

Republic of the Philippines

OFFICE OF THE SOLICITOR GENERAL

134 Amorsolo St., Legaspi Village, Makati City Tel. No. 9881-691; 836-3314/Telefax No. 813-1174

Procurement of ICT Equipment

(Lot 1, Lot 2, & Lot 3: OSG PR No. 018-04-135)

Terms of Reference

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For the delivery of the Following:

Office Productivity, Server and Storage and LAN and Wireless Upgrade

1) For all I.T. equipment:

- Winning Bidder must be an authorized reseller/authorized dealer of the brand being offered for a period of at least five (5) years. A current valid manufacturer's certification required as part of the technical component on bid proposal.
- Winning bidder must not exceed to ninety (90) day delivery lead-time upon receipt of Notice to Proceed.
- Winning Bidder must provide a standard/universal adaptor/converter for a 3-pin (UK) or round power plug.
- Winning Bidder must provide a standard 2.0 USB cable for printer/scanner.
- Winning Bidder must provide at least two (2) customer satisfaction certificate from previous client companies/agencies.

2) For laptop computers:

- Winning Bidder must be an Authorized Service Partner (ASP) of the brand being offered and a current valid manufacturer certificate is required as part of the technical component on bid proposal.
- Winning Bidder must have at least two (2) manufacturer certified engineers for the brand of laptop and desktop computers, including workstations being offered.
- The brand which represents the bidder must apply in the latest top 3 of the Leaders Group of Gartner's List for Global Enterprise Notebook and Desktop. Certification in the inclusion in the top 3 is required from the brand's manufacturer.
- 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.
- If repair of the unit is refused by the Winning Bidder during the warranty period because of damage not being covered by the warranty, the Winning Bidder shall submit a report detailing its refusal not more than fifteen (15) days from the communication of its refusal.

Lot 1 (Office Productivity)

TECHNICAL SPECIFICATIONS:

OFFICE PRODUCTIVITY			
ITEM	QTY	UNIT COST	TOTAL
CORPORATE NOTEBOOK PC	180	₱50,000.00	₱9,000,000.00
MOBILE DEVICE 2 IN 1 TABLET	60	₱30,000.00	₱1,800,000.00
INTERACTIVE MONITOR	1	₱100,000.00	₱100,000.00
LED TELEVISION 75" COMMERCIAL UHD TV WITH ADJUSTABLE STEEL TV CART	2	₱200,000.00	₱400,000.00
FILE STORAGE	6	₱36,000.00	₱216,000.00
MULTIMEDIA PROJECTOR WITH MOUNTING KIT	6	₱45,000.00	₱270,000.00
SCANNER (AUTO DOCUMENT FEEDER)	6	₽25,000.00	₱150,000.00
SOLID STATE HARD DRIVE 500GB 2.5" SATA	21	₱10,500.00	₱220,500.00
BARCODE PRINTER	23	₽20,000.00	₱460,000.00
BARCODE SCANNER	6	₽8,000.00	₱48,000.00
HIGH RES SCANNER (75PPM)	2	₱350,000.00	₱700,000.00
VOIP PHONE WITH POWER ADAPTOR	93	₽8,000.00	₱744,000.00
		GRAND TOTAL	₱14,108,500

	ICT EQUIPMENT	QTY	
Corporate Notebook PC 180 Units		180 Units	
Classification	True Branded Notebook PC		
Certification	Must belong in the top 3 of the Leaders Group of Ga	rtner's Magic Quadrant for	
	Global Enterprise Notebook and Desktop (Must prov	ide certificate)	
Processor	8th Generation Intel Core i5 Processor		
	i5-8250U (3.40 GHz Max. Turbo Frequency)		
Cache Memory	6 MB SmartCache		
Chipset	Intel SoC (System on Chip) platform	Intel SoC (System on Chip) platform	
Memory	8G (1X8GBDDR4 2400) On Board		
Max Memory	up to 20 GB of DDR4-2400Mhz, dual channel capable		
Graphics	AMD Radeon R17M-M1-70 GDDR5 2G		
	supports three independent displays;		
	Max resolution: 3840x2160@30Hz (HDMI); 1920x1200@60Hz (VGA)		
HDD	1TB 7MM 5400RPM		
Support HDD	Must Support Dual HDD (SSD + Traditional HDD)		
Display	14.0" (355mm) FHD TN (1920x1080) Anti-Glare, LED backlight, 220 nits, 16:9		
	aspect ration		
Connectivity	Integrated 10/100/1000 MBps Lan Controller; Wireless 802.11 ac 1x1 and		
	Bluetooth 4.1		
Ports	Two USB 3.0 (one with optional Always On), one USE	3.1 Type-C Gen 1, one	
	optional USB 3.1 Type-C Gen 1 (with the function of	DisplayPort and	

	PowerDelivery), one optional USB 2.0 in Ultra-bay, VGA, HDMI, Etherne	t (RJ-45)	
Audio Support	HD Audio, Stereo speakers with Dolby [®] Audio [™] , 2W x 2		
Keyboard	6-row, spill-resistant, multimedia Fn keys		
Touchpad	One-piece touchpad, multi-touch		
Security	Security chip Fingerprint reader		
•	Power-on password, hard disk password, supervisor password, security keyhole		
Security Chip	Firmware TPM 2.0, integrated in chipset		
Fingerprint	Touch-type fingerprint reader		
Multimedia Options	Integrated Stereo Speakers, at least 0.3MP fixed focus, physical camera	shutter	
Operating System		Windows 10 Pro Standard Preinstalled (Must provide certificate from the	
	manufacturer that the OS installed is Genuine OS)		
Features	Sleek and robust design		
Color	Iron Gray		
Battery	2-cell 30Wh + 2-cell 39Wh Li-Polymer		
Adapter	BLACK 65W 3-PIN		
Carrying Case	Standard Carrying Case		
Dimensions	WxDxH: 13.5" x 9.72" x 0.79"; 343mm x 247mm x 20.3mm		
Maximum Weight	Must be 1.85 kg / 4.07 lb		
Other	Must include branded MiniSaver™ lock		
14/	Must include an Optical Travel Mouse		
Warranty Environment	Must be 3 years warranty on parts and labor EPEAT Silver; ENERGY STAR [®] 6.1; RoHS-compliant		
Environment	ICT EQUIPMENT QTY		
		-	
2 in 1 Tablet	60 Unit	S	
2 in 1 Tablet Classification	60 Unit Must be 2 in 1 Tablet	5	
		S	
	Must be 2 in 1 Tablet Must be 10.1" IPS FHD display Width (mm / inches) 256.6 / 10.1"	5	
Classification	Must be 2 in 1 Tablet Must be 10.1" IPS FHD display Width (mm / inches) 256.6 / 10.1" Thickness (mm / inches) 9.6 / 0.38"	s	
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Classification Dimension Weight	Must be 2 in 1 Tablet Must be 10.1" IPS FHD display Width (mm / inches) 256.6 / 10.1" Thickness (mm / inches) 9.6 / 0.38" Height (mm / inches) 170.8 /6.72" 690 g (1.52 lbs)		
Classification Dimension Weight Operating System	Must be 2 in 1 Tablet Must be 10.1" IPS FHD display Width (mm / inches) 256.6 / 10.1" Thickness (mm / inches) 9.6 / 0.38" Height (mm / inches) 170.8 /6.72" 690 g (1.52 lbs) Android™ 6.0.1 Marshmallow (upgradable)		
Classification Dimension Weight Operating System Processor	Must be 2 in 1 Tablet Must be 10.1" IPS FHD display Width (mm / inches) 256.6 / 10.1" Thickness (mm / inches) 9.6 / 0.38" Height (mm / inches) 170.8 / 6.72" 690 g (1.52 lbs) Android™ 6.0.1 Marshmallow (upgradable) Intel® Atom™ x5-Z8550 Processor (2M Cache, Quad-Core, Up to 2.4 GH		
Classification Dimension Weight Operating System Processor Sound	Must be 2 in 1 Tablet Must be 10.1" IPS FHD display Width (mm / inches) 256.6 / 10.1" Thickness (mm / inches) 9.6 / 0.38" Height (mm / inches) 170.8 /6.72" 690 g (1.52 lbs) Android™ 6.0.1 Marshmallow (upgradable) Intel® Atom™ x5-Z8550 Processor (2M Cache, Quad-Core, Up to 2.4 GH Dolby Atmos		
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Classification Dimension Weight Operating System Processor Sound Memory	Must be 2 in 1 Tablet Must be 10.1" IPS FHD display Width (mm / inches) 256.6 / 10.1" Thickness (mm / inches) 9.6 / 0.38" Height (mm / inches) 170.8 /6.72" 690 g (1.52 lbs) Android™ 6.0.1 Marshmallow (upgradable) Intel® Atom™ x5-Z8550 Processor (2M Cache, Quad-Core, Up to 2.4 GH Dolby Atmos RAM (4 GB LPDDR3) ROM (64 GB) Card Slot (microSD™; Supports Up to 128 GB)		
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Classification Dimension Weight Operating System Processor Sound Memory Battery	Must be 2 in 1 TabletMust be 10.1" IPS FHD displayWidth (mm / inches) 256.6 / 10.1"Thickness (mm / inches) 9.6 / 0.38"Height (mm / inches) 170.8 /6.72"690 g (1.52 lbs)Android™ 6.0.1 Marshmallow (upgradable)Intel® Atom™ x5-Z8550 Processor (2M Cache, Quad-Core, Up to 2.4 GHDolby AtmosRAM (4 GB LPDDR3)ROM (64 GB)Card Slot (microSD™; Supports Up to 128 GB)Type : Li-ion PolymerCapacity : 8500 mAhStandby Time : Over 70 DaysGeneral Usage : 15 Hours		
Classification Dimension Weight Operating System Processor Sound Memory Battery	Must be 2 in 1 TabletMust be 10.1" IPS FHD displayWidth (mm / inches) 256.6 / 10.1"Thickness (mm / inches) 9.6 / 0.38"Height (mm / inches) 170.8 /6.72"690 g (1.52 lbs)Android™ 6.0.1 Marshmallow (upgradable)Intel® Atom™ x5-Z8550 Processor (2M Cache, Quad-Core, Up to 2.4 GHDolby AtmosRAM (4 GB LPDDR3)ROM (64 GB)Card Slot (microSD™; Supports Up to 128 GB)Type : Li-ion PolymerCapacity : 8500 mAhStandby Time : Over 70 DaysGeneral Usage : 15 HoursSize : 10.1" FHD IPS (1920 x 1200)		
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	On Screen : Capacitive Touch with AnyPen Technolog	۷.
	Create Pad : Capacitive Touch and EMR Pen Technology	
	Material : Magnesium Aluminum Alloy	
Colors	Gunmetal Grey	
Connectivity	WLAN : WiFi 802.11 a/b/g/n/ac; Dual Channel (2.4 GHz and 5 GHz)	
Camera	Rear : 8 MP Auto-Focus	
	Front : 2 MP Fixed-Focus	
Keyboard	Halo Keyboard	
Sensors	Vibrator	
	G-Sensor	
	E-Compass	
	Ambient Light Sensor Hall	
	Sensor	
	GPS	
	A-GPS	
Software	Note Saver	
	Collection	
	SHAREit	
	SYNCit	
	Google Docs	
	Google Sheets	
	Google Slides	
	McAfee [®] Security	
	Evernote®	
	ArtRage TouchPal	
	IME	
Includes	Charger	
	USB Cable	
	Warranty Card	
	Quick Start Guide	
	Real Pen	
	Ink Cartridge Refills (3x)	
	Book Pad	
	Book Sleeve	
Warranty	Must be 1 year on parts and labor (on site)	
	ICT EQUIPMENT	QTY
Interactive Monitor		1 Unit
Screen Size	43" 10 Point Multi Touch Display with Slim Bezel 27.0)mm width
	Must be IR (Infrared Rays) Spread technology	
Panel Orientation	Landscape & Portrait	
Interactive White Board Software	Application software for business	
	Integration of board page and application	
	Character recognition function	
DRAWING	Character recognition function Pen / Brush / Spray / Eraser / Shape	

DATA FORMAT	Intrinsic / PDF / JPG		
MEDIA	Image, Audio, Video		
APP LINKAGE	PowerPoint, Excel, Word, Internet Explorer		
E-MAIL	Share writing/drawing data via e-mail		
SCREEN SPLIT	2 horizontal Screens		
USAGE CONVENIENCE	Preview / Navigation / Screen Lock		
CAPTURE	Full / Window / Automatic Copy & Paste		
RECORDING	Full / Window / Rectangle		
ZOOM	In / Out (100% ~ 400%)		
WRITING SPACE RESIZE	Resize From 1,920 x 1,080 to 3,840 x 2,160		
Touch	GUI for FHD/UHD resolution		
Available object size for touch	Ø 8mm		
Scan Time	9 ~ 14ms		
Accuracy	1mm		
Interface	USB 2.0		
Protection Glass Thickness	2.8T (Anti-Glare)		
Operating Systme Support	Windows 7, Windows 8 / Mac OS X (10.7 or later) / A	ndroid / Linux (Kernel 3.9 or	
	later)		
Touch Resolution	1,428 x 803		
Overlay Dimension (W x H x D)	997 x 586 x 23.5 mm (Max 60 mm)		
Weight	6.5kg		
Warranty	One year on parts and labor		
	ICT EQUIPMENT	QTY	
LED TELEVISION 75" COMMERCIAL	UHD TV With Adjustable Steel TV Cart	QTY 2 Units	
LED TELEVISION 75" COMMERCIAL Display			
	UHD TV With Adjustable Steel TV Cart		
	UHD TV With Adjustable Steel TV Cart Diagonal Size: 74.6"		
	UHD TV With Adjustable Steel TV Cart Diagonal Size: 74.6" Type: Edge LED		
	UHD TV With Adjustable Steel TV CartDiagonal Size: 74.6"Type: Edge LEDResolution: 3,840 x 2,160 (4K UHD)		
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Display	UHD TV With Adjustable Steel TV CartDiagonal Size: 74.6"Type: Edge LEDResolution: 3,840 x 2,160 (4K UHD)Brightness: 400cd/m2Dynamic Contrast Ratio: 1,000,000:1Viewing Angle Degree: 178° / 178°Analog: NTSCDigital: ATSC/VSB/Clear QAM	2 Units	
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Display Display Display Display Display Dimension Dimension Vesa (mm) Vesa (mm) WxHxD/weight (without stand)	UHD TV With Adjustable Steel TV CartDiagonal Size: 74.6"Type: Edge LEDResolution: 3,840 x 2,160 (4K UHD)Brightness: 400cd/m2Dynamic Contrast Ratio: 1,000,000:1Viewing Angle Degree: 178° / 178°Analog: NTSCDigital: ATSC/VSB/Clear QAMAudio Output / Speaker System: 10W + 10W / 2.0 chSound Mode: 6 modes (Standard, Cinema, Clear VoicSide: HDMI In, USB 2.0Rear: RF In, AV In (Sharing with Component In), CompDigital Audio Out, HDMI In, RS 232-C In, RJ45 (SNMP)Bezel Width (L/R, U, B) : on bezel based (mm): 14.7, 1Bezel Width (L/R, U, B) : off bezel based (mm): 12.7, 2600 x 40066.8" x 38.6" x 1.5" / 91.1lb66.8" x 41.4" x 11.7" / 92.6lb	2 Units 2 Units e III, Sports, Music, Game) ponent In + Video, Optical , External Speaker Out 14.7, 14.7	
Display Display	UHD TV With Adjustable Steel TV CartDiagonal Size: 74.6"Type: Edge LEDResolution: 3,840 x 2,160 (4K UHD)Brightness: 400cd/m2Dynamic Contrast Ratio: 1,000,000:1Viewing Angle Degree: 178° / 178°Analog: NTSCDigital: ATSC/VSB/Clear QAMAudio Output / Speaker System: 10W + 10W / 2.0 chSound Mode: 6 modes (Standard, Cinema, Clear VoicSide: HDMI In, USB 2.0Rear: RF In, AV In (Sharing with Component In), CompDigital Audio Out, HDMI In, RS 232-C In, RJ45 (SNMP)Bezel Width (L/R, U, B) : on bezel based (mm): 14.7, 1Bezel Width (L/R, U, B) : off bezel based (mm): 12.7, 2600 x 40066.8" x 38.6" x 1.5" / 91.1lb66.8" x 41.4" x 11.7" / 92.6lbDiagonal Size: 74.6"	2 Units 2 Units e III, Sports, Music, Game) ponent In + Video, Optical , External Speaker Out 14.7, 14.7	
Display Display Display Display Display Dimension Dimension Vesa (mm) Vesa (mm) WxHxD/weight (without stand)	UHD TV With Adjustable Steel TV CartDiagonal Size: 74.6"Type: Edge LEDResolution: 3,840 x 2,160 (4K UHD)Brightness: 400cd/m2Dynamic Contrast Ratio: 1,000,000:1Viewing Angle Degree: 178° / 178°Analog: NTSCDigital: ATSC/VSB/Clear QAMAudio Output / Speaker System: 10W + 10W / 2.0 chSound Mode: 6 modes (Standard, Cinema, Clear VoicSide: HDMI In, USB 2.0Rear: RF In, AV In (Sharing with Component In), CompDigital Audio Out, HDMI In, RS 232-C In, RJ45 (SNMP)Bezel Width (L/R, U, B) : on bezel based (mm): 14.7, 1Bezel Width (L/R, U, B) : off bezel based (mm): 12.7, 2600 x 40066.8" x 38.6" x 1.5" / 91.1lb66.8" x 41.4" x 11.7" / 92.6lb	2 Units 2 Units e III, Sports, Music, Game) ponent In + Video, Optical , External Speaker Out 14.7, 14.7	

