15 years on the market.		

QTY	ITEM	SPECIFICATIONS	
<b>2</b>	<b>Laptop</b>		
	Category	Branded and Brand New	
	Form Type	Proprietary Design/Manufacturer's Standard	
	Processor	6-cores,12-threads, clock speed of up to 5.0GHz, 12MB Cache	
	Memory (RAM)	8GB DDR4	
	Hard Disk	1TB Hard Disk Drive + m.2 256Gb SSD	
	Optical Drive	DVD-RW or latest optical drive (built-in or external)	
	Onboard Controller	Sound, Bluetooth, Network (wired and wireless), Card reader, Microphone / headphone and Webcam (built-in)	
	Video Controller	Video Card 4GB DDR6	
	Networking	WLAN:	IEEE 802.11ac+
			Dual Band (2.4GHz and 5.0GHz)
		LAN:	Gigabit Ethernet
			Supports Bluetooth
		USB Ports	2x USB ports (with at least 1 USB 3.0)
	Interface	HDMI / HDMI connector and VGA / VGA connector	
	Monitor	15" FHD	
	Battery	Battery Life - 6 Hours or Better	
	Software		Latest Professional Licensed Operating System
			Latest Licensed Anti-Virus
			Latest Licensed Commercial Use Office Application (Perpetual)
Accessories	CD Installer, Driver, Manual, external LAN adapter, Branded Wireless Mouse Laptop Carrying Bag		
Warranty	At least three (3) years after sales support on parts and service. Brand is at least 15 years on the market.		

QTY	ITEM	SPECIFICATIONS
3	<b>CCTV</b>	
	Category	Branded and Brand New
	Camera Type	Dome/Bullet/Box
	Image Sensor	1/2" to maximum to 1/3" minimum CMOS sensor
	Signal System	NTSC
	Illumination	Color 0.1 - 1.0 lux Black and White 0-0.5 lux
	Image Frame Rate	30fps
	Angle of View	62.8 deg. Minimum
	Effective Pixel	2 MP
	Image Compression	H. 264
	Audio Compression	G. 726
	IR Visibility	20 meters (minimum)
	Network Protocol	Manufacturer's Standard
	Operating System	Manufacturer's Standard
	Operating Temperature	0 deg. Celsius to 55 deg. Celsius
	Lens Type	Manufacturer's Standard
	Weight	2.3 kgs. Minimum
	Protection Rating	IP 66
	Optical Zoom	18x minimum
Digital Zoom	10x	
Warranty	At least 1 year after sales support on parts and service.	

QTY	ITEM	SPECIFICATIONS
1	<b>Digital Video Recorder</b>	<b>Network Video Recorder (NVR) Standalone Type</b>
	Category	Branded and Brand New
	Number of Channels	16 Channels
	Video Compression	H. 264
	Supported Resolution	Manufacturer's Standard
	HDD Capacity	4TB
	USB port	2
	Protocol Support	Manufacturer's Standard
	Power Supply	220VAC, 60Hz (+-5%)
	Weight	Not more than 4kgs.
	Communication Standard	Manufacturer's Standard
	Ports	8 ports
	Data Transfer Rate	Ethernet:10/20Mbps (half/full duplex) Fast Ethernet 100/200Mbps (half/full duplex)
	Data RAM buffer	Manufacturer's Standard
	Power Supply	220VAC, 60Hz (+-5%)
Operating Temperature	0 deg. Celsius to 45 deg. Celsius	

	Dimension	Manufacturer's Standard
	Weight	Not more than 1.5kgs.
	Warranty	At least 1 year after sales support on parts and service.

