TERMS OF REFERENCE

1. ICT Equipment	Statement of Compliance
• The Bidder must be an authorized reseller/dealer of the brand being offered. A current valid manufacturer's certification is required as part of the technical component on bid proposal.	
• The Bidder must not exceed the sixty (60) day delivery lead-time upon receipt of Notice to Proceed.	
• Must attach brochure of the brand being offered.	
2. Corporate Notebook PC	
• The Bidder must be an Authorized Service Partner (ASP) of the brand being offered. A current valid manufacturer certificate is required as part of the technical component on bid proposal.	
• The Bidder must have at least two (2) manufacturer certified engineers for the brand of laptop. A current valid manufacturer certificate is required as part of the technical component on bid proposal.	
• The brand offered by the bidder must be included in the latest Top 3 of the Leaders Group of Gartner's List for Global Enterprise Notebook and Desktop. A certification in the inclusion in the Top 3 is required from the brand's manufacturer.	
• The winning Bidder should replace a factory defective unit with a new unit within 30 days upon delivery of the item.	
• In case of outside repair within the 3-year warranty period, the winning Bidder shall provide a service unit to the OSG.	
• For the two immediately preceding items, the Bidder must submit Proof of Warranty as part of the technical component.	

ICT EQUIPMENT - OFFICE PRODUCTIVITY (NEP)			
ITEM	**QTY**	**UNIT COST**	**TOTAL**
Blade Server	2	660,000	1,320,000
Storage Area Network Expansion Enclosure	1	600,000	600,000
Corporate Notebook PC	110	55,000	6,050,000

Hi-Resolution Document Scanner-110ppm	2	360,000	720,000
Barcode Printer	18	25,000	450,000
QR Barcode Scanner	40	10,000	400,000
		GRAND TOTAL	**₱ 9,540,000**

ICT EQUIPMENT - OFFICE PRODUCTIVITY (NEP)		
Item	**Specifications**	**Statement of Compliance**
Blade Server (2 Units)		
Form Factor	Half-width	
Compatibility	Must be compatible with OSG's existing Blade Chassis	
Processor	2x Xeon Silver 4114 10C 85W 2.2GHz Processor	
Memory	8x 16GB DDR4 2666 MHz. up to 24 DIMMs can be installed	
Storage	2x 2.5" 300GB 10K SAS 12Gb Hot Swap 512n HDD	
Connectivity	4-port 10Gb Virtual Fabric Adapter and 16Gb 2-Port Fibre Channel Adapter	
Features	With predictive failure analysis which covers processors, memory, and drives, plus the fans and power supplies.	
Warranty	3 Years Parts, Labour, On Site, 4Hr Response Time, 24x7	
Implementation Services	Installation and configuration must be included	
Power Cable	Two C13 to IEC 320-C14 Rack Power Cable	
Warranty and support	3Yr 24x7 4Hr Response with Drive Retention	
Implementation	Unboxing and Initial Setup	
	Integration with existing chassis	
	RAID configuration	
	Hypervisor Installation (vSphere only)	
	Knowledge Transfer	
Storage Area Network Expansion Enclosure (1 Unit)		
Form Factor	2U rack mount.	
Compatibility	Must be compatible with OSG's existing Storage Controller	
Drive technology	12 Gb SAS and NL SAS HDDs, 12 Gb NL SAS FIPS HDDs, 12 Gb SAS SSDs.	
	Intermix of HDDs and SSDs is supported within a system.	
	Intermix of HDDs and SSDs is supported within a volume group or disk pool	
	A maximum of 120 SAS SSDs is supported.	
	Intermix of FIPS drives non-FIPS drives is not supported	
Drives Slots	24x 2.5" Hot-swap Storage Bays	
Drives	3x 400GB 3DWD 2.5" SAS SSD on RAID 5	
	8x1.2TB 10K 2.5" SAS HDD ON RAID 5	
	8x1.2TB 10K 2.5" SAS HDD ON RAID 5	

	To be added on OSG's existing Drive Pool	
Connectivity (Ports)	3x external 12 Gb SAS x4 ports (Mini-SAS HD SFF-8644 connectors labelled Port A, Port B, and Port C) that are used for connections to the Controller Enclosure and for daisy chaining the expansion enclosures between each other.	
SAS Cables	4x External MiniSAS HD 8644/MiniSAS HD 8644 1M Cable	
Power supply	Two 580 W AC power and cooling modules	
Power Cable	2x 1.5m, 10A/100-250V, C13 to IEC 320-C14 rack power cables	
Warranty and support	3Yr 24x7 4Hr Response with Drive Retention	
Implementation	Unboxing and Initial Setup	
	Racking	
	Integration with existing storage	
	RAID configuration	
	Creating of Volume	
	Mapping of Volume to Host	
	Knowledge Transfer	
CORPORATE NOTEBOOK PC (110 Units)		
Classification	True Branded Notebook PC	
Certification	Must belong in the Top 3 of the Leaders Group of Gartner's Magic Quadrant for Global Enterprise Notebook and Desktop (must provide certificate)	
Processor	Intel Core i5 10210U Processor (1.60GHz, up to 4.20GHz with Turbo Boost, 4 Cores, 6MB Cache)	
Color	Black	
Cache Memory	6 MB Cache	
Chipset	Intel SoC (System on Chip) platform	
Memory	8GB (1x8GB) DDR4 2666MHz SoDIMM	
Max Memory	Up to 16GB DDR4	
Graphics	AMD Radeon 625 2GB DDR5 64bits	
	Supports external digital monitor via HDMI or USB Type-C;	
HDD	Supports three independent displays;	
Support HDD	Max resolution: 3840x2160@60Hz (USB Type-C); 3840x2160@30Hz (HDMI)	
HDD	1TB Hard Drive, 5400RPM, 2.5, 7mm	
Support HDD	Must Support Dual HDD (one M.2 SSD and one HDD)	
Display	14.0 FHD (1920x1080), TN, 220nits, Anti-glare, No Touch	
Base Cover Material	PC/ABS	
Camera	720P HD Camera with Dual Mic	
Ethernet	Gigabit Ethernet Connection, Realtek R8111GUS	
Fingerprint Reader	Fingerprint Reader Black	