Brightness: 400cd/m2 Dynamic Contrast Ratio: 1,000,000:1 Viewing Angle Degree: 178° / 178° Broadcasting System Analog: NTSC Digital: ATSC/VSB/Clear QAM Audio Audio Output / Speaker System: 10W + 10W / 2.0 ch Sound Mode: 6 modes (Standard, Cinema, Clear Voice III, Sports, Music, Game) Interface Side: HDMI In, USB 2.0 Rear: RF In, AV In (Sharing with Component In), Component In + Video, Optical Digital Audio Out, HDMI In, RS 232-C In, RJ45 (SNMP), External Speaker Out Dimension Bezel Width (L/R, U, B) : on bezel based (mm): 14.7, 14.7, 14.7 Bezel Width (L/R, U, B) : of bezel based (mm): 12.7, 12.7, 12.7 Vesa (mm) 600 x 400 WXHxD/weight (without stand) 66.8" x 38.6" x 1.5" / 91.1lb WXHxD/weight (with stand) 66.8" x 41.4" x 11.7" / 92.6lb TELESCOPIC HEIGHT ADJUSTABLE UTRA LARGE DISPLAY STEEL TV CART FOR 60"-100" 2 Units TV Quick-release spring lock adjusts height effortlessly Quick-release spring lock adjusts height effortlessly 2 Units Guick assembly shelf assures easy post-installation and height adjustable Cable management keeps everything organized Heavy-duty casters offer maximum portability and mobility Specifications: Material:
Viewing Angle Degree: 178° / 178° Broadcasting System Analog: NTSC Digital: ATSC/VSB/Clear QAM Audio Audio Output / Speaker System: 10W + 10W / 2.0 ch Sound Mode: 6 modes (Standard, Cinema, Clear Voice III, Sports, Music, Game) Interface Side: HDMI In, USB 2.0 Rear: RF In, AV In (Sharing with Component In), Component In + Video, Optical Digital Audio Out, HDMI In, RS 232-C In, RU45 (SNMP), External Speaker Out Dimension Bezel Width (L/R, U, B) : on bezel based (mm): 14.7, 14.7, 14.7 Bezel Width (L/R, U, B) : on bezel based (mm): 12.7, 12.7, 12.7 Vesa (mm) 600 x 400 WXHxD/weight (without stand) 66.8" x 38.6" x 1.5" / 91.1lb WXHxD/weight (with stand) 66.8" x 41.4" x 11.7" / 92.6lb TELESCOPIC HEIGHT ADJUSTABLE ULTRA LARGE DISPLAY STEEL TV CART FOR 60"-100" 2 Units Features Height adjustable TV mount Free-tilting design for multiple monitor viewing angles Quick-release spring lock adjusts height effortlessly Quick assembly shelf assures easy post-installation and height adjustable Cable management keeps everything organized Heavy-duty casters offer maximum portability and mobility Specifications: Steel, Plastic Color: Black Steel, Plastic
Broadcasting System Analog: NTSC Digital: ATSC/VSB/Clear QAM Audio Audio Output / Speaker System: 10W + 10W / 2.0 ch Sound Mode: 6 modes (Standard, Cinema, Clear Voice III, Sports, Music, Game) Interface Side: HDMI In, USB 2.0 Rear: RF In, AV In (Sharing with Component In), Component In + Video, Optical Digital Audio Out, HDMI In, RS 232-C In, RJ45 (SNMP), External Speaker Out Dimension Bezel Width (L/R, U, B) : on bezel based (mm): 14.7, 14.7, 14.7 Bezel Width (L/R, U, B) : off bezel based (mm): 12.7, 12.7, 12.7 Vesa (mm) 600 × 400 WXHxD/weight (without stand) 66.8" x 31.6" × 15" / 91.1lb MXHxD/weight (with stand) 66.8" x 11.4" x 11.7" / 92.6lb TELESCOPIC HEIGHT ADJUSTABLE ULTRA LARGE DISPLAY STEEL TV CART FOR 60"-100" 2 Units Features Height adjustable TV mount Free-tilting design for multiple monitor viewing angles Quick-release spring lock adjusts height effortlessly Quick assembly shelf assures easy post-installation and height adjustable Cable management keeps everything organized Heavy-duty casters offer maximum portability and mobility Specifications: Material: Steel, Plastic Black Black
Digital: ATSC/VSB/Clear QAM Audio Audio Output / Speaker System: 10W + 10W / 2.0 ch Sound Mode: 6 modes (Standard, Cinema, Clear Voice III, Sports, Music, Game) Interface Side: HDMI In, USB 2.0 Rear: RF In, AV In (Sharing with Component In), Component In + Video, Optical Digital Audio Out, HDMI In, RS 232-C In, RJ45 (SNMP), External Speaker Out Dimension Bezel Width (L/R, U, B) : on bezel based (mm): 14.7, 14.7, 14.7 Bezel Width (L/R, U, B) : off bezel based (mm): 12.7, 12.7, 12.7 600 x 400 WXHxD/weight (without stand) 66.8" x 38.6" x 1.5" / 91.1lb WXHxD/weight (with stand) 66.8" x 41.4" x 11.7" / 92.6lb TELESCOPIC HEIGHT ADJUSTABLE ULTRA LARGE DISPLAY STEEL TV CART FOR 60"-100" TV 2 Units Features Height adjustable TV mount Free-tilting design for multiple monitor viewing angles Quick-release spring lock adjusts height effortlessly Quick assembly shelf assures easy post-installation and height adjustable Cable management keeps everything organized Heavy-duty casters offer maximum portability and mobility Specifications: Material: Steel, Plastic Color: Black
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Rear: RF In, AV In (Sharing with Component In), Component In + Video, Optical Digital Audio Out, HDMI In, RS 232-C In, RJ45 (SNMP), External Speaker OutDimensionBezel Width (L/R, U, B) : on bezel based (mm): 14.7, 14.7, 14.7 Bezel Width (L/R, U, B) : off bezel based (mm): 12.7, 12.7, 12.7Vesa (mm)600 x 400WxHxD/weight (without stand)66.8" x 38.6" x 1.5" / 91.1lb G6.8" x 41.4" x 11.7" / 92.6lbTELESCOPIC HEIGHT ADJUSTABLE ULTRA LARGE DISPLAY STEEL TV CART FOR 60"-100" TV2 UnitsFeaturesHeight adjustable TV mountFree-tilting design for multiple monitor viewing angles Quick-release spring lock adjusts height effortlesslyQuick assembly shelf assures easy post-installation and height adjustable Cable management keeps everything organized
Digital Audio Out, HDMI In, RS 232-C In, RJ45 (SNMP), External Speaker OutDimensionBezel Width (L/R, U, B) : on bezel based (mm): 14.7, 14.7, 14.7Bezel Width (L/R, U, B) : off bezel based (mm): 12.7, 12.7, 12.7Vesa (mm)600 x 400WxHxD/weight (without stand)66.8" x 38.6" x 1.5" / 91.1lbWxHxD/weight (with stand)66.8" x 41.4" x 11.7" / 92.6lbTELESCOPIC HEIGHT ADJUSTABLE ULTRA LARGE DISPLAY STEEL TV CART FOR 60"-100"2 UnitsTVPree-tilting design for multiple monitor viewing anglesQuick-release spring lock adjusts height effortlesslyQuick assembly shelf assures easy post-installation and height adjustableCable management keeps everything organizedHeavy-duty casters offer maximum portability and mobilitySpecifications:Material:Material:Steel, PlasticColor:Black
DimensionBezel Width (L/R, U, B) : on bezel based (mm): 14.7, 14.7, 14.7Bezel Width (L/R, U, B) : off bezel based (mm): 12.7, 12.7, 12.7Vesa (mm)600 × 400WxHxD/weight (without stand)66.8" × 38.6" × 1.5" / 91.1lbWxHxD/weight (with stand)66.8" × 41.4" × 11.7" / 92.6lbTELESCOPIC HEIGHT ADJUSTABLE ULTRA LARGE DISPLAY STEEL TV CART FOR 60"-100" TV2 UnitsPree-tilting design for multiple monitor viewing angles Quick-release spring lock adjusts height effortlessly Quick assembly shelf assures easy post-installation and height adjustable Cable management keeps everything organized Heavy-duty casters offer maximum portability and mobilitySpecifications:Steel, PlasticMaterial:Steel, PlasticColor:Black
Bezel Width (L/R, U, B) : off bezel based (mm): 12.7, 12.7, 12.7 Vesa (mm) 600 x 400 WxHxD/weight (without stand) 66.8" x 38.6" x 1.5" / 91.1lb WxHxD/weight (with stand) 66.8" x 41.4" x 11.7" / 92.6lb TELESCOPIC HEIGHT ADJUSTABLE ULTRA LARGE DISPLAY STEEL TV CART FOR 60"-100" 2 Units TV Features Height adjustable TV mount Free-tilting design for multiple monitor viewing angles Quick-release spring lock adjusts height effortlessly Quick assembly shelf assures easy post-installation and height adjustable Cable management keeps everything organized Heavy-duty casters offer maximum portability and mobility Specifications: Material: Steel, Plastic Color: Black
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TV Z Units Features Height adjustable TV mount Free-tilting design for multiple monitor viewing angles Quick-release spring lock adjusts height effortlessly Quick assembly shelf assures easy post-installation and height adjustable Quick assembly shelf assures easy post-installation and height adjustable Cable management keeps everything organized Heavy-duty casters offer maximum portability and mobility Specifications: Steel, Plastic Color: Black
TV Features Height adjustable TV mount Free-tilting design for multiple monitor viewing angles Quick-release spring lock adjusts height effortlessly Quick assembly shelf assures easy post-installation and height adjustable Cable management keeps everything organized Heavy-duty casters offer maximum portability and mobility Specifications: Material: Steel, Plastic Color: Black
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Cable management keeps everything organized Heavy-duty casters offer maximum portability and mobility Specifications: Material: Steel, Plastic Color: Black
Heavy-duty casters offer maximum portability and mobility Specifications: Material: Steel, Plastic Color: Black
Specifications: Image: Steel, Plastic Material: Steel, Plastic Color: Black
Material: Steel, Plastic Color: Black
Color: Black
Surface Finish: Powder Coating
Column Size: 60X110X2.0 Thickness X990mm Length
Dimension: 1350x683x2325mm (53.1"x26.9"x91.5"
Fit screen size:60"-100"
VESA Compatible: 200x200,300x300,400x200,400x400,600x400,800x400,800x600,1000x600
Weight Capacity: 100kg (220lbs)
Tilt Range:+5°~ -10°
Adjustable Height: Yes
Metal Sheet Thickness: Panel T=1.8mm ; Bracket T=2.0mm (Panel T=0.071" ; Bracket T=0.079")
Weight Capacity per Layer: 5kg (11lbs)
Features Height adjustable TV mount
Free-tilting design for multiple monitor viewing angles
Quick-release spring lock adjusts height effortlessly
Quick assembly shelf assures easy post-installation and height adjustable
Cable management keeps everything organized
Heavy-duty casters offer maximum portability and mobility
Specifications:
Material: Steel, Plastic
Color: Black

Surface Finish:	Powder Coating		
Column Size:	60X110X2.0 Thickness X990mm Length		
Dimension:	1350x683x2325mm (53.1"x26.9"x91.5"		
Fit screen size:	60"-100"		
VESA Compatible:	200x200,300x300,400x200,400x400,600x400,800x400,800x600,1000x600		
Weight Capacity:	100kg (220lbs)		
Tilt Range:	+5°~ -10°		
Adjustable Height:	+5 ⁻⁰ -10 ⁻ Yes		
Metal Sheet Thickness:	Panel T=1.8mm ; Bracket T=2.0mm (Panel T=0.071"	: Bracket T=0 079")	
Weight Capacity per Layer:	5kg (11lbs)	, DIACKET 1-0.075 /	
	ICT EQUIPMENT	QTY	
NETWORK ATTACHED STORAGE F		6 Units	
Technology	Must be High performance 2-bay NAS server		
Features	Must have High-speed data transfer and must be AE engine	S-NI hardware encryption	
	Must be screw less drive bay design and hot-swappa	ble support	
	Must be dual core processor		
	Must have 4K Ultra HD video transcoding that allows you to transcode H.264 4K videos to 1080p and stream them to high-definition TVs, digital media players, mobile handsets, and computers in the required format		
	Must have User Home feature that automatically create a "home" folder for every user account		
	Must have Ultimate file center feature		
	Must be comprehensive network protocol support including FTP, SMB2, AFP, NFS and WebDAV. With Windows AD and LDAP integration		
	Must have Cloud Station Back up feature	ווכ	
OS	Must include DiskStation Manager		
Specifications			
CPU	Intel Coloron N2060 Dual Caro 1 6 hurst up to 2.48 G	U- 64 hit	
	Intel Celeron N3060 Dual Core 1.6 burst up to 2.48 GHz 64 bit		
System Memory Storage	1GB 2 Drive Bays (Hot Swappable)		
Storage	 2 Drive Bays (Hot Swappable) 2 x 2TB NAS HDD, Interface : SATA 6Gb/s, Cache : 64MB, Spin Speed : 5900RPM 		
	* Voltage Tolerance, Including Noise (5V): ±5%	* Max Sustained Data Transfer Rate OD (MB/s): 159	
	* Voltage Tolerance, Including Noise (3V). ±5%		
Compatible Drive Type	* Load/Unload tested to 600,000 cycles 3.5" SATA III / SATA II HDD		
compatible blive Type	2.5" SATA III / SATA II HDD		
	2.5" SATA III / SATA II IDD		
Supported RAID Type	Hybrid RAID		
	Basic		
	JBOD		
	RAID 0		
	RAID 1		

RAID Migration	Basic to RAID 1	
File Sharing Capacity	Maximum Local User Accounts: 2048	
	Maximum Local Groups: 256	
	Maximum Shared Folder: 256	
	Maximum Shared Folder Sync Tasks: 4	
	Maximum Concurrent CIFS/AFP/FTP Connections: 25	56
Snapshot Replication	Maximum Snapshots per Shared Folder: 256	
	Maximum Snapshots of all Shared Folder: 4096	
External Ports)	2 x USB 2.0 Port	
	1 x USB 3.0 Port	
	1 x eSATA Port	
	USB Сору	
Size (Height x Width x Depth)	165 mm x 108 mm x 233.2 mm	
Weight	1.25 kg	
Warranty	One year on parts and labor	
	The bidder must be an authorized reseller of the bra	nd being offered
	ICT EQUIPMENT	QTY
		C I Inito
MULTIMEDIA PROJECTOR WITH MC		6 Units
Features	Must have ColorBoost3D & ColorSafe II Features	
Resolution	Native XGA (1,024 x 768)	
	Maximum WUXGA (1,920 x 1,200)	
Aspect Ratio	4:3 (Native), 16:9 (Supported)	
Contrast Ratio	Dynamic Black 20,000:1	
Displayable Colors	1.07 Billion Colors	
Brightness	3,600 ANSI Lumens (Standard),	
	2,880 ANSI Lumens (ECO),	
	(Compliant with ISO 21118 standard)	
Projection Screen Size (Diagonal)	27" ~ 300" (69cm ~ 762cm)	
Projection Distance	1.2m ~ 11.8m (3.9' ~ 38.8')	
Throw ratio	1.94 ~ 2.16 (51"@2m)	
Projection lens	F = 2.41 ~ 2.53, f = 21.85mm ~ 24.01mm, Manual Zoo	om & Focus
Lamp Type	Osram 195W	
Lamp Life	5,000 Hours (Standard),	
	6,000 Hours (ECO),	
	10,000 Hours (ExtremeEco)*	
	Lamp Life of ExtremeEco mode is based on an indust	
	usage cycle, which consists of 45 minutes of Full, ECO and/or Dynamic modes, 75	
	minutes of ExtremeEco (lowest lamp power) mode a	nd 15 minutes of Power Off
Coiling Mounting Corphility	mode	
Ceiling Mounting Capability Audio	Yes	
	3W Speaker x 1	
Keystone correction	+ / - 40° (Vertical, Manual)	
Weight	2.5 Kg (5.5 lbs)	
Dimensions	314 x 223 x 93 mm	