QTY	ITEM	SPECIFICATIONS
8	<b>External Hard Drive</b>	
	Category	Branded and Brand New
	Storage	2 TB
	Interface	USB version 2.0 or latest interface
	Type of Device	Solid State Drive (SSD) or Disk-based
	Form Factor	2.5" or 3.5" standard
	Dimension	Height x Width x Depth
	2.5 standard	0.7" x 3.2" x 5" (maximum)
	3.5 standard	1.6" x 5" x 8.1" (maximum)
	Standard	SATA or latest hard disk standard
	Security/Software	Back-up Software and Encryption
	Casing	Metal enclosure/casing
	Color	Black or Dark color
	Accessories	USB Cable connector, CD installer/Driver/Manual
Warranty	At least 1 year after sales support on parts and service.	

QTY	ITEM	SPECIFICATIONS
1	<b>LED Smart TV, 40 inches</b>	
	Category	Branded and Brand New
	Type	Smart TV
	Screen Size (Diagonally)	40"
	Native resolution	1920x1080
	Audio	Surround Sound
	PC Interface	at least 2 High Definition Multimedia Interface
	Power	110-240 V AC, 50/60 Hz
	Full HD	Full HD
	USB port	At least 2 USB ports
	Network	
	Lan Port	Lan Port
	Wireless Connection	Wi-Fi
		Bluetooth
	Others	Wall mounted and stand
Accessories	HDMI Cables (10 meters)	
Warranty	At least one (1) year after sales support on parts and service. Brand is at least 15 years on the market.	

QTY	ITEM	SPECIFICATIONS
1	<b>LED Smart TV, Ultra High Definition, 75 inches</b>	
	Category	Branded and Brand new
	Type	LED Smart TV UHD
	Screen Size (Diagonally)	75"
	Native resolution	4k ultra HD
	Audio	Surround Sound
	PC Interface	2 at least High Definition Multimedia Interface
	Power	110-240 V AC, 50/60 Hz
	Full HD	Full HD
	USB port	At least 2 USB ports
	Network	
	Lan Port	LAN Port
	Wireless Connection	Wi-Fi
		Bluetooth
	Others	Wall mounted and stand
Accessories	HDMI Cables (10 meters)	
Warranty	At least one (1) year after sales support on parts and service. Brand is at least 15 years on the market.	

QTY	ITEM	SPECIFICATIONS
1	<b>Network Switch</b>	
	Category	Branded and Latest Model
	Form Type	Rack-mountable or other form types
	Standard	IEEE 802.3 Type -10 Base-T
		IEEE 802.3u Type -100 Base-TX
		IEEE 802.3ab Type -1000 Base-T
		IEEE 802.3x Flow Control
		or latest standard protocol and features
	Protocol Support	IPv4 and IPv6 Support or Better
	Number of ports	24 ports
	Power Requirements Service	110-240 AC (Auto-volt)
		Connection/Cascade with existing switches, if available
Accessories	Software Driver and Manual	
Service	Power Cable	
Warranty	At least 1 year after sales support on parts and service.	

QTY	ITEM	SPECIFICATIONS
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<b>2</b>	<b>Printer</b>	
	Category	Branded and Brand New
	Type	Print, Scan and Copy
	Functions	Inkjet with integrated Ink Tank
	Ink Colors	Black, Cyan, Yellow and Magenta
	Ink Capacity (Pages yield)	Black – 4000, Colored - 5000
	Interface	USB
	With Resetting Capability	Based on the Manufacturer’s Product Brand Brochure
	Printing Resolution in Dots per Inch (DPI)	4800 x 1200
	Print Speed in Image per Minute (IPM)	Monochrome: 8.8
		Colored: 4.5
	Scanning Capability	Monochrome and Colored
	Scanning Resolution (DPI)	600 x 1200
	Copy Speed (IPM)	Monochrome: 2.5
		Colored: 2.5
Warranty	At least 1 year after sales support on parts and service. Brand is at least 5 years on the market.	
Accessories	Compatible Software/s Based on the Manufacturer’s Product Brand Brochure Specifications as Offered	
	Appropriate Cables Based on the Manufacturer’s Product Brand Brochure Specifications as Offered	