Ports	One USB 2.0, two USB 3.1 Gen 1 (one Always On), one USB 3.1 Type-C Gen 1 (with the function of Power Delivery and DisplayPort), HDMI 1.4b, Ethernet (RJ-45), headphone / microphone combo jack, security keyhole	
Audio Support	Dolby Audio™ Skype for Business-certified mic 2 x 2W speakers by Harman Kardon®	
Keyboard	6-row, spill-resistant, multimedia Fn keys	
Touchpad	TrackPoint pointing device and buttonless Mylar surface multi-touch touchpad	
Security	Power-on password, hard disk password, supervisor password, security keyhole	
Security Chip Setting	Enabled Firmware TPM2.0	
Operating System	Windows 10 Pro Standard Preinstalled (Must provide certificate from the manufacturer that the OS installed is Genuine OS)	
Battery	Integrated Li-ion 45Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter	
Max Battery Life	MobileMark 2014: 12.8 hr	
AC Adapter	65W AC Adapter PCC (3pin)-US (USB Type C)	
Carrying Case	Standard Carrying Case	
Dimensions	WxDxH: 12.80" x 9.13" x 0.81"; 325mm x 232mm x 20.5mm	
Maximum Weight	Starting at 3.90 lb / 1.77 kg	
Other	Must include branded MiniSaver™ lock	
	Must include an Optical Travel Mouse (same brand)	
Warranty	Must be 3 years warranty on parts and labor. (A valid certificate issued by the manufacturer must be submitted).	
Environment	EPEAT Silver; ENERGY STAR 7.1; RoHS-compliant	
	The bidder must be an authorized reseller/service provider of the brand being offered (must provide Manufacturer Certificate).	
HI-RESOLUTION DOCUMENT SCANNER-110PPM (2 Units)		
Type	Must be Production Document Scanner	
Document Feeding	Must be Automatic or Manual sheet feeding	
Document size		
Width	Must be 2" - 12"	
Length	Must be 2.8" - 17"	
Long Document Mode:	Must be Up to 220.1"	
Document weight		
Automatic Feeding:	Must be 14 - 56 lb. Bond	

Manual Feeding:	Must be 14 - 56 lb. Bond	
Feeder Capacity:	Must be Up to 500 Sheets	
Grayscale:	Must be 8-bit	
Color:	Must be 24-bit	
Scanning Element:	Must be Three-Line Contact Image Sensor (CIS)	
Light Source:	Must be RGB LED	
Scanning Modes:	Must be Color, Grayscale, Black and White	
Color Dropout:	Must be RGB and Custom	
Optical Resolution:	Must be Up to 600 dpi	
Output Resolution:	150/200/240/300/400/600 dpi	
Max. Scanning Speeds		
	Simplex	
BW/Grayscale	Must be Up to 110 ppm	
Color:	Must be Up to 110 ppm	
	Duplex	
BW/Grayscale	Must be Up to 220 ipm	
Color:	Must be Up to 220 ipm	
Interface:	Must be Hi-Speed USB 3.1, 10Base-T/ 100Base-TX/1000Base-T Ethernet	
Dimensions (H x W x D):	Must be 18.9'' x 22.4'' x 12.4'' (with trays closed)	
Weight:	Must be 55.1 lb.	
Power Consumption:	66.5 W or less (Energy Saving Mode: 3.5 W)	
Supported OS:	Windows® 7/8/8.1/10 (32-bit/64-bit) or later, Windows® Server 2008 R2/ 2012 R2/2016	
Scanner Drivers:	ISIS/TWAIN	
Suggested Daily Volume:	50,000 ▲	
Bundled Software:	CaptureOnTouch, Kofax VRS Professional	
Other Features:	Auto Color Detection, Auto Page Size Detection, Active Thresholding, Batch Separation, Character Emphasis, Count Only Mode, Custom Color Dropout/Enhance Color, Deskew, Double-Feed Detection, Edge Emphasis, Folio Scan, Image Rotation, Moiré Reduction, MultiStream, Paper Feed Tray (Adjustable), Pre-Scan, Prevent BleedThrough/Remove Background, Punch Hole Removal, Rapid Recovery System, Skip Blank Page, Staple Detection, Text Enhancement, Text Orientation Recognition, Three-Dimensional Color Correction, User Preferences, Verify Sc	
Warranty	Must be One year on parts and labor	