	(12.4" x 8.8" x 3.7")
Remote Control	IR remote control,
	PgUp/PgDn functions
Power Supply	AC input 100~240V,
	50/60 Hz
Power Consumption	235 Watts (Standard),
	195 Watts (ECO),
	<0.5 Watts (Standby)
Noise Level	31 dBA (Standard),
	28 dBA (ECO)
Input Interface	Analog RGB/Component Video (D-sub) x 1
	HDMI (Video, Audio, HDCP) x 1
	PC Audio (Stereo mini jack) x 1
Control interface	USB (Mini-B) x 1
Mounting Kit	Universal Projector Ceiling mount bracket
Accessories	10 Meter VGA Cable and HDMI cable
Warranty	One year on parts and labor on site
Features	Must have ColorBoost3D & ColorSafe II Features
Resolution	Native XGA (1,024 x 768)
	Maximum WUXGA (1,920 x 1,200)
Aspect Ratio	4:3 (Native), 16:9 (Supported)
Contrast Ratio	Dynamic Black 20,000:1
Displayable Colors	1.07 Billion Colors
Brightness	3,600 ANSI Lumens (Standard),
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Projection Screen Size (Diagonal)	27" ~ 300" (69cm ~ 762cm)
Projection Distance	1.2m ~ 11.8m (3.9' ~ 38.8')
Throw ratio	1.94 ~ 2.16 (51"@2m)
Projection lens	F = 2.41 ~ 2.53, f = 21.85mm ~ 24.01mm, Manual Zoom & Focus
Lamp Type	Osram 195W
Lamp Life	5,000 Hours (Standard),
	6,000 Hours (ECO),
	10,000 Hours (ExtremeEco)*
	Lamp Life of ExtremeEco mode is based on an industrial standard of educational
	usage cycle, which consists of 45 minutes of Full, ECO and/or Dynamic modes, 75
	minutes of ExtremeEco (lowest lamp power) mode and 15 minutes of Power Off
Colling Mounting Conchility	mode
Ceiling Mounting Capability	Yes
Audio	3W Speaker x 1
Keystone correction	+ / - 40° (Vertical, Manual)
Weight	2.5 Kg (5.5 lbs)
Dimensions	314 x 223 x 93 mm
Demote Control	(12.4" x 8.8" x 3.7")
Remote Control	IR remote control,

	PgUp/PgDn functions	
Power Supply	AC input 100~240V,	
	50/60 Hz	
Power Consumption	235 Watts (Standard),	
	195 Watts (ECO),	
	<0.5 Watts (Standby)	
Noise Level	31 dBA (Standard),	
	28 dBA (ECO)	
Input Interface	Analog RGB/Component Video (D-sub) x 1	
	HDMI (Video, Audio, HDCP) x 1	
	PC Audio (Stereo mini jack) x 1	
Control interface	USB (Mini-B) x 1	
Mounting Kit	Universal Projector Ceiling mount bracket	
Accessories	10 Meter VGA Cable and HDMI cable	
Warranty	One year on parts and labor on site	
	ICT EQUIPMENT	QTY
SCANNER (AUTO DOCUMENT	FEEDER)	6 Units
	-	
Туре	Desktop sheet-fed scanner	
Document size	Plain paper	
	U-turn path:	
	Width: 50.8 to 216mm	
	Length:70 to 356mm	
	Straight path:	
	Width: 50.8 to 216mm,	
	Length:53.9 to 356mm	
	Use Long Document mode to scan documents up	to 3,000mm long
	Business card	
	50 x 53.9mm or larger. Vertical feeding only	
	Plastic Card	
	53.9 x 85.5mm (ISO standard). Embossed cards c	an be scanned
Document thickness	Plain paper	
	U-turn path:	
	52 - 128g/m2 (0.06 - 0.15mm)	
	Straight path:	
	40 - 209g/m2 (0.05 - 0.25mm)	
	Business card	
	300g/m2 0.35mm or less	
	Plastic Card	
	0.76mm or less	
Document feeding	Automatic sheet feeding	
Feeding Capacity	6mm stack (including curls) or 30 sheets of 80g/r	m2
Scanning element	CMOS CIS	
Light source	LED (Red, Green, and Blue)	
Scanning side	Simplex / Duplex / Skip Blank Page / Folio	

Scanning modes	Black and white, Error diffusion, Advanced Text Enha	incement, Advanced Text		
U U	Enhancement II (for Windows only), 256-level grayso			
Scanning Resolutions	150 x 150dpi, 200 x 200dpi, 300 x 300dpi, 400 x 400dpi, 600 x 600dpi			
Scanning Speed *2	Simplex:			
(A4 / LTR, Portrait, 200dpi)	25ppm			
	Duplex:			
	50ipm			
Interfaces	Hi-Speed USB 2.0			
Software	Windows:			
	ISIS / TWAIN driver, CaptureOnTouch, Presto! BizCar	d,Omnipage, PaperPort,		
	eCopy PDF Pro Office, Evernote			
	Мас			
	TWAIN driver, CaptureOnTouch, Presto! BizCard,Pres	sto! PageManager, Evernote		
Dimensions (W x D x H)	300 x220 x156mm with the feed tray closed			
Weight	Approx. 2.7kg			
Power Requirements	AC100 to 240V (50 / 60Hz)			
Power Consumption	Scanning:			
	12.8W or less	12.8W or less		
	Sleep:	Sleep:		
	1.8W or less			
	OFF:			
	0.5W or less			
Operating environment	Temperature:			
	10°C to 32.5°C			
	Humidity:			
	20% to 80% RH			
	ICT EQUIPMENT	QTY		
SOLID STATE HARD DRIVE 500G	B 2.5" SATA	21 Units		
Capacity	500 GB			
Interface	SATA 6Gb/s Interface, compatible with SATA 3Gb/s &	& SATA 1.5Gb/s interface		
Key Features				
Sequential Read Speed	Up to 540 MB/s Sequential Read			
Sequential Write Speed	Up to 520 MB/s Sequential Write			
Random Read Speed	SATA 6Gb/s Interface, compatible with SATA 3Gb/s & SATA 1.5Gb/s interface			
Random Write Speed	Random Write (4KB, QD32):Up to 90,000 IOPS Random Write			
Memory Speed	Samsung 32 layer 3D V-NANDSamsung 512 MB Low Power DDR3 SDRAM			
Controller	Samsung MGX Controller			
Trim Support	Yes			
AES Encryption	AES 256 bit Encryption (Class 0) , TCG/Opal, IEEE166	7 (Encrypted drive)		
Internal Storage	Yes			
Temperature proof	Yes			
General				
Power Consumption (W)	50 MW			
Voltage	5V ± 5% Allowable voltage			

Reliability (MTBF)	2 Million Hours Reliability (MTBF)		
Environmental Specs			
Operating Temperature	32ºF - 158ºF		
Form Factor	2.5" SATA III "		
Dimensions (W x D x H)	3.94" x 2.75" x 0.27"		
Weight	0.1		
Warranty			
wairancy	5 Years Limited Warranty or 150TBW Limited Warranty		
BARCODE/QR CODE SCANNER	ICT EQUIPMENT QTY 6 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 dr	ops	
	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: W Olivetti, Keyboard Wedge and RS485 IBM46xx ;	/incor Nixdorf, ICL, Fujitsu,	
	The minimum resolution must be SR: Code 39 4 mil; Datamatrix 7.5 mil	UPC 60% 5 mil; PDF417 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	5.8 cm W)	
Warranty	One year on parts and labor		
Technology	Handheld 2D Barcode Scanners		
	Must Scans 1-D, 2-D and PDF417 bar codes on paper computer displays	, mobile phones and	
	Must have Omni-directional scan pattern		
	Must support all common interfaces		
	Must provide reliable operation despite spills and dr	ops	
	Must be compatible with 123Scan and Remote Scan	ner 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 d	cm per second	
	Must support the following protocols over USB: HID SNAPI, COM Port Emulation, IBM SurePOS (Yellowst Tabletop, OPOS);		
	Must support the following protocols over RS232: W Olivetti, Keyboard Wedge and RS485 IBM46xx ;	/incor Nixdorf, ICL, Fujitsu,	
	The minimum resolution must be SR: Code 39 4 mil; Datamatrix 7.5 mil	UPC 60% 5 mil; PDF417 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	
	ICT EQUIPMENT	QTY
BARCODE PRINTER		23 Units
Standard Features:	Must be 32 bit RISC processor	
	Must have Co-resident EPL and ZPL programming lar	nguages (emulator is not
	allowed)	
	Must have Triple connectivity: Serial, USB and parallel	
	Print methods: Thermal transfer and direct thermal modes	
	>> GC420t — thermal transfer and direct thermal	
	* Construction: Dual-wall frame, reinforced plastic	
	* OpenACCESS [™] for easy media and ribbon loading	
	* Certified Microsoft [®] Windows [®] drivers	
Resolution	203 dpi/ 8 dots per mm	
Memory	8 MB Flash, 8 MB SDRAM (standard)	
Print Width	4.09"/104 mm	
Maximum Print Length	39"/990 mm	
Maximum Print Speed	4"/102 mm per second	
Media Sensors	Standard: Fixed reflective and transmissive sensors	
Media width	1.00"/25.4 mm to 4.24"/108 mm	
Media length	0.38"/9.6 mm to 39"/990 mm	
Maximum media roll size	5"/127 mm O.D. on a 1.00"/25.4 mm, 1.5"/38 mm I.D. core	
Media thickness	0.003"/0.08 mm to 0.007"/0.18 mm	
Media types	Roll-fed or fan-fed, die cut or continuous direct thermal labels with or without black mark, tag stock, continuous receipt paper, wristbands, and optional liner-free direct thermal media	
Ribbon Characteristics:		
Outside diameter	1.34"/34 mm	
Standard length	244' (74 m)	
Ratio	1:1 media to roll to ribbon	
Width	1.33"/33.8 mm to 4.3"/110 mm	
Core I.D.	0.5"/12.7 mm	
Firmware:	* The printer must have Powerful programming lang stand-alone applications, connect to peripherals, and	•
	* The printer must have Programming utility that ma programmers to create and test complex ZBI 2.0 pro the printer	•
	* The printer must have Programming Language that formatting and printer control and is compatible with printers	h tabletop and mobile
	* The printer must have Eltron Programming Langua formatting and enables format compatibility with leg	gacy applications
	Line Mode support (GK888d) enables format compate applications	ibility with legacy
Fonts/Graphics/Symbologies:	16 resident expandable ZPL fonts	

	One resident scalable ZPL font
	• 5 resident expandable EPL2 fonts
Day Cada Cumhalasian	Supports user-defined fonts and graphics — including custom logos
Bar Code Symbologies:	Bar Code Ratios: 2:1 (non-rotated) and 3:1
Standard Features:	Must be 32 bit RISC processor
	Must have Co-resident EPL and ZPL programming languages (emulator is not
	allowed)
	Must have Triple connectivity: Serial, USB and parallel
	Print methods: Thermal transfer and direct thermal modes
	>> GC420t — thermal transfer and direct thermal
	* Construction: Dual-wall frame, reinforced plastic
	* OpenACCESS™ for easy media and ribbon loading
	* Certified Microsoft [®] Windows [®] drivers
Resolution	203 dpi/ 8 dots per mm
Memory	8 MB Flash, 8 MB SDRAM (standard)
Print Width	4.09"/104 mm
Maximum Print Length	39"/990 mm
Maximum Print Speed	4"/102 mm per second
Media Sensors	Standard: Fixed reflective and transmissive sensors
Media width	1.00"/25.4 mm to 4.24"/108 mm
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Maximum media roll size	5"/127 mm O.D. on a 1.00"/25.4 mm, 1.5"/38 mm I.D. core
Media thickness	0.003"/0.08 mm to 0.007"/0.18 mm
	Roll-fed or fan-fed, die cut or continuous direct thermal labels with or without
Media types	black mark, tag stock, continuous receipt paper, wristbands, and optional liner-
	free direct thermal media
Ribbon Characteristics:	
Outside diameter	1.34"/34 mm
Standard length	244' (74 m)
Ratio	1:1 media to roll to ribbon
Width	1.33"/33.8 mm to 4.3"/110 mm
Core I.D.	0.5″/12.7 mm
Firmwara	* The printer must have Powerful programming language that lets printers run
Firmware:	stand-alone applications, connect to peripherals, and much more (option)
	* The printer must have Programming utility that makes it dramatically easier for
	programmers to create and test complex ZBI 2.0 programs and distribute them to
	the printer
	* The printer must have Programming Language that provides sophisticated label
	formatting and printer control and is compatible with tabletop and mobile
	printers
	* The printer must have Eltron Programming Language that simplifies label
	formatting and enables format compatibility with legacy applications
	Line Mode support (GK888d) enables format compatibility with legacy
Fonts/Granhies/Sumhalagias	applications
Fonts/Graphics/Symbologies:	 16 resident expandable ZPL fonts One resident scalable ZPL font
	I • Une resident scalable /PL tont

	• 5 resident expandable EPL2 fonts	
	Supports user-defined fonts and graphics — including custom logos	
Bar Code Symbologies:	Bar Code Ratios: 2:1 (non-rotated) and 3:1	
Warranty	One year on parts and labor	
wairanty	ICT EQUIPMENT	QTY
HI-RESOLUTION DOCUMENT SCANN		2 Units
HI-RESOLUTION DOCOMENT SCANN	ick (/SPPINI)	2 Onits
Туре	Must be Desktop sheet-fed scanner	
Document Feeding	Must be Automatic or manual sheet feeding	
Document size		
Width	Must be 50.8 - 305mm	
Length	Must be 70 - 432mm	
Long Document Mode:	Must be up to 3,000mm	
Document thickness and weight		
Continuous Feeding	Must be 20 - 209g/m2, 0.04 - 0.25mm	
Non-Separation Mode	Must be 20 - 255 g/m2, 0.04 - 0.3mm	
Feeding Capacity	Must be 48mm stack or 500 sheets of 80 g/m2	
Scanning Element	Must be 3-line CMOS CIS	
Light Source	Must be LED (red, green, and blue)	
Scanning Side	Must be Simplex / Duplex	
Scanning Modes	Black and White, Error Diffusion, Advanced Text Enhancement, Advanced Text Enhancement II, 256-level Grayscale, 24-bit Color, Auto Colour Detection	
Scanning Resolutions	150 x 150dpi, 200 x 200dpi, 240 x 240dpi, 300 x 300dpi,	
	400 x 400dpi, 600 x 600dpi	
Scanning speed*1 (A4 / LTR, 200dpi)		
B&W	Portrait: DR-G1100: 75ppm (Simplex) / 150ipm (Dupl	lex) Landscape
	Landscape: DR-G1100: 100ppm (Simplex) / 200ipm (I	Duplex)
Grayscale	Portrait: DR-G1100: 75ppm (Simplex) / 150ipm (Dupl	lex)
	Landscape: DR-G1100: 100ppm (Simplex) / 200ipm (I	Duplex)
Colour	Portrait: DR-G1100: 75ppm (Simplex) / 150ipm (Dupl	
	Landscape: DR-G1100: 100ppm (Simplex) / 200ipm (I	Duplex)
Interface	Hi-Speed USB 2.0	
Technical Specification		
Scanner driver	ISIS / TWAIN	
Useful functions	Job Function, Ultrasonic Double-Feed Detection, Staple Detection, Text Enhancement, Dropout and Color Enhancement, Auto Page Size Detection, 3-D Color Correction, Image Rotation, Skip Blank Page, Edge Emphasis, Moiré Removal, Prevent Bleed Through / Remove Background, Contrast Adjustment, Shading Correction, Brightness Adjustment, Deskew, Border Removal, Scanning Side Selection, Scan Area Settings, Add-on Settings, Text Orientation Recognition, Punch Hole Removal, Folio Scan, Unnecessary dots removal, Notch removal, Background Smoothing, Character Emphasis, Count Only Mode, Verify Scan,	
	Rapid Recovery System, MultiStream [™]	
Power requirements	AC220-240V (50 / 60Hz)	
Power Consumption	220 - 240V: 94.3W (Scanning), 1.7W (Sleep mode)	

Operating Environment	10 - 32.5°C		
	Humidity: 20 - 80% RH		
Dimensions	Feed trays closed: 480 x 535 x 315mm		
(W x D x H)			
Weight	Approx. 22.8kg		
Warranty	One year on parts and labor		
	ICT EQUIPMENT	QTY	
VOIP PHONE WITH ADAPTOR		93 Units	
Technology	Must be Business Media Phone		
	Must have 2 programmable lines/registrations		
	Must have 2.5" Graphical backlit LCD display with control	ve 2.5" Graphical backlit LCD display with 5-way navigation cluster for	
	Must be HD voice and Acoustic Fence Technology	/	
	Must have 2 x Ethernet 10/100 for network pass t	through	
	Must have RJ9 Headset support with electronic he	ook switch	
	Must have full duplex Type 1-compliant speakerp	hone features	
	Must be designed for interoperability and is certil industry's broadest range of PBX systems and SIP	•	
	Must have Zero Touch Provisioning and web-base	•	
	Must be simple to deploy, easy to administer, upg	grade, and maintain	
User interface features	Must have Voicemail support		
	Reversible desk stand/wall mount		
	Unicode UTF-8-character support		
Feature Keys	4 context-sensitive "soft" keys		
	2-line keys with bi-color (red/green) LED		
	"Home" feature key		
	4-way navigation key cluster with center "Select"	key	
	2 volume control keys		
	Dedicated hold key		
	Dedicated headset key		
	Dedicated hands-free speakerphone key		
	Dedicated microphone mute key		
Call handling features	Shared call/bridged line appearance		
	Distinctive incoming call treatment/call waiting		
	Call timer and call waiting		
	Call transfer, hold, divert (forward), pickup		
	Called, calling, connected party information		
	Local three-way audio conferencing		
	One-touch speed dial, redial		
	Remote missed call notification		
	Do not disturb function		
	Electronic hook switch capable		
	Local configurable digit map/dial plan		
Network and provisioning	SIP Protocol Support		

	SDP
	IETF SIP (RFC 3261 and companion RFCs)
	Two-port Ethernet switch
	10/100Base-TX across LAN and PC Ports
	Manual or dynamic host configuration protocol (DHCP) network setup
	Time and date synchronization using SNTP
	FTP/FTPS/TFTP/HTTP/HTTPS server based central provisioning for mass deployments
	Provisioning and call server redundancy supported
	QoS Support–IEEE 802.1p/Q tagging (VLAN), Layer 3 TOS, and DHCP
	Network Address Translation (NAT) – support for static configuration and "Keep- Alive" SIP signaling
	RTCP and RTP support
	Event logging
	Syslog
	Hardware diagnostics
	Status and statistics reporting
Security	802.1X Authentication and EAPOL
	Media encryption via SRTP
	Transport Layer Security (TLS)
	Encrypted configuration files
	Digest authentication
	Password login
	Support for URL syntax with password for boot server address
	HTTPS secure provisioning
	Support for signed software executables
Power Adaptor	Must include External Universal AC Adapter 12V
Warranty	Must be One year with premier service program that provides Service Partners with technical telephone support, advance parts replacement, software upgrades & updates, and access to Polycom's enhanced support portal. The SLA must be included on the technical requirements
	The bidder must be an authorized reseller of the brand being offered.

