Terms of Reference

ICT Equipment and Peripherals

Background

The Department of Tourism (DOT) is the national government agency responsible for tourism development planning, implementing standards and regulations, evaluating and facilitating the formulation of policies that will enable sustainable tourism development and the provision of a healthy business environment.

In order to do this, DOT employees must have functioning and updated ICT equipment such as but not limited to desktops, laptops, servers, productivity software and uninterrupted power supplies (UPS) to be able to work efficiently and provide access analyze and process data to produce relevant statistics, thereby providing the necessary service needed from the DOT.

Justification

The current ICT equipment situation at the DOT central office through the inventory conducted by the IT Division showed that most of the desktops, laptops, UPS, and other ICT peripherals are beyond its maximum life span with some equipment as old as 1993. This has render the old equipment as non-functional, beyond repair, obsolete, and could not meet the demand of the workload and the current technology. Among others, breakdown of equipment that can result in data loss that can hamper the DOT operating units' operations. There is an issue concerning security and insufficient productivity software such as but not limited to Microsoft Office and security update which needs immediate action.

The lack of ICT equipment at the DOT central and regional offices result to sharing of ICT equipment such as but not limited to desktop, laptop, printer and tablets with a ratio of 3:1 resulting to inefficiency the operation of the agency. Further, the newly created offices are lacking desktop and laptop for their daily operations.

Objective

- To provide efficient and reliable delivery of service to the different tourism stakeholders and the general public.

- To provide officials and staff of the DOT with functional and working ICT equipment, which can aid the different operating units in the performance of its functions.

I.   Technical Specification

A. Lot I
•   Managed 24-Port Gigabit POE Switch

Description
Standard - IEEE 802.3, 802.3u, 802.3x, 802.3ab, 802.3az, 802.3AF/AT
Number of Ports- 24 Gigabit
MAC Address Table Size- 8,000 entries

Power Over Ethernet:
    Standards – 802.3af/at
    Capable Ports – Ports 1 – 12
    Power Budget – 100 W

Switching Capacity – 48Gbps
Max. Forwarding Rate – 35.71 Mpps
Quality of Service- 802.1p and DSCP
Status LEDs- Link, speed, and activity indicators
Power Supply- Internal
Power- 110–240V AC, 50/60Hz
Max. Power Consumption – 128.3 W (PoE on), 21.2 W (PoE off)
Standby Power Consumption – 13.0 W
Ventilation – One Fan
Temperature (Operating)- -5 to 50°C (23 to 122°F)
Temperature (Storing)- -40 to 70°C (-40 to 158°F)
Humidity (Operating)- 10 to 90% (non-condensing)
Mounting- Rack mount
Warranty – 1 year

B. Lot II
•   Mesh (3 Pcs. Per Pack)

Description
Wi-Fi Bands: 2.4 and 5GHz (Simultaneous Dual-Band)
Wi-Fi Speed: AX5400 (600 + 4800)
Ports: 3x Gigabit LAN + 1x Gigabit WAN
Wi-Fi Technology: AX5400 Mesh Dual-Band Gigabit 600 + 4800 Mbps

Key Features
    4x4 MU-MIMO
    OFDMA
    High Power Pas
    Supporting 160MHz channel bandwidth
    Automatic Firmware Updates
    Advanced Security
    Easy setup and control with the Linksys App
    Intelligent Mesh Technology
    Easily Expandable and Seamless Mesh WiFi system

Power Supply: 12V/2A
Antennas: 5x high performance internal antennas
Wireless Encryption: 128-bit

Processor: 1GHz Dual Core Processor

Security Features
    WPA2-Personal, WPA3-Personal, WPA3/WPA2 Mixed
    Encryption SPI Firewall
    Automatic Security Updates

Network Standards   802.11a, 802.11b, 802.11g, WiFi 4 (802.11n), WiFi 5 (802.11ac), WiFi 6 (802.11ax)
Warranty and Support - 1 year

C. Lot III

- **Network Test Kit**

Description
General Specs
Operating temperature: 32 °F to 104 °F (0 °C to 40 °C)
Storage temperature: -4 °F to +140°F (-20 °C to °C)

Operating relative humidity (% RH without condensation)
    95 % (50 °F to 95 °F; 10 oC to 35 °C)
    75 % (95 °F to 104 °F; 35 °C to 40 °C) Uncontrolled < 50 °F (< 10 °C)

Vibration: Random, 2 g, 5 Hz-500 Hz
Shock: 1 m drop test
Safety: EN 61010-1, Category: None
Altitude: 3000 m
EMC: EN 61326-1, FCC Part 15 B
Battery type and life: 9 V alkaline (NEDA 1604A or IEC 6LR61); 20 hours typical

Applications
    Copper cabling media including; 75 or 50 Ohm Coaxial cable; Two Conductor
    control, security, generic cabling. 10 Base-T or 10/100 Base-T datacom networks.
    UTP cable. Shielded Twisted Pair supported in Cablemap function of the IntelliTone
    200.