QTY	ITEM	SPECIFICATIONS
<b>1</b>	<b>Rack Cabinet 4U</b>	
	Category	Branded and Brand New
	Size	4U
	Accessories	Cooling Fan
		6 or more slots universal PDU (Rack Mounted)
Mounting Bracket		

QTY	ITEM	SPECIFICATIONS
<b>2</b>	<b>Router, Dual Band</b>	
	Category	Branded and Brand New
	Wireless Technology	IEEE 802.11 b/g and or latest
	Frequency Spectrum	2.5 GHz and 5 GHz
	Transmission Speed	54 Mbps or Better
	Network Protocols	TCP/IP, PPPoE, PPTP, FTP, DHCP, HTTP, TKIP and/or other

	Wireless Security Protocol	Wireless Encryption Protocol (WEP);
		Wi-Fi Protected Access 2 (WPA2):
		MAC Address Access Control (WPA-TKIP/WPA-AES) and or
		Other latest wireless security standards
	Interfaces/Ports	1 x RJ-45 10/100 Base TX WAN;
		at least 2 x RJ-45 10/100 Base-TX LAN; and
		at least 1 x RJ-45 10/100/1000 Base-TX LAN (optional)
	Modulation	Latest modulation Technology
	Device Management	DHCP (Server function) and Web based management configuration
	LEDs	Power, LAN, WLAN (Wireless Connection) and other indicators
Power Input	Ext. Power Supply Direct Current (DC)	
Accessories	AC to DC Adaptor	
	UTP Patch Cord	
	CD Installer/Drive/Manual	
Warranty	At least 1 year after sales support on parts and service.	

QTY	ITEM	SPECIFICATIONS
1	<b>Router, Tri-Band</b>	
	Category	Branded and Brand New
	Wireless Technology	IEEE 802.11 b/g and or latest
	Frequency Spectrum	2.5 GHz and 2 x 5 GHz
	Transmission Speed	54 Mbps or Better
	Network Protocols	TCP/IP, PPPoE, PPTP, FTP, DHCP, HTTP, TKIP and/or other
	Wireless Security Protocol	Wireless Encryption Protocol (WEP);
		Wi-Fi Protected Access 2 (WPA2):
		MAC Address Access Control (WPA-TKIP/WPA-AES) and or
		Other latest wireless security standards
	Interfaces/Ports	1 x RJ-45 10/100 Base TX WAN;
		at least 2 x RJ-45 10/100 Base-TX LAN; and
		at least 1 x RJ-45 10/100/1000 Base-TX LAN (optional)
Modulation	Latest modulation Technology	
Device Management	DHCP (Server function) and Web based management configuration	
LEDs	Power, LAN, WLAN (Wireless Connection) and other indicators	
	Power Input	Ext. Power Supply Direct Current (DC)
	Accessories	AC to DC Adaptor

		UTP Patch Cord
		CD Installer/Drive/Manual
	Warranty	At least 1 year after sales support on parts and service.

QTY	ITEM	SPECIFICATIONS	
1	<b>Scanner</b>		
	Category	Branded and Brand New	
	Type	Auto Document Feeder (ADF)	
	Capability	Duplex Scanning	
	Scanning Modes	Color, Grayscale, and Monochrome	
	Optical Resolution	600 dots per inch (dpi)	
	Scanning Speed at Normal Mode	24 pages per minute (ppm)	
	Minimum of the Largest Scanning Area	2.0" x 3.0"	
	Maximum of the Smallest Scanning Area	8.5" x 14"	
	ADF Capacity	50 Pages	
	Interface	USB (Latest Technology), network connectivity or better	
	Software	Bundled with Optical Character Recognition (OCR) Software	
	Compatibility	Based on the Manufacturer's Product Brand Brochure Specifications as Offered	
	Scan Speed		Color Scanning: 20 to 25 pages per minute or better
			Monochrome Scanning: 25 to 30 pages per minute or better.
	Paper Types	Photo, plain paper, banner, envelopes, transparencies, labels, cards, iron-out, transfers and alike	
	Interface	USB, parallel port or better	
Scan Size	Supports A4, letter, legal and long paper		
Accessories	Power Cord, CD Software, Driver, Installer and Manual		
Warranty	At least 1 year after sales support on parts and service. Brand is at least 5 years on the market.		