Lot 2

(Server and Storage Upgrade)

SERVER AND STORAGE UPGRADE			
ITEM	QTY	UNIT COST	TOTAL
BLADE SERVER SYSTEM	1		
- BLADE SYSTEM	1	₱3,934,000.00	₱3,934,000.00
- BLADE SERVERS	4		
SAN STORAGE	1	₱1,500,000.00	₱1,500,000.0
PC SERVER	1	₱206,500.00	₱206,500.00
		GRAND TOTAL	₽5,640,500.00

ICT EQUIPMENT		QTY	
BLADE SERVER SYSTEM		1 Lot	
Compatibility	Blade Chassis System must be compatible with ex OSG (IBM Blade Server E) including its existing Sto and Dell VNXe System). New and existing SAN sho Blade Chassis System.	orage Area Network (DS 3400 ould be seen by the New	
	CHASSIS	1 Unit	
Form Factor	Blade with 10U chassis that can accommodate up nodes. Supports mixing 2P, 4P and 8P nodes on t		
Midplane	Must have passive midplane		
Management Module	Blade Chassis should have 2x redundant manager	ment module	
Network Switch	ports enabled (one to each compute node) and 1 enabled with options to upgrade (per Switch). Wi	Blade Chassis should have 2x network switch that includes 14 internal 10 GbE ports enabled (one to each compute node) and 10 external 10 GbE ports enabled with options to upgrade (per Switch). With 10x initially activated ports with 10x 10Gb base-T SFP+ Transceivers and 10x 1GbE Transceivers. Standard with Flexible Port Mapping capability.	
SAN Switch	Blade Chassis should have 2x SAN switch that includes 28 internal full duplex 16/8Gb FC ports (per Switch). 24 external ports for 16 Gb or 8 Gb SFP+ transceivers supporting 4 Gb, 8 Gb, and 16 Gb port speeds (per Switch). With 12x initially activated external ports per switch with 12x 16Gb and 12x 8Gb FC Transceivers.		
Fans and Cooling		Blade Chassis should have 10x redundant Fans. Should be capable of Zoned Adaptive Cooling with fans can be independently slowed or sped up.	
Power Supply	Blade Chassis should have 6x redundant 2500W F	PSU	
Power Consumption	Must be 12,900 watts maximum		
Power Cable	Blade Chassis should have 6x 2.5m, 16A/100-240 Power Cable	V, C19 to IEC 320-C20 Rack	
Warranty	3 Years Parts, Labour, On Site, 4Hr Response Time	e, 24x7	
Implementation Services	Installation and configuration must be included		

ICT	EQUIPMENT	QTY	
BLADE SERVER NODE		4 Units	
Form Factor	Half-width		
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-Po	ort Fibre Channel Adapter	
Features	With predictive failure analysis which covers proc	essors, memory, and drives,	
	plus the fans and power supplies.		
Warranty	3 Years Parts, Labour, On Site, 4Hr Response Time	e, 24x7	
Implementation Services	Installation and configuration must be included		
ICT	EQUIPMENT	QTY	
STORAG	E AREA NETWORK	1 Unit	
Form Factor	2U Rackmount SAN		
Controller memory	16 GB per system (8 GB per controller module)		
Controller	Dual Redundant Converged Network Controller		
RAID Levels	RAID 1, 5, 6, and 10		
Storage	3x 400GB SSD and 15x 1.2TB HDD		
Ports	4x SFP/SFP+ host ports with two built-in dual-por	t CNCs (each port on the	
	same CNC must have the same connectivity type;		
	different connectivity types) and 1x 1GbE ports for	or management per	
	Controller.		
Transceivers	8x 16GB FC SFP+ Transceivers		
Features	SSD Tierring		
Performance	Dual controller configuration		
	Up to 250000 random disk read IOPS		
	Up to 7 GBps sequential disk read throughput Up to 6 GBps sequential disk write throughput		
Cooling	Redundant cooling with two fans built into power and cooling modules		
cooning	(PCMs).		
Power supply	Two redundant hot-swap 580 W AC power supplies built into PCMs.		
Management interfaces	1 GbE port (UTP, RJ-45) and serial port (Mini-USB) on the controller modules.		
_	Web-based interface (WBI); Telnet, SSH, or Direct Connect USB CLI; SNMP and		
	email notifications.		
Cables	2x 4.3m, 10A/100-250V, C13 to IEC 320-C14 Rack	Power Cable and 8x 5m LC-	
	LC OM3 MMF Cable		
Warranty	3Yr 24x7 4Hr Response + Drive Retention		
Implementation Services	Installation and configuration must be included		
Misc			
FC HBA	1x Dual port 8Gb FC HBA for x3550 M5 (5463)		
NIC	1x Dual port 10GbBase-T NIC for x3550 M5 (5463)		
Implementation Services	Installation and configuration must be included		
Scope of Work			
Blade Chassis			
	Unboxing and initial setup		
	Racking		

	Assembly of Power Supply and Cooling Fans		
	Initial Configuration of Chassis Management Module (CMM)		
	Initial Configuration of Flex Network Switch		
	Initial Configuration of Flex SAN Switch with SAN Z	Coning	
	Installation of Server Nodes	0	
	Knowledge Transfer		
Server Nodes			
	Configuraiton of Server Nodes		
	RAID Configuration		
	OS Installation (Windows Only)		
	Knowledge Transfer		
Storage			
	Unboxing and initial setup		
	Racking		
	Create Storage Pool		
	Create Host		
	Mount volumes to Host		
	Testing		
	Knowledge Transfer		
Existing x3550 M5			
	Removal of 2x Single port FC HBA		
	Installation of 1x Dual port FC HBA		
	Installation of 1x Dual port 10GbBase-T NIC		
10	Installation of 1x Dual port 10GbBase-T NIC CT EQUIPMENT	QTY	
	•	QTY 1 Unit	
Case Type	CT EQUIPMENT		
Case Type M/B Compatibility	CT EQUIPMENT PC SERVER Full Tower E-ATX (12" x 13"), ATX, Micro-ATX, Mini-ITX		
Case Type M/B Compatibility Expansion Slots	CT EQUIPMENT PC SERVER Full Tower		
Case Type M/B Compatibility	CT EQUIPMENT PC SERVER Full Tower E-ATX (12" x 13"), ATX, Micro-ATX, Mini-ITX PCI-E x 8 VGA Card Length: 370mm		
Case Type M/B Compatibility Expansion Slots Maximum Compatibility Front Ports	CT EQUIPMENT PC SERVER Full Tower E-ATX (12" x 13"), ATX, Micro-ATX, Mini-ITX PCI-E x 8		
Case Type M/B Compatibility Expansion Slots Maximum Compatibility	CT EQUIPMENTPC SERVERFull TowerE-ATX (12" x 13"), ATX, Micro-ATX, Mini-ITXPCI-E x 8VGA Card Length: 370mmAt least 2x USB 3.0PSII: ATX12V and EPS12V	· ·	
Case Type M/B Compatibility Expansion Slots Maximum Compatibility Front Ports Power Supply Compatibility	CT EQUIPMENTPC SERVERFull TowerE-ATX (12" x 13"), ATX, Micro-ATX, Mini-ITXPCI-E x 8VGA Card Length: 370mmAt least 2x USB 3.0PSII: ATX12V and EPS12V- Length up to 230mm		
Case Type M/B Compatibility Expansion Slots Maximum Compatibility Front Ports Power Supply Compatibility	CT EQUIPMENTPC SERVERFull TowerE-ATX (12" x 13"), ATX, Micro-ATX, Mini-ITXPCI-E x 8VGA Card Length: 370mmAt least 2x USB 3.0PSII: ATX12V and EPS12V- Length up to 230mmMOTHERBOARD		
Case Type M/B Compatibility Expansion Slots Maximum Compatibility Front Ports Power Supply Compatibility N Chipset	CT EQUIPMENTPC SERVERFull TowerE-ATX (12" x 13"), ATX, Micro-ATX, Mini-ITXPCI-E x 8VGA Card Length: 370mmAt least 2x USB 3.0PSII: ATX12V and EPS12V- Length up to 230mmMOTHERBOARDIntel B250	1 Unit	
Case Type M/B Compatibility Expansion Slots Maximum Compatibility Front Ports Power Supply Compatibility N Chipset CPU SUPPORT	CT EQUIPMENTPC SERVERFull TowerE-ATX (12" x 13"), ATX, Micro-ATX, Mini-ITXPCI-E x 8VGA Card Length: 370mmAt least 2x USB 3.0PSII: ATX12V and EPS12V- Length up to 230mmMOTHERBOARDIntel B2507th & 6th Gen Intel LGA 1151 Processor	1 Unit	
Case Type M/B Compatibility Expansion Slots Maximum Compatibility Front Ports Power Supply Compatibility N Chipset	CT EQUIPMENTPC SERVERFull TowerE-ATX (12" x 13"), ATX, Micro-ATX, Mini-ITXPCI-E x 8VGA Card Length: 370mmAt least 2x USB 3.0PSII: ATX12V and EPS12V- Length up to 230mmMOTHERBOARDIntel B2507th & 6th Gen Intel LGA 1151 ProcessorSupport Dual Channel DDR4 2400/ 2133/ 1866 MH	1 Unit	
Case Type M/B Compatibility Expansion Slots Maximum Compatibility Front Ports Power Supply Compatibility N Chipset CPU SUPPORT	CT EQUIPMENTPC SERVERFull TowerE-ATX (12" x 13"), ATX, Micro-ATX, Mini-ITXPCI-E x 8VGA Card Length: 370mmAt least 2x USB 3.0PSII: ATX12V and EPS12V- Length up to 230mmMOTHERBOARDIntel B2507th & 6th Gen Intel LGA 1151 ProcessorSupport Dual Channel DDR4 2400/ 2133/ 1866 MH2 x DDR4 DIMM Memory Slot	1 Unit	
Case Type M/B Compatibility Expansion Slots Maximum Compatibility Front Ports Power Supply Compatibility N Chipset CPU SUPPORT MEMORY	CT EQUIPMENTPC SERVERFull TowerE-ATX (12" x 13"), ATX, Micro-ATX, Mini-ITXPCI-E x 8VGA Card Length: 370mmAt least 2x USB 3.0PSII: ATX12V and EPS12V- Length up to 230mmMOTHERBOARDIntel B2507th & 6th Gen Intel LGA 1151 ProcessorSupport Dual Channel DDR4 2400/ 2133/ 1866 MH2 x DDR4 DIMM Memory SlotMax. Supports up to 32GB Memory	1 Unit	
Case Type M/B Compatibility Expansion Slots Maximum Compatibility Front Ports Power Supply Compatibility N Chipset CPU SUPPORT	CT EQUIPMENTPC SERVERFull TowerE-ATX (12" x 13"), ATX, Micro-ATX, Mini-ITXPCI-E x 8VGA Card Length: 370mmAt least 2x USB 3.0PSII: ATX12V and EPS12V- Length up to 230mmMOTHERBOARDIntel B2507th & 6th Gen Intel LGA 1151 ProcessorSupport Dual Channel DDR4 2400/ 2133/ 1866 MH2 x DDR4 DIMM Memory SlotMax. Supports up to 32GB Memory1 x PCI-E 3.0 x16 Slot	1 Unit	
Case Type M/B Compatibility Expansion Slots Maximum Compatibility Front Ports Power Supply Compatibility N Chipset CPU SUPPORT MEMORY EXPANSION SLOT	CT EQUIPMENTPC SERVERFull TowerE-ATX (12" x 13"), ATX, Micro-ATX, Mini-ITXPCI-E x 8VGA Card Length: 370mmAt least 2x USB 3.0PSII: ATX12V and EPS12V- Length up to 230mmMOTHERBOARDIntel B2507th & 6th Gen Intel LGA 1151 ProcessorSupport Dual Channel DDR4 2400/ 2133/ 1866 MH2 x DDR4 DIMM Memory SlotMax. Supports up to 32GB Memory1 x PCI-E 3.0 x16 Slot11 x PCI-E 3.0 x1 Slot	1 Unit	
Case Type M/B Compatibility Expansion Slots Maximum Compatibility Front Ports Power Supply Compatibility Chipset CPU SUPPORT MEMORY EXPANSION SLOT STORAGE	CT EQUIPMENTPC SERVERFull TowerE-ATX (12" x 13"), ATX, Micro-ATX, Mini-ITXPCI-E x 8VGA Card Length: 370mmAt least 2x USB 3.0PSII: ATX12V and EPS12V- Length up to 230mmMOTHERBOARDIntel B2507th & 6th Gen Intel LGA 1151 ProcessorSupport Dual Channel DDR4 2400/ 2133/ 1866 MH2 x DDR4 DIMM Memory SlotMax. Supports up to 32GB Memory1 x PCI-E 3.0 x16 Slot11 x PCI-E 3.0 x1 Slot6 x SATA3 Connector	1 Unit	
Case Type M/B Compatibility Expansion Slots Maximum Compatibility Front Ports Power Supply Compatibility N Chipset CPU SUPPORT MEMORY EXPANSION SLOT	CT EQUIPMENTPC SERVERFull TowerE-ATX (12" x 13"), ATX, Micro-ATX, Mini-ITXPCI-E x 8VGA Card Length: 370mmAt least 2x USB 3.0PSII: ATX12V and EPS12V- Length up to 230mmMOTHERBOARDIntel B2507th & 6th Gen Intel LGA 1151 ProcessorSupport Dual Channel DDR4 2400/ 2133/ 1866 MH2 x DDR4 DIMM Memory SlotMax. Supports up to 32GB Memory1 x PCI-E 3.0 x16 Slot11 x PCI-E 3.0 x1 Slot6 x SATA3 Connector4 x USB 3.0 Port	1 Unit	
Case Type M/B Compatibility Expansion Slots Maximum Compatibility Front Ports Power Supply Compatibility Chipset CPU SUPPORT MEMORY EXPANSION SLOT STORAGE	CT EQUIPMENTPC SERVERFull TowerE-ATX (12" x 13"), ATX, Micro-ATX, Mini-ITXPCI-E x 8VGA Card Length: 370mmAt least 2x USB 3.0PSII: ATX12V and EPS12V- Length up to 230mmMOTHERBOARDIntel B2507th & 6th Gen Intel LGA 1151 ProcessorSupport Dual Channel DDR4 2400/ 2133/ 1866 MH2 x DDR4 DIMM Memory SlotMax. Supports up to 32GB Memory1 x PCI-E 3.0 x16 Slot11 x PCI-E 3.0 x1 Slot6 x SATA3 Connector4 x USB 3.0 Port1 x USB 3.0 Header	1 Unit	
Case Type M/B Compatibility Expansion Slots Maximum Compatibility Front Ports Power Supply Compatibility Chipset CPU SUPPORT MEMORY EXPANSION SLOT STORAGE	CT EQUIPMENTPC SERVERFull TowerE-ATX (12" x 13"), ATX, Micro-ATX, Mini-ITXPCI-E x 8VGA Card Length: 370mmAt least 2x USB 3.0PSII: ATX12V and EPS12V- Length up to 230mmMOTHERBOARDIntel B2507th & 6th Gen Intel LGA 1151 ProcessorSupport Dual Channel DDR4 2400/ 2133/ 1866 MH2 x DDR4 DIMM Memory SlotMax. Supports up to 32GB Memory1 x PCI-E 3.0 x16 Slot11 x PCI-E 3.0 x1 Slot6 x SATA3 Connector4 x USB 3.0 Port	1 Unit	