TONER SPECS
Dimensions: 5.54 in x 2.94 in x 1.25 in (14.1 cm x 7.5 cm x 3.2 cm)
Display: LED
Control: Thumbwheel switch

Toner interface:
    Main Mod8 port for tone generation on all 4 pairs of UTP / STP cabling. F Connector for
    coaxial cabling Banana Jack Plugs (2) - two conductor wiring

Toner frequency:
    IntelliTone™ signal: encoded digital signal
    Analog SmartTone signal: 500 - 1200Hz, 4 songs

Ouptut power: 5 V p-p
Auto power down: Turns off automatically after 2 1/2 hours of inactivity
PROBE SPECS

Dimensions: 8.73 in x 1.88 in x 1.26 in (22.2 cm x 4.8 cm x 3.2 cm)	
Display: (8) LED indicators, Sync LED indicator	
Audio: IntelliTone: Microprocessor controlled audio files Analog: Detected toner signal	
Control: Thumbwheel switch, volume control wheel	

Tone detection:

    Detects IntelliTone™ digital signal for Locate, Isolate, and CableMap

    Detects analog SmartTone signal (500-1200Hz) and other analog toners.

Toner interface:

    Main Mod8 port for cablemap on all 4 pairs of UTP / STP cabling.

Auto power down:

    Turns off automatically after 1 hour of inactivity

- **UTP Cable Cat5e**

Description
CONDUCTOR : Number of Pairs: 4 Total Number of Conductors: 8 AWG: 24 Stranding: Solid Conductor Material: BC - Bare Copper
INSULATION : Insulation Material: PO - Polyolefin
Number Color 1 White/Blue Stripe & Blue 2 White/Orange Stripe & Orange 3 White/Green Stripe & Green 4 White/Brown Stripe & Brown
OUTER SHIELD : Outer Shield Material: Unshielded
OUTER JACKET : Outer Jacket Material: PVC - Polyvinyl Chloride Outer Jacket Ripcord: Yes
OVERALL NOMINAL DIAMETER : Overall Nominal Diameter: .195 in. Operating Temperature Range: -20°C To +75°C Bulk Cable Weight: 29 lbs/1000 ft. Max. Recommended Pulling Tension: 35 lbs. Min. Bend Radius (Install): 0.5 in.
APPLICABLE STANDARDS : NEC/(UL) Specification: CM, UL444 CEC/C(UL) Specification: CM IEC Specification: 11801 Category 5 TIA/EIA Specification: 568-B.2 Category 5e Other Specification: NEMA WC-63.1 Category 5e, UL verified to Category 5e
FLAME TEST : UL Flame Test: UL1685 UL Loading CSA Flame Test: FT1

PLENUM/NON-PLENUM :
Plenum (Y/N): N
Plenum Number: 1585A
ELECTRICAL CHARACTERISTICS :
Nom. Mutual Capacitance @ 1 KHz: 15 pF/ft
Maximum Capacitance Unbalance (pF/100 m): 330 pF/100 m
Nominal Velocity of Propagation: 70 %
Maximum Delay (ns/100 m): 538 @ 100MHz ns/100 m
Maximum Delay Skew (ns/100m): 45 ns/100 m
Maximum Conductor DC Resistance @ 20 Deg. C: 9.38 Î©/100 m
Maximum DCR Unbalance @ 20 Deg. C: 3 %
Max. Operating Voltage - UL: 300 V RMS

- **Rj45 (1000pcs)**
- **Rj45 Rubber Boots (1000pcs)**

D. Lot IV

- **All-in-One Colored Printer**

Description	
Ink	
Number of Nozzles	Total 1,792 nozzles
Ink Bottles (Type / Colours)	GI-71 (Pigment / Black),(Dye-Based Ink / Cyan, Magenta, Yellow)
Maintenance Cartridge	MC-G02
Maximum Printing Resolution	4,800 (horizontal)[*1] x 1,200 (vertical) dpi
Document (ESAT/Simplex)	9.1 / 5 ipm (mono/colour)
Document (FPOT Ready/Simplex)	9 / 16 sec (mono/colour)
Photo (4 x 6") (PP-201/Borderless)	45 sec
Printable Width	Up to 203.2 mm (8") Borderless: Up to 216 mm (8.5")
Printable Area	
Borderless Printing[*3]	Top/Bottom/Left/Right margin: each 0 mm
Bordered Printing	Envelope (COM10/DL): Top margin: 8 mm, Bottom margin: 12.7 mm, Left/Right margin: 3.4 mm Envelopes (C5/Monarch): Top margin: 8 mm, Bottom margin: 12.7 mm, Left/Right margin: 5.6 mm Square 5 x 5" (127 x 127 mm): Top/Bottom/Left/Right margin: 6 mm Square 3.5 x 3.5" (89 x 89 mm): Top/Bot/Left/Right margin: 5mm