QTY	ITEM	SPECIFICATIONS
8	<b>UPS</b>	
	Category	Branded and Brand New

	General Usage	For protection against power surges of ICT equipment
	Product type	Uninterrupted Power Supply
	Voltage Rating	650VA or higher
	Management	Management Software (optional)
	Accessories	Manual
	Warranty	At least 1 year after sales support on parts and service.

QTY	ITEM	SPECIFICATIONS
<b>9</b>	<b>Web Camera</b>	
	Category	Branded and Brand New
	Effective Resolution	One (1) Megapixel or higher
	Interface	USB version 2. 0 or higher
	Video Resolution	800 x 600 @ 30 fps or better
	Microphone	Integrated microphone (optional)
	System Requirement	Compatible with latest licensed Operating System
	Accessories	USB connector extension (optional), CD Driver/ Application/Manual Software
	Warranty	At least 1 year after sales support on parts and service.

QTY	ITEM	SPECIFICATIONS
<b>8</b>	<b>Wi-Fi Adapter</b>	
	Category	Branded and Brand New
	Wireless Technology	IEEE 802.11 b/g and or latest
	Frequency Spectrum	2.4 and 5 GHz or as defined by latest wireless technology
	Transmission Speed	54 Mbps or Better
	USB port	Capable on 2.0 and 3.0
	Modulation	Latest modulation Technology
	Warranty	At least 1 year after sales support on parts and service.

## V. Warranties and Guarantees Requirements

1. The anti-virus software must have at least 1 year license coverage starting from delivery and installation.
2. Quality assurance is expected from the Winning Bidder, 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.

3. List with addresses and contact information of their service centers or accredited service centers, which will provide technical after sales support.
4. Certifications by the Proponent’s Supplier (Original Equipment Manufacturer (OEM) local distributor and the like) that all ICT equipment to be supplied are brand new.
5. Certification from the Proponent’s Supplier that the proponent is authorized to resell the ICT equipment offered.

## VI. APPROVED BUDGET

The Approved Budget for the Contract (ABC) allocated for the procurement of ICT equipment (hardware) is One Million Three Hundred Forty Six Thousand Seven Hundred Pesos only (PHP1,346,700.00), inclusive of installation services, delivery, incidental expenses, VAT and other government taxes.

## VII. REFERENCES

ITEM	REQUIREMENT
Desktop	<b>PHILIPPINE NATIONAL POLICE MC 2020-086</b> <i>Prescribing the Minimum Technical Specifications for Desktop Computer</i>
Laptop	<b>NAPOLCOM RESOLUTION NO. 2015-061</b> <i>Amending NAPOLCOM Resolution No. 2010-028 by Prescribing the New Minimum Standards in the Specifications for Laptop/Notebook Computer</i>
External Hard Drive	<b>NAPOLCOM RESOLUTION NO. 2009-700</b> <i>Approving the Proposed Standard Specifications for External Hard Drive</i>
UPS	<b>NAPOLCOM RESOLUTION NO. 2009-653</b> <i>Approving the Proposed Standard Specifications for Uninterruptible Power Supply (UPS)</i>
CCTV	<b>NAPOLCOM RESOLUTION NO. 2015-021</b> <i>Prescribing the Minimum Standard in the Specifications for Closed Circuit Television (CCTV) Wireless Internet Protocol (IP) Equipment</i>
LED TV	<b>NAPOLCOM RESOLUTION NO. 2015-012</b> <i>Prescribing the Standard Specifications for Light Emitting Diode Television (LED TV)</i>

Web Cam	<b>NAPOLCOM RESOLUTION NO. 2009-650</b> <i>Prescribing the Standard Specifications for Web Cam</i>
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