	2 x USB 2.0 Header	
LAN	Realtek RTL8111H - 10/100/1000 Controller	
	Support Super LAN Surge Protection	
CODEC	Realtek ALC887 8-Channel HD Audio	
	Support HD Audio	
REAR I/O	1 x PS/2 Mouse	
	1 x PS/2 Keyboard	
	4 x USB 3.0 Port	
	2 x USB 2.0 Port	
	2 x USB 2.0 Port (only 5V power, up to 1.5A)	
	1 x DVI-D Connector, resolution up to 1920 x 1200	@60Hz
	1 x RJ-45 Port	
	3 x Audio Connector	
INTERNAL I/O	1 x USB 3.0 Header	
	2 x USB 2.0 Header	
	6 x SATA3 6Gb/s Connector	
	1 x SATA Power Connector (for rear USB power enl	hancement)
	1 x Front Audio Header	
	1 x Front Panel Header	
	1 x CPU Fan Header	
	2 x System Fan Header	
	1 x Serial Header	
	2 x PCI-E 12V 4Pin Connector	
DIMENSION	ATX Form Factor Dimension: 29.5cm x 21cm (W x L	_)
OS SUPPORT	Supports Windows 10(x64) for Intel 7th Generation	n Processor
FEATURES	Supports 100% Solid capacitor	
	Supports Charger Booster	
	Supports BIOS Online Update	
CPU SPECIFICATIONS (i5-7600K)		1 unit
Performance	# of Cores 4	
	# of Threads 4	
	Processor Base Frequency 3.80 GHz	
	Max Turbo Frequency 4.20 GHz	
	Cache 6 MB SmartCache	
	Bus Speed 8 GT/s DMI3	
	# of QPI Links 0	
	TDP 91 W	
Memory Specifications	Max Memory Size (dependent on memory type)	
	Memory Types DDR4-2133/2400, DDR3L-1333/1	.600 @ 1.35V
	Max # of Memory Channels 2	
	ECC Memory Supported ‡ No	
Processor Graphics	Processor Graphics ‡ Intel [®] HD Graphics 630	
	Graphics Base Frequency 350 MHz	

	Craphics May Dynamia Fraguency 1 15 CUz	
	Graphics Max Dynamic Frequency 1.15 GHz	
	Graphics Video Max Memory 64 GB	
	4K Support Yes, at 60Hz	
	Max Resolution (HDMI 1.4)‡ 4096x2304@24Hz	
	Max Resolution (DP)‡ 4096x2304@60Hz	
	Max Resolution (eDP - Integrated Flat Panel)‡ 4096x2304@60Hz	
	DirectX* Support 12	
	OpenGL* Support 4.4	
	Intel [®] Quick Sync Video Yes	
	Intel® InTru™ 3D Technology Yes	
	Intel [®] Clear Video HD Technology Yes	
	Intel [®] Clear Video Technology Yes	
	# of Displays Supported ‡ 3	
	Device ID 0x5912	
Expansion Options	Scalability 1S Only	
	PCI Express Revision 3.0	
	PCI Express Configurations ‡ Up to 1x16, 2x8, 1x8+2x4	
	Max # of PCI Express Lanes 16	
Package Specifications	Sockets Supported FCLGA1151	
	Max CPU Configuration 1	
	Thermal Solution Specification PCG 2015C (65W)	
	TJUNCTION 100°C	
	Package Size 37.5mm x 37.5mm	
	Low Halogen Options Available See MDDS	
Advanced Technologies	Intel [®] Optane [™] Memory Supported ‡ Yes	
	Intel [®] Turbo Boost Technology ‡ 2.0	
	Intel® vPro™ Technology ‡ No	
	Intel [®] Hyper-Threading Technology ‡ No	
	Intel [®] Virtualization Technology (VT-x) ‡ Yes	
	Intel [®] Virtualization Technology for Directed I/O (VT-d) ‡ Yes	
	Intel [®] VT-x with Extended Page Tables (EPT) ‡ Yes	
	Intel [®] TSX-NI Yes	
	Intel [®] 64 ‡ Yes	
	Instruction Set 64-bit	
	Instruction Set Extensions Intel [®] SSE4.1, Intel [®] SSE4.2, Intel [®] AVX2	
	Idle States Yes	
	Enhanced Intel SpeedStep [®] Technology Yes	
	Thermal Monitoring Technologies Yes	
	Intel [®] Identity Protection Technology ‡ Yes	
	Intel [®] Stable Image Platform Program (SIPP) No	
Security & Reliability	Intel [®] AES New Instructions Yes	
	Secure Key Yes	
	Intel [®] Software Guard Extensions (Intel [®] SGX) Yes	
	Intel [®] Memory Protection Extensions (Intel [®] MPX) Yes	
	Intel [®] OS Guard Yes	

	Execute Disable Bit ‡ Yes	
	Intel [®] Boot Guard Yes	
RAM SPECIFICATIONS	8GB DDR4 Compatible w/ mother board & cpu	
6X USB 3.0 PCI-E EXPRESS 1X TO 16X EX	TENDER RISER CARD ADAPTER POWER CABLE	6 Units
Power Connector	Sata 15 PIN POWER / 6 PIN POWER CABLE / MOI	LEX 4 PIN
The board size	130mm * 50mm	
USB Cable Length	600mm	
Compatible use	With any graphics cards	
SSD SPECIFICATIONS		1 unit
Capacity	At least 120GB	-
Form Factor	2.5"	
NAND Flash	3D NAND	
Dimensions (L x W x H)	100.45 x 69.85 x 7mm	
Weight	47.5g	
Interface	SATA 6Gb/s	
Sequential R/W performance (max)	Up to 520 / 450MB/s	
Shock resistance	1500G / 0.5ms	
MTBF	2,000,000 hours	
6x GPU SPE	CIFICATIONS (RX 580)	6 Units
Compute Units	36	-
Base Frequency	Up to 1257 MHz	
Boost Frequency	Up to 1340 MHz	
Peak Pixel Fill-Rate	Up to 42.88 GP/s	
Peak Texture Fill-Rate	Up to 192.96 GT/s	
Max Performance	Up to 6.2 TFLOPs	
ROPs	32	
Stream Processors	2304	
Texture Units	144	
Transistor Count	5.7 B	
Memory Speed (Effective)	8 Gbps	
Max Memory Size	8 GB	
Memory Type (GPU)	GDDR5	
Memory Interface	256-bit	
Max. Memory Bandwidth	256 GB/s	
Features	Crossfire Technology	
	Vulkan API	
2x PSU	SPECIFICATIONS	2 Units
Wattage	1200 Watts	
Form Factor	ATX 12 V	
Features	Full Modular	
	80 PLUS Platinum Certified	
	Multi-GPU setup	

Lot 3

(LAN and Wireless Upgrade)

	LAN AND WIRELESS	UPGRADE	
ITEM	QTY	UNIT COST	TOTAL
WIREL	ESS LAN UPGRADE		
 Access Point 802.11n/ac 2x2:2/3x3:3 MUMIMO Dual Radio Integrated Antenna AP Including Services 	20		
 Flat Surface Wall/Ceiling AP Basic Flat Surface Mount Kit 	20	_	
- LIC-AP Controller per AP Capacity License Including Services	20		
 LIC-PEF Controller Policy Enforcement Firewall Per AP License Including Services 	41	₽1,700,000	₽1,700,000
 Modular Core Switch with 6 Module Slot with 2x 700W PoE+ PSU and rackmount kit 	1		
- 8 Port 1G/10GbE SFP+ v3 Mod	1	-	
- 24 Port 1000BASE-T PoE+ v3 Mod	1		
- 24 Port 1000BASE-T v3 Mod	1		
- 24 Port 1000BASE-T PoE+ v3 zl2 Mod	1		
LAN EQ	UIPMENT UPGRADE		
ADDITIONAL MODULE FOR EXISTING OSG CORE SWITCH			
- 8 Port 1G/10GbE SFP+ v3 zl2 Mod	1	₱160,000.00	₱160,000.00
- 8 Port 1/2.5/5/XGT PoE+ v3 zl2 Mod	1	₱160,000.00	₱160,000.00
- HPE X132 10G SFP+ LC SR Transceiver	4	₱45,000.00	₱180,000.00
- 24 Port 4SFP+ Layer 3 Switch	1	₱92,000.00	₱ 92,000.00
 Managed Network Switch POE L2 (24-port) 	6	₱20,000.00	₱120,000.00
 LAN and Wireless Implementation and Services including installation and knowledge transfer 	1		
		GRAND TOTAL	₱2,412,000.00

WIRELESS ACCESS POINT COMPATIBLE WITH EXISTING ACCESS POINT AND CONTROLLER (ARUBA)		20 Units
Specifications Must be Wave 2 access points that deliver high performance		
	and superb user experience for medium density environments	
Must have 3x3:3SS MU-MIMO capability		
	Must provide simultaneous data transmission to multiple	
	devices (up to two)	

Must have advanced Client Natch radio management	
Must have advanced ClientMatch radio management	
technology Must have RF management features	
Must be Dual Radio 802.11ac Access Point	
Must have Built-in Bluetooth Low-Energy (BLE) radio	
Must have Advanced Cellular Coexistence (ACC) that minimize	
interference from 3G/4G cellular networks, distributed	
antenna systems and commercial small cell/ femtocell	
equipment	
Must support priority handling and policy enforcement for	
unified communication apps, including Microsoft Skype for	
Business with encrypted videoconferencing, voice, chat and	
desktop sharing	
Must have Adaptive Radio Management (ARM) technology	
that automatically assigns channel and power settings	
The APs must be configured to provide part-time or dedicated	
air monitoring for spectrum analysis and wireless intrusion	
protection, VPN tunnels to extend remote locations to	
corporate resources, and wireless mesh connections where	
Ethernet drops are not available	
Must have Intelligent app visibility and control	
Must provide comprehensive protection against advanced	
online threats	
Must have Integrated wireless intrusion protection offers	
threat protection and mitigation, and eliminates the need for	
separate RF sensors and security appliances	
 Must have Intelligent Power Monitoring (IPM)	
Must be 5GHz 802.11ac 3x3 MIMO (1,300 Mbps max rate) and	
2.4GHz 802.11n 2x2 MIMO (300 Mbps max rate) radios, with a	
total of three integrated omni-directional downtilt	
 dual- band antennas.	
Must Support for up to 256 associated client devices per radio,	
and up to 16 BSSIDs per radio	
Must have Dynamic frequency selection (DFS) that optimizes	
the use of available RF spectrum	
Supported radio technologies:	
- 802.11b: Direct-sequence spread-spectrum (DSSS)	
- 802.11a/g/n/ac: Orthogonal frequency-division multiplexing	
(OFDM)'	
Supported data rates (Mbps):	
'- 802.11b: 1, 2, 5.5, 11	
- 802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54	
- 802.11n (2.4GHz): 6.5 to 300 (MCS0 to MCS15)	
- 802.11n (5GHz): 6.5 to 450 (MCS0 to MCS23)	
- 802.11ac: 6.5 to 1,300 (MCS0 to MCS9, NSS = 1 to 3 for	
VHT20/40/80'	
The Transmit power must be configurable in increments of 0.5	
dBm	

	802.11n high-throughput (HT) support: HT 20/40	
	802.11ac very high throughput (VHT) support: VHT 20/40/80	
	802.11n/ac packet aggregation: A-MPDU, A-MSDU	
Interface	• 10/100/1000BASE-T Ethernet network interface (RJ-45)	
	Auto-sensing link speed and MDI/MDX	
	- 802.3az Energy Efficient Ethernet (EEE)	
	- PoE-PD: 48 Vdc (nominal) 802.3af PoE	
	• DC power interface, accepts 1.7/4.0-mm center-positive	
	circular plug with 9.5-mm length	
	Visual indicators (LEDs):	
	Power/system status	
	Ethernet link status (ENET)	
	- Radio status (two; RAD0, RAD1)	
	Reset button: factory reset (during device power up)	
	Serial console interface (RJ-45)	
	Kensington security slot	
	Must include the following:	
Licenses	Must have AP Licenses	20 Units
	The LIC-AP Controller must be per AP Capacity License	
Support	The licenses must include 1 year foundation care 24x7 Support	
Mounting Kit	Must be Flat Surface Wall/Ceiling White AP Basic Flat Surface Mount Kit	20 Units
Warranty	Must be lifetime warranty on parts	
	Must include 1 Year Foundation Care Next Business Day	
	Wust include I real roundation care wext business bay	
	Exchange	
Certification	Exchange Must belong to the Leaders Magic Quadrant for the Wired and	
Certification	Exchange	
	Exchange Must belong to the Leaders Magic Quadrant for the Wired and Wireless LAN Access Infrastructure (please attach certificate)	41 Units
	Exchange Must belong to the Leaders Magic Quadrant for the Wired and Wireless LAN Access Infrastructure (please attach certificate) CEMENT FIREWALL PER AP LICENSE E-LTU	41 Units
LIC-PEF CONTROLLER POLICY ENFORC	Exchange Must belong to the Leaders Magic Quadrant for the Wired and Wireless LAN Access Infrastructure (please attach certificate) CEMENT FIREWALL PER AP LICENSE E-LTU * The PEF Controller must be compatible to the existing AP	41 Units
	Exchange Must belong to the Leaders Magic Quadrant for the Wired and Wireless LAN Access Infrastructure (please attach certificate) CEMENT FIREWALL PER AP LICENSE E-LTU * The PEF Controller must be compatible to the existing AP OLS must have the following:	41 Units
LIC-PEF CONTROLLER POLICY ENFORC	Exchange Must belong to the Leaders Magic Quadrant for the Wired and Wireless LAN Access Infrastructure (please attach certificate) EXEMENT FIREWALL PER AP LICENSE E-LTU * The PEF Controller must be compatible to the existing AP OLS must have the following: * PEF with AppRF technology provides user-level awareness of	41 Units
LIC-PEF CONTROLLER POLICY ENFORC	Exchange Must belong to the Leaders Magic Quadrant for the Wired and Wireless LAN Access Infrastructure (please attach certificate) CEMENT FIREWALL PER AP LICENSE E-LTU * The PEF Controller must be compatible to the existing AP OLS must have the following:	41 Units
LIC-PEF CONTROLLER POLICY ENFORC	Exchange Must belong to the Leaders Magic Quadrant for the Wired and Wireless LAN Access Infrastructure (please attach certificate) CEMENT FIREWALL PER AP LICENSE E-LTU * The PEF Controller must be compatible to the existing AP OLS must have the following: * PEF with AppRF technology provides user-level awareness of all traffic across the network. This Mobility Controllers support	41 Units
LIC-PEF CONTROLLER POLICY ENFORC	Exchange Must belong to the Leaders Magic Quadrant for the Wired and Wireless LAN Access Infrastructure (please attach certificate) CEMENT FIREWALL PER AP LICENSE E-LTU * The PEF Controller must be compatible to the existing AP OLS must have the following: * PEF with AppRF technology provides user-level awareness of all traffic across the network. This Mobility Controllers support multiple user categories on a single network, spanning wired, wireless and VPNs. * During the network sign-on process, the identity and role of	41 Units
LIC-PEF CONTROLLER POLICY ENFORC	Exchange Must belong to the Leaders Magic Quadrant for the Wired and Wireless LAN Access Infrastructure (please attach certificate) EXEMENT FIREWALL PER AP LICENSE E-LTU * The PEF Controller must be compatible to the existing AP DLS must have the following: * PEF with AppRF technology provides user-level awareness of all traffic across the network. This Mobility Controllers support multiple user categories on a single network, spanning wired, wireless and VPNs. * During the network sign-on process, the identity and role of each user or device is learned. Employees and other	41 Units
LIC-PEF CONTROLLER POLICY ENFORC	Exchange Must belong to the Leaders Magic Quadrant for the Wired and Wireless LAN Access Infrastructure (please attach certificate) CEMENT FIREWALL PER AP LICENSE E-LTU * The PEF Controller must be compatible to the existing AP OLS must have the following: * PEF with AppRF technology provides user-level awareness of all traffic across the network. This Mobility Controllers support multiple user categories on a single network, spanning wired, wireless and VPNs. * During the network sign-on process, the identity and role of each user or device is learned. Employees and other authorized internal users can be treated as a single class or	41 Units
LIC-PEF CONTROLLER POLICY ENFORC	Exchange Must belong to the Leaders Magic Quadrant for the Wired and Wireless LAN Access Infrastructure (please attach certificate) CEMENT FIREWALL PER AP LICENSE E-LTU * The PEF Controller must be compatible to the existing AP OLS must have the following: * PEF with AppRF technology provides user-level awareness of all traffic across the network. This Mobility Controllers support multiple user categories on a single network, spanning wired, wireless and VPNs. * During the network sign-on process, the identity and role of each user or device is learned. Employees and other authorized internal users can be treated as a single class or further subdivided according to information found in a	41 Units
LIC-PEF CONTROLLER POLICY ENFORC	Exchange Must belong to the Leaders Magic Quadrant for the Wired and Wireless LAN Access Infrastructure (please attach certificate) EMENT FIREWALL PER AP LICENSE E-LTU * The PEF Controller must be compatible to the existing AP DLS must have the following: * PEF with AppRF technology provides user-level awareness of all traffic across the network. This Mobility Controllers support multiple user categories on a single network, spanning wired, wireless and VPNs. * During the network sign-on process, the identity and role of each user or device is learned. Employees and other authorized internal users can be treated as a single class or further subdivided according to information found in a directory server.	41 Units
LIC-PEF CONTROLLER POLICY ENFORC	Exchange Must belong to the Leaders Magic Quadrant for the Wired and Wireless LAN Access Infrastructure (please attach certificate) CEMENT FIREWALL PER AP LICENSE E-LTU * The PEF Controller must be compatible to the existing AP OLS must have the following: * PEF with AppRF technology provides user-level awareness of all traffic across the network. This Mobility Controllers support multiple user categories on a single network, spanning wired, wireless and VPNs. * During the network sign-on process, the identity and role of each user or device is learned. Employees and other authorized internal users can be treated as a single class or further subdivided according to information found in a directory server. TIFICATION must be:	41 Units
LIC-PEF CONTROLLER POLICY ENFORC	ExchangeMust belong to the Leaders Magic Quadrant for the Wired and Wireless LAN Access Infrastructure (please attach certificate)CEMENT FIREWALL PER AP LICENSE E-LTU* The PEF Controller must be compatible to the existing APDLS must have the following:* PEF with AppRF technology provides user-level awareness of all traffic across the network. This Mobility Controllers support multiple user categories on a single network, spanning wired, 	41 Units
LIC-PEF CONTROLLER POLICY ENFORC	Exchange Must belong to the Leaders Magic Quadrant for the Wired and Wireless LAN Access Infrastructure (please attach certificate) CEMENT FIREWALL PER AP LICENSE E-LTU * The PEF Controller must be compatible to the existing AP OLS must have the following: * PEF with AppRF technology provides user-level awareness of all traffic across the network. This Mobility Controllers support multiple user categories on a single network, spanning wired, wireless and VPNs. * During the network sign-on process, the identity and role of each user or device is learned. Employees and other authorized internal users can be treated as a single class or further subdivided according to information found in a directory server. TIFICATION must be:	41 Units