	LTR/LGL/Foolscap/B-Oficio: Top margin: 3 mm, Bottom margin: 5mm, Left margin: 6.4 mm, Right margin 6.3 mm M-Oficio: Top margin: 3 mm, Bottom margin: 5 mm, Left/Right margin: 6.4 mm Others: Top margin: 3 mm, Bottom margin: 5 mm, Left/Right margin: 3.4 mm
Support Media	
Rear Tray	Plain Paper (64-105 g/m²) Photo Paper Pro Luster (LU-101) Photo Paper Plus Glossy II (PP-201/PP-208) Matte Photo Paper (MP-101) Double Sided Matte Paper (MP-101D) Glossy Photo Paper "Everyday Use" (GP-508) High Resolution Paper (HR-101N) Photo Paper Plus Semi-Gloss (SG-201) Photo Stickers (PS-208/PS-808) Envelope
Paper Size	
Rear Tray	A4, A5, A6, B5, LTR, LGL, Executive (184.2 x 266.7 mm), Legal (India) (215 x 345 mm), Foolscap (215.9 x 330.2 mm), F4 (215.9 x 330.2 mm), Oficio2 (215.9 x 330.2 mm), B-Oficio (216 x 355 mm), M-Oficio (216 x 341 mm), 4 x 6", 5 x 7", 7 x 10", 8 x 10", Envelopes DL, Envelopes COM10, Envelopes C5, Envelopes Monarch (98.4 x 190.5 mm), Square (3.5 x 3.5", 5 x 5"), Card Size (91 x 55 mm) Custom size: width 55 - 216 mm, length 89 - 1200 mm
Paper Size (Borderless)	A4, LTR, 4x6", 5x7", 7x10", 8x10" Square (3.5 x 3.5", 5 x 5"), Card Size (91 x 55 mm)
Scan	
Scanner Type	Flatbed

Scanner Method	CIS (Contact Image Sensor)
Optical Resolution[*6]	600 x 1,200 dpi
Scanning Bit Depth (Input/Output)	
Grayscale	16 bit/8 bit
Colour	RGB each 16 bit/8 bit
Line Scanning Speed	
Grayscale	1.5 ms/line (300 dpi)
Colour	3.5 ms/line (300 dpi)
Maximum Document Size	
Flatbed	A4/LTR
Network	
Protocol	SNMP, HTTP, TCP/IP (IPv4/IPv6)
Wireless LAN	
Network Type	IEEE802.11b/g/n
2.4GHz Channel (1 - 11)	US/HK/TW/LTN/BR/CAN
2.4GHz Channel (1 - 13)	JP/KR/EUR/AU/ASA/CN/EMBU
Security	WEP 64/128 bit WPA-PSK (TKIP/AES) WPA2-PSK (TKIP/AES)
Direct Connection (Wireless LAN)	Available
System Requirements	
Windows 10 / 8.1 / 7 SP1 (operation can only be guaranteed on a PC with a pre-installed Windows 7 or later) macOS 10.12.6 ~ 10.15 Chrome OS	
General Specifications	
Operational panel	
Display	2-Line LCD
Language	32 Selectable Languages: Japanese / English / German / French / Italian / Spanish / Dutch / Portuguese / Norwegian / Swedish / Danish / Finnish / Russian / Czech / Hungarian / Polish / Slovene / Turkish / Greek / Simplified Chinese / Traditional Chinese / Korean / Indonesian / Slovakian / Estonian / Latvian / Lithuanian / Ukrainian / Romanian / Bulgarian / Thai / Croatian / Vietnamese
Interface	USB 2.0

PictBridge (Wireless)	Available
Operating Environment	
Temperature	5 - 35°C
Humidity	10 - 90% RH (no dew condensation)
Power	AC 100-240 V, 50/60 Hz
Power Consumption (Approx.)	
OFF	0.2 W
Standby (scanning lamp is off) USB connection to PC	0.6 W
Copying[13] USB connection to PC	16 W
Duty Cycle	Up to 3,000 pages/month
Dimensions (WxDxH) (Approx.)	
Factory Configuration	445 x 330 x 167 mm
Output/ADF Trays Extended	445 x 555 x 238 mm
Weight (Approx.)	6.4 kg

E. Lot V

- **External Hard Disk Drive**

- 2TB Capacity
- USB 3.0 or higher
- Form Factor: 2.5 inch

Summary

Item	Qty	Total Amount
Lot I:		
Managed 24-Port Gigabit POE Switch	2	Php 55,618.00
Lot II:		
Mesh (3 pcs. Per pack)	1	Php 33,479.00
Lot III:		
Network Test Kit	1	Php 40,987.00
UTP Cable Cat5e	3	Php 22,098.00
Rj45	1000	Php 10,000.00
Rj45 Rubber Boots	1000	Php 5,000.00
Lot IV:		
All-in-One Colored Printer	2	Php 26,190.00
Lot V:		
External Hard Disk Drive	3	Php 12,150.00
Total Amount		Php 205,522.00

Project Cost:

Total budget **PhP 205.522.00** inclusive of VAT chargeable against ITD 2023 funds.

Mode of Payment: Government Procedure

Delivery: 45 days upon receipt of Purchase Order

Project Officer:

Paul Brian D. Lao
OIC- IT Division
Department of Tourism
351 Sen. Gil Puyat Ave
Makati City
(02) 459 – 5200 Loc 518

Approved by:

Warner M. Andrada
Director, OTDPRIM