	The bidder must be an authorized reseller of the brand being offered. Must provide Manufacturer certificate	
Barcode Printer (18 Units)		
Standard Features	Thermal Transfer or Direct Thermal print method ZPL and EPL programming languages Single LED status indicator Single button for feed/pause USB connectivity OpenACCESS™ for easy media loading Dual-wall frame construction ENERGY STAR qualified	
Dimension	Thermal Transfer: 10.5 in. L x 7.75 in. W x 7.5 in. H 267 mm L x 197 mm W x 191 mm H Direct Thermal: 8.6 in. L x 6.9 in. W x 5.9 in. H 220 mm L x 176 mm W x 151 mm H	
Weight	2.5 lbs./1.1 kg	
Resolution	203 dpi/8 dots per mm	
Memory	256 MB Flash; 128 MB SDRAM	
Maximum Print Width	4.09 in./104 mm	
Maximum Print Speed	4 in./102 mm per second	
Media Sensors	• Movable black mark sensor, limited range from center to left side Fixed off-center gap sensor	
Firmware	ZPL II; EPL 2; XML	
Media and Ribbon Characteristics		
Maximum Label Length	39.0 in./991 mm	
Media Width	1.00 in./25.4 mm to 4.4 in./112 mm	
Media Roll Size	5.00 in./127 mm outer diameter Core inner diameter: 0.5 in. (12.7 mm) and 1.0 in. (25.4 mm) standard, 1.5 in. (38.1), 2.0 in., (50.8 mm) and 3.0 in. (76.2 mm) using optional adapters	
Thickness	0.003 in. (0.08 mm) min.; 0.0075 in. (.1905 mm) max. (tear-off mode only)	
Media Types	Roll-fed or fan-fold, die cut or continuous with or without black mark, tag stock, continuous receipt paper, and wristbands	
Ribbon Outside Diameter	1.34 in./34 mm (74 m)	
Maximum Ribbon Length	244 ft. (74 m)	
Ribbon Ratio	1:1 media to ribbon (74 m)	

Ribbon Width	1.33 in./33.8 mm ~ 4.3 in./109.2 mm	
Ribbon Core I.D.	74 Meter ribbon 0.5 in./12.7 mm	
Maximum Label Length	39.0 in./991 mm	
Fonts/Graphics/Symbologies		
Bar Code Ratios	2:1 and 3:1	
1D Bar Codes	Code 11, Code 39, Code 93, Code 128, ISBT-128, UPC-A, UPC-E, EAN-8, EAN-13, UPC and EAN 2-or 5-digit extensions, Plessey, Postnet, Standard 2-of-5, Industrial 2-of-5, Interleaved 2-of-5, Logmars, MSI, Codabar and Planet Code	
2D Bar Codes	Codablock, PDF417, Code 49, DataMatrix, MaxiCode, QR Code, MicroPDF, Aztec	
Fonts and Graphics	16 resident expandable ZPL II bitmap fonts Two resident scalable ZPL fonts Five resident expandable EPL2 fonts Native open-type font support Unicode compliant for multi-language, on demand thermal printing China units include SimSun simplified Chinese font 50 MB user available non-volatile memory, 8 MB user available SDRAM	
Warranty	One year on parts and labor	
	The bidder must be an authorized reseller of the brand being offered. Must provide Manufacturer certificate	
QR Barcode Scanner (40 Units)		
Technology	Handheld 2D Barcode Scanners	
	Must Scans 1-D, 2-D and PDF417 bar codes on paper, mobile phones and computer displays	
	Must have Omni-directional scan pattern	
	Must support all common interfaces	
	Must provide reliable operation despite spills and drops	
	Must be compatible with 123Scan and Remote Scanner Management (RSM)	
	Must be capable of PDF417, MicroPDF417, Composite Codes, TLC-39, Data Matrix, Maxicode, QR Code, MicroQR, Aztec	
	Must have Motion Tolerances of Up to 25 in. / 63.5 cm per second	
	Must support the following protocols over USB: HID Keyboard (default mode), SNAPI, COM Port Emulation, IBM SurePOS (Yellowstone) (IBM Handheld, IBM Tabletop, OPOS);	

	Must support the following protocols over RS232: Wincor Nixdorf, ICL, Fujitsu, Olivetti, Keyboard Wedge and RS485 IBM46xx;	
	The minimum resolution must be SR: Code 39 4 mil; UPC 60% 5 mil; PDF417 5 mil, Datamatrix 7.5 mil	
Dimensions	6.7 in. H x 3.7 in. L x 2.7 in. W (17 cm H x 9.3 cm L x 6.8 cm W)	
Warranty	One year on parts and labor	
	The bidder must be an authorized reseller of the brand being offered. Must provide Manufacturer certificate	

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