	*Network convised like Availa AirDrint and AirDlaw	
	*Network services like Apple AirPrint and AirPlay:	
	IT optimizes IP multicast video traffic and automatically	
	prioritizes services, and adds policy controls.	
	*Web-based applications:	
	Many web-based applications use the same port to	
	communicate with clients and appear as HTTP traffic. The	
	AppRF technology resolves	
	the destination address to identify unique applications like	
	Facebook, Twitter, Box, WebEx and hundreds of others.	
	*Encrypted applications:	
	For encrypted traffic, The AppRF technology uses heuristics to	
	look for traffic patterns and establishes a unique fingerprint to	
	identify those applications.	
COMPREHENSIVE VOICE MANA		
	*Phone number association – SIP-enabled devices can be	
	tracked and displayed by their phone number	
	*Call quality tracking – Automatically calculate, display and	
	track the R-value for each SIP call being processed	
	through a Mobility Controller.	
	*SIP authentication tracking – Track the registration of SIP	
	devices to an IP PBX to determine if they are	
	authenticated	
	*Call detail records (CDRs) – Display calls made to and from	
	Wi-Fi clients, including originator, terminator, termination	
	reason, rejected and failed calls, duration, and call quality.	
	* Real-time call admission control (CAC) information –	
	Quickly determine call density, CAC state and active calls	
	for load balancing.	
Support	* Must include 1Y Foundation Care 24x7 support	
Certification	* Must belong to the Leaders Magic Quadrant for the Wired	
	and Wireless LAN Access Infrastructure (please attach	
	certificate)	
	MODULAR CORE SWITCH	1 Unit
Switch Type	Must be Modular Chassis	
Routing / Switching	Must be Layer 3 Advanced	
Management	Must be Fully Managed	
Included Accessories		
	* Must include zl2 Management Module	
	* zl2 Switch Fan Tray	
Features		
	* Must be Powerful Layer 3 modular switch series with VSF	
	stacking, Tunnel Node, low latency and resiliency	
	* Must be Smart Rate for high-speed multi-gigabit bandwidth	
	(IEEE 802.3bz) and PoE+ power	
	* Must be Scalable line rate 40GbE for wireless traffic	
	aggregation	

	* Must be Ready for the software defined network with REST
	APIs and OpenFlow support
	* Must have Security and network management tools with
	ClearPass Policy Manager, AirWave and cloud-based Central
Physical Properties	
Dimensions	17.5(w) x 17.75(d) x 6.9(h) in.
	(44.45 x 45.09 x 17.53 cm)
	(4U height)
Weight	24.5 lb (11.11 kg)
Port Types	
LAN Ports	up to 144 with optional modules
Dual Personality Ports	N/A
SFP Ports	up to 144 with optional modules
SFP+ Ports	up to 48 with optional modules
SFP28 Ports	N/A
XFP Ports	N/A
X2 Ports	N/A
CX4 Ports	N/A
10GBASE-T Ports	up to 48 with optional modules
QSFP+ Ports	up to 12 with optional modules
QSFP28 Ports	N/A
Module Slots	6 open module slots
Console Port	1 RJ-45 serial console port
Power Supplies	
Power supply slots	2x power supply slots
Power supply requirements	Must have 2 x 700W PoE+ zl2 PSU
Memory and Processor	
Memory and Processor	N/A
Gigabit Module	v3 Gigabit Module: Dual ARM Cortex A9 @ 1 GHz; Packet
	buffer size: 13.5 MB internal
	v2 Gigabit Module: ARM 11 @ 450 MHz; Packet buffer size: 18
	-
	MB internal
10Gb Module	MB internal v3 10G Module: Dual ARM Cortex A9 @ 1 GHz; Packet buffer
10Gb Module	MB internal
10Gb Module	MB internal v3 10G Module: Dual ARM Cortex A9 @ 1 GHz; Packet buffer size: 13.5 MB internal
10Gb Module	MB internal v3 10G Module: Dual ARM Cortex A9 @ 1 GHz; Packet buffer size: 13.5 MB internal v2 10G Module: ARM11 @ 550 MHz; packet buffer size: 18 MB
	MB internal MB internal v3 10G Module: Dual ARM Cortex A9 @ 1 GHz; Packet buffer size: 13.5 MB internal v2 10G Module: ARM11 @ 550 MHz; packet buffer size: 18 MB internal
10Gb Module Management Module	MB internal v3 10G Module: Dual ARM Cortex A9 @ 1 GHz; Packet buffer size: 13.5 MB internal v2 10G Module: ARM11 @ 550 MHz; packet buffer size: 18 MB internal Freescale P2020 dual core @ 1.2 GHz, 16 MB flash, 1 GB SD
	MB internal MB internal v3 10G Module: Dual ARM Cortex A9 @ 1 GHz; Packet buffer size: 13.5 MB internal v2 10G Module: ARM11 @ 550 MHz; packet buffer size: 18 MB internal
Management Module Fabric Module	MB internal v3 10G Module: Dual ARM Cortex A9 @ 1 GHz; Packet buffer size: 13.5 MB internal v2 10G Module: ARM11 @ 550 MHz; packet buffer size: 18 MB internal Freescale P2020 dual core @ 1.2 GHz, 16 MB flash, 1 GB SD Card, 4 GB DDR3 SODIMM N/A
Management Module	MB internal v3 10G Module: Dual ARM Cortex A9 @ 1 GHz; Packet buffer size: 13.5 MB internal v2 10G Module: ARM11 @ 550 MHz; packet buffer size: 18 MB internal Freescale P2020 dual core @ 1.2 GHz, 16 MB flash, 1 GB SD Card, 4 GB DDR3 SODIMM
Management Module Fabric Module	MB internalv3 10G Module: Dual ARM Cortex A9 @ 1 GHz; Packet buffer size: 13.5 MB internalv2 10G Module: ARM11 @ 550 MHz; packet buffer size: 18 MB internalFreescale P2020 dual core @ 1.2 GHz, 16 MB flash, 1 GB SD Card, 4 GB DDR3 SODIMMN/Av3 40G Module: Dual ARM Cortex A9 @ 1 GHz; Packet buffer
Management Module Fabric Module I/O Module Mounting	MB internal V3 10G Module: Dual ARM Cortex A9 @ 1 GHz; Packet buffer size: 13.5 MB internal v2 10G Module: ARM11 @ 550 MHz; packet buffer size: 18 MB internal Freescale P2020 dual core @ 1.2 GHz, 16 MB flash, 1 GB SD Card, 4 GB DDR3 SODIMM N/A v3 40G Module: Dual ARM Cortex A9 @ 1 GHz; Packet buffer size: 13.5 MB internal
Management Module Fabric Module I/O Module	MB internalv3 10G Module: Dual ARM Cortex A9 @ 1 GHz; Packet buffer size: 13.5 MB internalv2 10G Module: ARM11 @ 550 MHz; packet buffer size: 18 MB internalFreescale P2020 dual core @ 1.2 GHz, 16 MB flash, 1 GB SD Card, 4 GB DDR3 SODIMMN/Av3 40G Module: Dual ARM Cortex A9 @ 1 GHz; Packet buffer
Management Module Fabric Module I/O Module Mounting	MB internalMB internalv3 10G Module: Dual ARM Cortex A9 @ 1 GHz; Packet buffer size: 13.5 MB internalv2 10G Module: ARM11 @ 550 MHz; packet buffer size: 18 MB internalv2 10G Module: ARM11 @ 550 MHz; packet buffer size: 18 MB internalFreescale P2020 dual core @ 1.2 GHz, 16 MB flash, 1 GB SD Card, 4 GB DDR3 SODIMMN/AV3 40G Module: Dual ARM Cortex A9 @ 1 GHz; Packet buffer size: 13.5 MB internalMounts in an EIA-standard 19 in. telco rack or equipment

1 Unit
1 Unit 1 Unit
1 Unit
1 Unit 1 Unit
1 Unit 1 Unit 1 Unit
1 Unit 1 Unit 1 Unit
1 Unit 1 Unit 1 Unit
1 Unit 1 Unit 1 Unit
1 Unit 1 Unit 1 Unit
1 Unit 1 Unit 1 Unit

24 PORT LAYER 3 WITH 4SFP+ SWITCH		
Switch Type	Must be Fixed Port	
Routing / Switching	Must be Layer 3 Dynamic	
Management	Must be Fully Managed	
Features		
	* Must be Layer 3 switch series with VSF stacking, static, Rip	
	and Access OSPF Routing, Tunnel Node, ACLs, and robust QoS	
	* Must be Consistent wired/wireless experience with AirWave	
	and ClearPass Policy Manager	
	* Must be Ready for the software defined network with REST	
	APIs and OpenFlow support	
	* Must be Simple deployment with Zero Touch Provisioning	
	and cloud-based Aruba Central support	
	* Must Supports multiple programmatic interfaces, including	
	REST APIs and Openflow 1.0 and 1.3, to enable automation of	
	network operations, monitoring, and troubleshooting	
Management		
	* SNMPv1, v2, and v3 provide complete support of SNMP;	
	provide full support of industry-standard Management	
	Information Base (MIB) plus private extensions; SNMPv3	
	supports increased security using encryption	
	* Central cloud-based management platform offers a simple,	
	secure and cost-effective way to manage switches	
	* Zero Touch Provisioning (ZTP) simplifies installation of the	
	switch infrastructure using the Aruba Activate-based or a	
	DHCP-based process with AirWave Network Management	
	* Supports multiple programmatic interfaces, including REST	
	APIs and Openflow 1.0 and 1.3, to enable automation of	
	network operations, monitoring, and troubleshooting	
Layer 2 switching		
	• VLAN support and tagging support IEEE 802.1Q (4,094 VLAN	
	IDs) and 2K VLANs simultaneously	
	Jumbo packet support improves the performance of large	
	data transfers; supports frame size of up to 9,220 bytes	
	IEEE 802.1v protocol VLANs isolate select non-IPv4 protocols	
	automatically into their own VLANs	
	Rapid Per-VLAN Spanning Tree (RPVST+) allows each VLAN	
	to build a separate spanning tree to improve link bandwidth	
	usage; is compatible with PVST+	
	GVRP and MVRP allows automatic learning and dynamic	
	assignment of VLANs	
	 VxLAN encapsulation (tunneling) protocol for overlay 	
	network that enables a more scalable virtual network	
	deployment	
Layer 3 services		
	DHCP server centralizes and reduces the cost of IPv4	
	address management	

Static IP routing provides manually configured routing; includes ECMP capability 256 static and 10,000 RIP routes facilitate segregation of user data, without adding external hardware Routing Information Protocol (RIP) provides RIPv1, RIPv2, and RIPng routing Access OSPF Provide OSPFv2 and OSPFv3 protocols for routing between access and the next layer on the LAN. Only one OSPF area and up to 8 interfaces are supported Policy-based routing uses a classifier to select traffic that can be forwarded based on policy set by the network administrator (limited to 16 next hop routes) Physical Properties 17.42(w) x 7.88(d) x 1.73(h) in (44.25 x 20.02 x 4.39 cm) (1U height) S.31 lb (2.41 kg) //O Ports and Slots * 24 RI-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 108ASE-T; IEEE 802.30 Type 100BASE-TX; IEEE 802.3a Type 100BASE-T; IEEE 802.30 Type 100BASE-TX; half or full; 1000BASE-T; TUPIeX: 10BASE-T/100BASE-TX; half or full; 1000BASE-T; IEEE 802.30 Type 100BASE-TX; half or full; 1000BASE-T; III only * 1 dual-personality (RI-45 or USB micro-B) serial console port Port Types Z4 RI-45 autosensing 10/100/1000 ports (IEEE 802.30 Type 100BASE-TY; IEEE 802.30 Type 100BASE-TX; half or full; 1000BASE-T; III only SFP+ Ports 24 FP-11/10GbE ports; PHY-less Console Port 1 dual-personality (RI-45 or USB micro-B) serial console port Memory and Processor Dual Core ARM Coretex A9 @ 1016 MHz, 1 GB DR3 SDRAM; Packet Duffer size: 12.38 MB, 4.5MB Ingress/7.785 Egress, 4 GB eMMC Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); hor			
includes ECMP capability • 256 static and 10,000 RIP routes facilitate segregation of user data, without adding external hardware • Routing Information Protocol (RIP) provides RIPv1, RIPv2, and RIPng routing • Access OSPF • Provide OSPFv3 protocols for routing between access and the next layer on the LAN. Only one OSPF area and up to 8 interfaces are supported • Policy-based for truing uses a classifier to select traffic that can be forwarded based on policy set by the network administrator (limited to 16 next hop routes) Physical Properties Dimensions 17.42(w) x 7.88(d) x 1.73(h) in (44.25 x 20.02 x 4.39 cm) (11) height) Weight 5.31 lb (2.41 kg) //O Ports and Slots * 24 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 1000BASE-T7, IEEE 802.3 u Type 100BASE-TX: half or full; 1000BASE-T7, IUI only * 1 dual-personality (RJ-45 or USB micro-B) serial console port Port Types LAN Ports 24 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 100BASE-TX: IDBASE-TX: half or full; 1000BASE-T7: 0uplex: 10BASE-TX: IDBASE-TX: half or full; 1000BASE-T3 SFP+ Ports 24 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 100BASE-TX: IDBASE-TX: IBBASE-TX: IBBASE	Layer 3 routing		
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Mounting Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); horizontal surface mounting; wall mounting.	Memory and Processor	Packet buffer size: 12.38 MB, 4.5MB Ingress/7.785 Egress, 4	
cabinet (rack-mounting kit available); horizontal surface mounting; wall mounting.	Mounting		
	Mounting	cabinet (rack-mounting kit available); horizontal surface	
Performance	Performance		
IPv6 Ready Certified		IPv6 Ready Certified	
1000 Mb Latency < 3.8 μs (64-byte packets)	1000 Mb Latency	< 3.8 µs (64-byte packets)	

10 Gbps Latency	< 1.6 µs (64-byte packets)					
Throughput	up to 95.2 Mpps					
Switching Capacity	128 Gbps					
Routing Table Size	10,000 entries (IPv4), 5,000 entries (IPv6)					
MAC Address Table Size	32,768 entries					
Electrical Characteristics						
Voltage	100 - 127 / 200 - 240 VAC, rated					
Current	0.6/0.4 A					
Frequency	50/60 Hz					
Maximum Power Consumption	29.3 W (idle power: 19.5 W)					
Maximum Heat Dissipation	100 BTU/hr (105.5 kJ/hr)					
Warranty and Support						
	Must be limited lifetime on parts					
	Must include 1 Year Foundation Care Next Business Day on					
	site support					
Certification	Must belong to the Leaders Magic Quadrant for the Wired and					
	Wireless LAN Access Infrastructure (please attach certificate)					
MANAGED	NETWORK SWITCH POE L2 (24-PORT)	6 Units				
Technology	Must be basic smart-managed, fixed-configuration Gigabit					
recimology	Ethernet Layer 2 switches					
	Must provide non-blocking Gigabit per port performance					
	Must include SFP ports for fiber connectivity					
	Must be Power over Ethernet Switch					
	Must be customizable operation using intuitive Web interface					
	Must supports HTTP and HTTP Secure (HTTPS)					
	Flexible deployment options including wall, under table and					
	desktop mounting					
	Must be latest energy-saving capabilities, including Energy					
	Efficient Ethernet (EEE) and idle-port power down. Must have Port Mirroring and Dual Flash Images					
	Must have Port Will offing and Dual Flash images Must have Default DHCP client mode					
	Must be 1U Height					
Connectivity	Auto-MDI/MDIX					
Connectivity	IEEE 802.3X flow control					
	Loop protection					
	IEEE 802.3at Power over Ethernet (PoE+)					
	PoE+ port availability					
	Auto PoE power configuration					
	PoE shut down mode					
	12 RJ-45 autosensing 10/100/1000 PoE+ ports; Duplex:					
I/O ports and slots	10BASET/100BASE-TX: half or full; 1000BASE-T: full only					
	12 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type					
	10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type					
	1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full;					
	1000BASE-T: full only					

2 SFP 100/1000 Mbps ports (IEEE 802.3z Type 1000BASE-X IEEE 802.3u Type 100BASE-FX)							
	ARM Cortex-A9 @ 400 MHz, 128 MB SDRAM; Packet buffer						
size: 1.5 MB, 16 MB flash							
Performance	100 Mb Latency: $< 7 \ \mu s$ (LIFO 64-byte packets)						
	1000 Mb Latency: $< 2 \ \mu s$ (LIFO 64-byte packets)						
	Throughput up to 38.6 Mpps (64-byte packets)						
	Switching capacity: 52 Gbps						
 	MAC address table size 8000 entries						
	Encrypts all HTTP traffic, allowing secure access to the						
Security	browser-based management GUI in the switch						
	Monitors nine types of malicious attacks and protects the						
	network by blocking these attacks						
	Provides security so that only authorized access to the Web						
	browser interface is allowed						
Performance	Half-/full-duplex auto-negotiating capability on every port						
	IGMP snooping						
Resiliency and high availability	IEEE 802.1D STP and IEEE 802.1W RSTP that Provides						
	redundant links while preventing network loops						
	Link aggregation (trunking)						
Warranty	Limited Lifetime Warranty						
	The bidder must be and authorized reseller of the brand being offered						
	onered						
	SERVICES						
INSTALL, START-UP and CONFIGURA	TION OF CORE SWITCHES						
	Scope of Works						
A. Physical Checking Installation	i. Pre-staging						
	ii. Hardware Testing						
	iii. Rack mounting						
	iv. Inserting/connecting power supplies						
	v. Power-up						
B. Management	i. Creation of management VLAN						
	ii. Assigning of management IP address per switch or per						
	stacked of switches						
C. VLAN Configuration	i. Configuration of VLANS						
	ii. Configuration of Tagged port (VLAN up links)						
	iii. Configuration of inter-VLAN routing						
D. Testing	i. Perform Inter VLAN connection						
	CONFIGURATION OF CONTROLLER LICENSES						
	A. System name						
	B. Country Code						
	C. Admin Password						
	D. Date and Time						
	E. Connectivity Settings						
	F. Authentication Settings						

	G. Management VLAN configuration	
	H. Configuring Default Gateway	
	I. License installation and activation	
	INSTALLATION AND CONFIGURATION OF ACCESS POINTS	
A. Access Point Controller Discovery	i. Layer 2 Network Discovery	
	ii. DHCP Server Configuration	
	DOCUMENTATION	
	A. Electronic documentation as built	
Knowledge Transfer	Include 1 Day Knowledge Transfers based on Implementation	
CORE SWITCH ADDITIONAL MODULE		
INSTALL, START-UP and CONFIGURAT	ION OF CORE SWITCH ADDITIONAL MODULE AND 24 PORTS	
LAYER 3 SWITCH		
A. Physical Checking Installation	i. Pre-staging	
	ii. Hardware Testing	
	iii. Rack mounting	
	iv. Inserting/connecting power supplies	
	v. Power-up	
B. Management	i. Creation of management VLAN	
	ii. Assigning of management IP address per switch or per	
	stacked of switches	
C. VLAN Configuration	i. Configuration of VLANS	
	ii. Configuration of Tagged port (VLAN up links)	
	iii. Configuration of inter-VLAN routing	
D. Testing	i. Perform Inter VLAN connection	
	DOCUMENTATION	
	A. Electronic documentation as built	
Knowledge Transfer	Include 1 Day Knowledge Transfers based on Implementation	

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Section I. Invitation to Bid



Office of the Solicitor General

134 Amorsolo St., Legaspi Village, Makati City Tel No. 988-1674 loc. 691 / Telefax No. 813-11-74 Website: www.osg.gov.ph

INVITATION TO BID

PROCUREMENT OF ICT EQUIPMENT

The Office of the Solicitor General (OSG), through the FY 2018 GAA, R.A. 10964, intends to apply the sum of Twenty Two Million One Hundred Sixty One Thousand Pesos (₱22,161,000.00) being the Approved Budget for the Contract (ABC) to payments under the contract for each lot. Bids received in excess of the ABC for each lot shall be automatically rejected at bid opening.

Description	Pre-Bid Conference	Submission of Bids	Opening of Bids	Delivery Schedule	Budg Co	proved et for the ntract Php)	Amount of Bid Document (Php)
Procurement of Information and Communication Technology (ICT)	August 7, 2018 @ 1:30 p.m.	On or before August 20, 2018 @ 1:25 p.m.	August 20, 2018 @ 1:30 p.m.	Within 90 days upon receipt of NTP	Lot 1 : Lot 2 : Lot 3 :	14,108,500 5,640,500 2,412,000	10,000 5,000 2,000
Equipment		G 1.20 p.m.			Total :	22,161,000	Total : 17,000
	Venue for the Pre-Bid Conference: Quintin Paredes Division, 4th FIr, OSG Building, 134 Amorsolo St., Legaspi Village, Makati City & Opening of Bids: 9th Floor, Padilla Hall, OSG Building, 134 Amorsolo St., Legaspi Village, Makati City.						

The OSG now invites bids for the procurement of ICT Equipment, composed of Lot 1: Office Productivity; Lot 2: Server and Storage Upgrade; Lot 3: Lan and Wireless Upgrade.

Bidders should have completed, within five (5) years from the date of submission and receipt of bids, a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II, Instruction to Bidders.

Bidding will be conducted through open competitive bidding procedures using a non-discretionary "pass/fail" criterion as specified in the 2016 Revised Implementing Rules and Regulations of R.A. 9184, otherwise known as the "Government Procurement Reform Act". Bidding is restricted to Filipino citizens/sole proprietorships, partnerships, or organizations with at least sixty percent (60%) interest or capital stock belonging to citizens of the Philippines, and to citizens or organizations of a country the laws and regulations of which grant similar rights or privileges to Filipino citizens, pursuant to RA 5183.

Bids must be duly received by the BAC Secretariat at the *Administrative Division2nd FIr., OSG Bldg., 134 Amorsolo St., Legaspi Village, Makati City* on or before 1:25 p.m. of 20 August 2018. All bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in ITB Clause 18. Bids will be opened in the presence of the bidders' representatives who choose to attend at the address above. Late bids shall not be accepted.

A complete set of bidding documents may be acquired by interested bidders from the OSG on 31 July 2018 to 20 August 2018 between 8:00 a.m. to 5:00 p.m., Monday to Friday, and upon payment of a non-refundable fee in the amount stated above, pursuant to the latest Guidelines issued by the GPPB.

The OSG reserves the right to accept or reject any bid and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with section 41 of RA 9184 and its IRR, without thereby incurring any liability to the affected bidder or bidders.

For further information, please refer to: Jane J. Burigsay Tel Nos. 988-16-74 loc. 789; 988-16-93 E-mail Address**: jjburigsay@osg.gov.ph**

> ASG ALEXANDER S. SALVADOR Chairperson, Bids and Awards Committee (on official travel)

SSS AILEEN E. DALWATAN Vice Chairperson, Bids and Awards Committee

Section II. Instructions to Bidders

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A. General

1. Scope of Bid

- 1.1. The Procuring Entity named in the **BDS** invites bids for the supply and delivery of the Goods as described in Section VII. Technical Specifications.
- 1.2. The name, identification, and number of lots specific to this bidding are provided in the **BDS**. The contracting strategy and basis of evaluation of lots is described in **ITB** Clause 28.

2. Source of Funds

The Procuring Entity has a budget or has received funds from the Funding Source named in the **BDS**, and in the amount indicated in the **BDS**. It intends to apply part of the funds received for the Project, as defined in the **BDS**, to cover eligible payments under the contract.

3. Corrupt, Fraudulent, Collusive, and Coercive Practices

- 3.1. Unless otherwise specified in the **BDS**, the Procuring Entity as well as the bidders and suppliers shall observe the highest standard of ethics during the procurement and execution of the contract. In pursuance of this policy, the Procuring Entity:
 - (a) defines, for purposes of this provision, the terms set forth below as follows:
 - (i) "corrupt practice" means behavior on the part of officials in the public or private sectors by which they improperly and unlawfully enrich themselves, others, or induce others to do so, by misusing the position in which they are placed, and includes the offering, giving, receiving, or soliciting of anything of value to influence the action of any such official in the procurement process or in contract execution; entering, on behalf of the government, into any contract or transaction manifestly and grossly disadvantageous to the same, whether or not the public officer profited or will profit thereby, and similar acts as provided in RA 3019.
 - (ii) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Procuring Entity, and includes collusive practices among Bidders (prior to or after bid submission) designed to establish bid prices at artificial, non-competitive levels and to deprive the Procuring Entity of the benefits of free and open competition.
 - (iii) "collusive practices" means a scheme or arrangement between two or more Bidders, with or without the

knowledge of the Procuring Entity, designed to establish bid prices at artificial, non-competitive levels.

- (iv) "coercive practices" means harming or threatening to harm, directly or indirectly, persons, or their property to influence their participation in a procurement process, or affect the execution of a contract;
- (v) "obstructive practice" is
 - (aa) deliberately destroying. falsifying, altering or concealing of evidence material to an administrative proceedings or investigation or making false statements to investigators in order to materially impede an administrative proceedings or investigation of the Procuring Entity or any foreign government/foreign or international financing institution into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the administrative proceedings or investigation or from pursuing such proceedings or investigation; or
 - (bb) acts intended to materially impede the exercise of the inspection and audit rights of the Procuring Entity or any foreign government/foreign or international financing institution herein.
- (b) will reject a proposal for award if it determines that the Bidder recommended for award has engaged in any of the practices mentioned in this Clause for purposes of competing for the contract.
- 3.2. Further, the Procuring Entity will seek to impose the maximum civil, administrative, and/or criminal penalties available under applicable laws on individuals and organizations deemed to be involved in any of the practices mentioned in **ITB** Clause 3.1(a).
- 3.3. Furthermore, the Funding Source and the Procuring Entity reserve the right to inspect and audit records and accounts of a bidder or supplier in the bidding for and performance of a contract themselves or through independent auditors as reflected in the **GCC** Clause 3.

4. Conflict of Interest

- 4.1. All Bidders found to have conflicting interests shall be disqualified to participate in the procurement at hand, without prejudice to the imposition of appropriate administrative, civil, and criminal sanctions. A Bidder may be considered to have conflicting interests with another Bidder in any of the events described in paragraphs (a) through (c) below and a general conflict of interest in any of the circumstances set out in paragraphs (d) through (g) below:
 - (a) A Bidder has controlling shareholders in common with another Bidder;
 - (b) A Bidder receives or has received any direct or indirect subsidy from any other Bidder;
 - (c) A Bidder has the same legal representative as that of another Bidder for purposes of this bid;
 - (d) A Bidder has a relationship, directly or through third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder or influence the decisions of the Procuring Entity regarding this bidding process;
 - (e) A Bidder submits more than one bid in this bidding process. However, this does not limit the participation of subcontractors in more than one bid;
 - (f) A Bidder who participated as a consultant in the preparation of the design or technical specifications of the Goods and related services that are the subject of the bid; or
 - (g) A Bidder who lends, or temporarily seconds, its personnel to firms or organizations which are engaged in consulting services for the preparation related to procurement for or implementation of the project, if the personnel would be involved in any capacity on the same project.
- 4.2. In accordance with Section 47 of the IRR of RA 9184, all Bidding Documents shall be accompanied by a sworn affidavit of the Bidder that it is not related to the Head of the Procuring Entity (HoPE), members of the Bids and Awards Committee (BAC), members of the Technical Working Group (TWG), members of the BAC Secretariat, the head of the Project Management Office (PMO) or the end-user unit, and the project consultants, by consanguinity or affinity up to the third civil degree. On the part of the Bidder, this Clause shall apply to the following persons:
 - (a) If the Bidder is an individual or a sole proprietorship, to the Bidder himself;
 - (b) If the Bidder is a partnership, to all its officers and members;

- (c) If the Bidder is a corporation, to all its officers, directors, and controlling stockholders;
- (d) If the Bidder is a cooperative, to all its officers, directors, and controlling shareholders or members; and
- (e) If the Bidder is a joint venture (JV), the provisions of items (a), (b),
 (c), or (d) of this Clause shall correspondingly apply to each of the members of the said JV, as may be appropriate.

Relationship of the nature described above or failure to comply with this Clause will result in the automatic disqualification of a Bidder.

5. Eligible Bidders

- 5.1. Unless otherwise provided in the **BDS**, the following persons shall be eligible to participate in this bidding:
 - (a) Duly licensed Filipino citizens/sole proprietorships;
 - (b) Partnerships duly organized under the laws of the Philippines and of which at least sixty percent (60%) of the interest belongs to citizens of the Philippines;
 - (c) Corporations duly organized under the laws of the Philippines, and of which at least sixty percent (60%) of the outstanding capital stock belongs to citizens of the Philippines;
 - (d) Cooperatives duly organized under the laws of the Philippines; and
 - (e) Persons/entities forming themselves into a Joint Venture (JV), *i.e.*, a group of two (2) or more persons/entities that intend to be jointly and severally responsible or liable for a particular contract: Provided, however, that Filipino ownership or interest of the JV concerned shall be at least sixty percent (60%).
- 5.2. Foreign bidders may be eligible to participate when any of the following circumstances exist, as specified in the **BDS**:
 - (a) When a Treaty or International or Executive Agreement as provided in Section 4 of RA 9184 and its IRR allow foreign bidders to participate;
 - (b) Citizens, corporations, or associations of a country, the laws or regulations of which grant reciprocal rights or privileges to citizens, corporations, or associations of the Philippines;
 - (c) When the Goods sought to be procured are not available from local suppliers; or
 - (d) When there is a need to prevent situations that defeat competition or restrain trade.

- 5.3. Government owned or –controlled corporations (GOCCs) may be eligible to participate only if they can establish that they (a) are legally and financially autonomous, (b) operate under commercial law, and (c) are not attached agencies of the Procuring Entity.
- 5.4. Unless otherwise provided in the **BDS**, the Bidder must have completed a Single Largest Completed Contract (SLCC) similar to the Project and the value of which, adjusted, if necessary, by the Bidder to current prices using the Philippine Statistics Authority (PSA) consumer price index, must be at least equivalent to a percentage of the ABC stated in the **BDS**.

For this purpose, contracts similar to the Project shall be those described in the **<u>BDS</u>**, and completed within the relevant period stated in the Invitation to Bid and **ITB** Clause 12.1(a)(ii).

5.5. The Bidder must submit a computation of its Net Financial Contracting Capacity (NFCC), which must be at least equal to the ABC to be bid, calculated as follows:

NFCC = [(Current assets minus current liabilities) (15)] minus the value of all outstanding or uncompleted portions of the projects under ongoing contracts, including awarded contracts yet to be started, coinciding with the contract to be bid.

The values of the domestic bidder's current assets and current liabilities shall be based on the latest Audited Financial Statements submitted to the BIR.

For purposes of computing the foreign bidders' NFCC, the value of the current assets and current liabilities shall be based on their audited financial statements prepared in accordance with international financial reporting standards.

If the prospective bidder opts to submit a committed Line of Credit, it must be at least equal to ten percent (10%) of the ABC to be bid. If issued by a foreign universal or commercial bank, it shall be confirmed or authenticated by a local universal or commercial bank.

6. Bidder's Responsibilities

- 6.1. The Bidder or its duly authorized representative shall submit a sworn statement in the form prescribed in
- 6.2. Section VIII. Bidding Forms as required in **ITB** Clause 12.1(b)(iii).
- 6.3. The Bidder is responsible for the following:
 - (a) Having taken steps to carefully examine all of the Bidding Documents;
 - (b) Having acknowledged all conditions, local or otherwise, affecting the implementation of the contract;

- (c) Having made an estimate of the facilities available and needed for the contract to be bid, if any;
- (d) Having complied with its responsibility to inquire or secure Supplemental/Bid Bulletin(s) as provided under **ITB** Clause 10.4.
- (e) Ensuring that it is not "blacklisted" or barred from bidding by the GOP or any of its agencies, offices, corporations, or LGUs, including foreign government/foreign or international financing institution whose blacklisting rules have been recognized by the GPPB;
- (f) Ensuring that each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the original, complete, and all statements and information provided therein are true and correct;
- (g) Authorizing the HoPE or its duly authorized representative/s to verify all the documents submitted;
- (h) Ensuring that the signatory is the duly authorized representative of the Bidder, and granted full power and authority to do, execute and perform any and all acts necessary and/or to represent the Bidder in the bidding, with the duly notarized Secretary's Certificate attesting to such fact, if the Bidder is a corporation, partnership, cooperative, or joint venture;
- Complying with the disclosure provision under Section 47 of RA 9184 and its IRR in relation to other provisions of RA 3019;
- (j) Complying with existing labor laws and standards, in the case of procurement of services; Moreover, bidder undertakes to:
 - (i) Ensure the entitlement of workers to wages, hours of work, safety and health and other prevailing conditions of work as established by national laws, rules and regulations; or collective bargaining agreement; or arbitration award, if and when applicable.

In case there is a finding by the Procuring Entity or the DOLE of underpayment or non-payment of workers' wage and wage-related benefits, bidder agrees that the performance security or portion of the contract amount shall be withheld in favor of the complaining workers pursuant to appropriate provisions of Republic Act No. 9184 without prejudice to the institution of appropriate actions under the Labor Code, as amended, and other social legislations.

(ii) Comply with occupational safety and health standards and to correct deficiencies, if any.

In case of imminent danger, injury or death of the worker, bidder undertakes to suspend contract implementation pending clearance to proceed from the DOLE Regional Office and to comply with Work Stoppage Order; and

- (iii) Inform the workers of their conditions of work, labor clauses under the contract specifying wages, hours of work and other benefits under prevailing national laws, rules and regulations; or collective bargaining agreement; or arbitration award, if and when applicable, through posting in two (2) conspicuous places in the establishment's premises; and
- (k) Ensuring that it did not give or pay, directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.

Failure to observe any of the above responsibilities shall be at the risk of the Bidder concerned.

- 6.4. The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Documents.
- 6.5. It shall be the sole responsibility of the Bidder to determine and to satisfy itself by such means as it considers necessary or desirable as to all matters pertaining to the contract to be bid, including: (a) the location and the nature of this Project; (b) climatic conditions; (c) transportation facilities; and (d) other factors that may affect the cost, duration, and execution or implementation of this Project.
- 6.6. The Procuring Entity shall not assume any responsibility regarding erroneous interpretations or conclusions by the prospective or eligible bidder out of the data furnished by the procuring entity. However, the Procuring Entity shall ensure that all information in the Bidding Documents, including bid/supplemental bid bulletin/s issued, are correct and consistent.
- 6.7. Before submitting their bids, the Bidder is deemed to have become familiar with all existing laws, decrees, ordinances, acts and regulations of the Philippines which may affect this Project in any way.
- 6.8. The Bidder shall bear all costs associated with the preparation and submission of his bid, and the Procuring Entity will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.
- 6.9. The Bidder should note that the Procuring Entity will accept bids only from those that have paid the applicable fee for the Bidding Documents at the office indicated in the Invitation to Bid.

7. Origin of Goods

Unless otherwise indicated in the **BDS**, there is no restriction on the origin of goods other than those prohibited by a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, subject to **ITB** Clause 27.1.

8. Subcontracts

- 8.1. Unless otherwise specified in the **BDS**, the Bidder may subcontract portions of the Goods to an extent as may be approved by the Procuring Entity and stated in the **BDS**. However, subcontracting of any portion shall not relieve the Bidder from any liability or obligation that may arise from the contract for this Project.
- 8.2. Subcontractors must submit the documentary requirements under **ITB** Clause 12 and comply with the eligibility criteria specified in the **BDS**. In the event that any subcontractor is found by the Procuring Entity to be ineligible, the subcontracting of such portion of the Goods shall be disallowed.
- 8.3. The Bidder may identify the subcontractor to whom a portion of the Goods will be subcontracted at any stage of the bidding process or during contract implementation. If the Bidder opts to disclose the name of the subcontractor during bid submission, the Bidder shall include the required documents as part of the technical component of its bid.

B. Contents of Bidding Documents

9. Pre-Bid Conference

9.1. (a) If so specified in the **BDS**, a pre-bid conference shall be held at the venue and on the date indicated therein, to clarify and address the Bidders' questions on the technical and financial components of this Project.

(b) The pre-bid conference shall be held at least twelve (12) calendar days before the deadline for the submission and receipt of bids, but not earlier than seven (7) calendar days from the posting of the invitation to bid/bidding documents in the PhilGEPS website. If the Procuring Entity determines that, by reason of the method, nature, or complexity of the contract to be bid, or when international participation will be more advantageous to the GOP, a longer period for the preparation of bids is necessary, the pre-bid conference shall be held at least thirty (30) calendar days before the deadline for the submission and receipt of bids, as specified in the **BDS**.

9.2. Bidders are encouraged to attend the pre-bid conference to ensure that they fully understand the Procuring Entity's requirements. Non-attendance of the Bidder will in no way prejudice its bid; however, the Bidder is expected to know the changes and/or amendments to the

Bidding Documents as recorded in the minutes of the pre-bid conference and the Supplemental/Bid Bulletin. The minutes of the pre-bid conference shall be recorded and prepared not later than five (5) calendar days after the pre-bid conference. The minutes shall be made available to prospective bidders not later than five (5) days upon written request.

9.3 Decisions of the BAC amending any provision of the bidding documents shall be issued in writing through a Supplemental/Bid Bulletin at least seven (7) calendar days before the deadline for the submission and receipt of bids.

10. Clarification and Amendment of Bidding Documents

- 10.1. Prospective bidders may request for clarification on and/or interpretation of any part of the Bidding Documents. Such request must be in writing and submitted to the Procuring Entity at the address indicated in the **BDS** at least ten (10) calendar days before the deadline set for the submission and receipt of Bids.
- 10.2. The BAC shall respond to the said request by issuing a Supplemental/Bid Bulletin, to be made available to all those who have properly secured the Bidding Documents, at least seven (7) calendar days before the deadline for the submission and receipt of Bids.
- 10.3. Supplemental/Bid Bulletins may also be issued upon the Procuring Entity's initiative for purposes of clarifying or modifying any provision of the Bidding Documents not later than seven (7) calendar days before the deadline for the submission and receipt of Bids. Any modification to the Bidding Documents shall be identified as an amendment.
- 10.4. Any Supplemental/Bid Bulletin issued by the BAC shall also be posted in the PhilGEPS and the website of the Procuring Entity concerned, if available, and at any conspicuous place in the premises of the Procuring Entity concerned. It shall be the responsibility of all Bidders who have properly secured the Bidding Documents to inquire and secure Supplemental/Bid Bulletins that may be issued by the BAC. However, Bidders who have submitted bids before the issuance of the Supplemental/Bid Bulletin must be informed and allowed to modify or withdraw their bids in accordance with **ITB** Clause 23.

C. Preparation of Bids

11. Language of Bids

The eligibility requirements or statements, the bids, and all other documents to be submitted to the BAC must be in English. If the eligibility requirements or statements, the bids, and all other documents submitted to the BAC are in foreign language other than English, it must be accompanied by a translation of the documents in English. The documents shall be translated by the relevant foreign government agency, the foreign government agency authorized to translate documents, or a registered translator in the foreign bidder's country; and shall be authenticated by the appropriate Philippine foreign service establishment/post or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines. The English translation shall govern, for purposes of interpretation of the bid.

12. Documents Comprising the Bid: Eligibility and Technical Components

- 12.1. Unless otherwise indicated in the **BDS**, the first envelope shall contain the following eligibility and technical documents:
 - (a) Eligibility Documents –

<u>Class "A" Documents</u>:

- (i) PhilGEPS Certificate of Registration and Membership in accordance with Section 8.5.2 of the IRR, except for foreign bidders participating in the procurement by a Philippine Foreign Service Office or Post, which shall submit their eligibility documents under Section 23.1 of the IRR, provided, that the winning bidder shall register with the PhilGEPS in accordance with section 37.1.4 of the IRR.
- (ii) Statement of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid; and

Statement of the Bidder's SLCC similar to the contract to be bid, in accordance with ITB Clause 5.4, within the relevant period as provided in the **BDS**.

The two statements required shall indicate for each contract the following:

- (ii.1) name of the contract;
- (ii.2) date of the contract;
- (ii.3) contract duration;
- (ii.4) owner's name and address;
- (ii.5) kinds of Goods;
- (ii.6) For Statement of Ongoing Contracts amount of contract and value of outstanding contracts;
- (ii.7) For Statement of SLCC amount of completed contracts, adjusted by the Bidder to current prices using PSA's consumer price index, if necessary for the purpose of meeting the SLCC requirement;

- (ii.8) date of delivery; and
- (ii.9) end user's acceptance or official receipt(s) or sales invoice issued for the contract, if completed, which shall be attached to the statements.
- (iii) NFCC computation in accordance with ITB Clause 5.5 or a committed Line of Credit from a universal or commercial bank.

Class "B" Document:

- (iv) If applicable, the Joint Venture Agreement (JVA) in case the joint venture is already in existence, or duly notarized statements from all the potential joint venture partners in accordance with Section 23.1(b) of the IRR.
- (b) Technical Documents
 - (i) Bid security in accordance with **ITB** Clause 18. If the Bidder opts to submit the bid security in the form of:
 - (i.1) a bank draft/guarantee or an irrevocable letter of credit issued by a foreign bank, it shall be accompanied by a confirmation from a Universal or Commercial Bank; or
 - (i.2) a surety bond, it shall be accompanied by a certification by the Insurance Commission that the surety or insurance company is authorized to issue such instruments;
 - (ii) Conformity with technical specifications, as enumerated and specified in Sections VI and VII of the Bidding Documents; and
 - Sworn statement in accordance with Section 25.3 of the IRR of RA 9184 and using the form prescribed in Section VIII. Bidding Forms.
 - (iv) For foreign bidders claiming eligibility by reason of their country's extension of reciprocal rights to Filipinos, a certification from the relevant government office of their country stating that Filipinos are allowed to participate in their government procurement activities for the same item or product.

13. Documents Comprising the Bid: Financial Component

13.1. Unless otherwise stated in the **BDS**, the financial component of the bid shall contain the following:

- (a) Financial Bid Form, which includes bid prices and the applicable Price Schedules, in accordance with **ITB** Clauses 15.1 and 15.4;
- (b) If the Bidder claims preference as a Domestic Bidder, a certification from the DTI issued in accordance with **ITB** Clause 27, unless otherwise provided in the **BDS**; and
- (c) Any other document related to the financial component of the bid as stated in the **BDS**.
- 13.2. (a) Unless otherwise stated in the **BDS**, all bids that exceed the ABC shall not be accepted.
 - (b) Unless otherwise indicated in the **BDS**, for foreign-funded procurement, a ceiling may be applied to bid prices provided the following conditions are met:
 - (i) Bidding Documents are obtainable free of charge on a freely accessible website. If payment of Bidding Documents is required by the procuring entity, payment could be made upon the submission of bids.
 - (ii) The procuring entity has procedures in place to ensure that the ABC is based on recent estimates made by the responsible unit of the procuring entity and that the estimates reflect the quality, supervision and risk and inflationary factors, as well as prevailing market prices, associated with the types of works or goods to be procured.
 - (iii) The procuring entity has trained cost estimators on estimating prices and analyzing bid variances.
 - (iv) The procuring entity has established a system to monitor and report bid prices relative to ABC and engineer's/procuring entity's estimate.
 - (v) The procuring entity has established a monitoring and evaluation system for contract implementation to provide a feedback on actual total costs of goods and works.

14. Alternative Bids

- 14.1 Alternative Bids shall be rejected. For this purpose, alternative bid is an offer made by a Bidder in addition or as a substitute to its original bid which may be included as part of its original bid or submitted separately therewith for purposes of bidding. A bid with options is considered an alternative bid regardless of whether said bid proposal is contained in a single envelope or submitted in two (2) or more separate bid envelopes.
- 14.2 Each Bidder shall submit only one Bid, either individually or as a partner in a JV. A Bidder who submits or participates in more than one bid (other than as a subcontractor if a subcontractor is permitted to participate in

more than one bid) will cause all the proposals with the Bidder's participation to be disqualified. This shall be without prejudice to any applicable criminal, civil and administrative penalties that may be imposed upon the persons and entities concerned.

15. Bid Prices

- 15.1. The Bidder shall complete the appropriate Schedule of Prices included herein, stating the unit prices, total price per item, the total amount and the expected countries of origin of the Goods to be supplied under this Project.
- 15.2. The Bidder shall fill in rates and prices for all items of the Goods described in the Schedule of Prices. Bids not addressing or providing all of the required items in the Bidding Documents including, where applicable, Schedule of Prices, shall be considered non-responsive and, thus, automatically disqualified. In this regard, where a required item is provided, but no price is indicated, the same shall be considered as non-responsive, but specifying a zero (0) or a dash (-) for the said item would mean that it is being offered for free to the Government, except those required by law or regulations to be accomplished.
- 15.3. The terms Ex Works (EXW), Cost, Insurance and Freight (CIF), Cost and Insurance Paid to (CIP), Delivered Duty Paid (DDP), and other trade terms used to describe the obligations of the parties, shall be governed by the rules prescribed in the current edition of the International Commercial Terms (INCOTERMS) published by the International Chamber of Commerce, Paris.
- 15.4. Prices indicated on the Price Schedule shall be entered separately in the following manner:
 - (a) For Goods offered from within the Procuring Entity's country:
 - (i) The price of the Goods quoted EXW (ex works, ex factory, ex warehouse, ex showroom, or off-the-shelf, as applicable);
 - (ii) The cost of all customs duties and sales and other taxes already paid or payable;
 - (iii) The cost of transportation, insurance, and other costs incidental to delivery of the Goods to their final destination; and
 - (iv) The price of other (incidental) services, if any, listed in the **BDS**.
 - (b) For Goods offered from abroad:

- (i) Unless otherwise stated in the <u>BDS</u>, the price of the Goods shall be quoted DDP with the place of destination in the
 Philippines as specified in the BDS. In quoting the price, the Bidder shall be free to use transportation through carriers registered in any eligible country. Similarly, the Bidder may obtain insurance services from any eligible source country.
- (ii) The price of other (incidental) services, if any, listed in the **BDS**.
- (c) For Services, based on the form which may be prescribed by the Procuring Entity, in accordance with existing laws, rules and regulations.
- 15.5. Prices quoted by the Bidder shall be fixed during the Bidder's performance of the contract and not subject to variation or price escalation on any account. A bid submitted with an adjustable price quotation shall be treated as non-responsive and shall be rejected, pursuant to **ITB** Clause 24.

All bid prices for the given scope of work in the contract as awarded shall be considered as fixed prices, and therefore not subject to price escalation during contract implementation, except under extraordinarv circumstances. Upon the recommendation of the Procuring Entity, price escalation may be allowed in extraordinary circumstances as may be determined by the National Economic and Development Authority in accordance with the Civil Code of the Philippines, and upon approval by the GPPB. Nevertheless, in cases where the cost of the awarded contract is affected by any applicable new laws, ordinances, regulations, or other acts of the GOP, promulgated after the date of bid opening, a contract price adjustment shall be made or appropriate relief shall be applied on a no loss-no gain basis.

16. Bid Currencies

- 16.1. Prices shall be quoted in the following currencies:
 - (a) For Goods that the Bidder will supply from within the Philippines, the prices shall be quoted in Philippine Pesos.
 - (b) For Goods that the Bidder will supply from outside the Philippines, the prices may be quoted in the currency(ies) stated in the <u>BDS</u>. However, for purposes of bid evaluation, bids denominated in foreign currencies shall be converted to Philippine currency based

on the exchange rate as published in the *Bangko Sentral ng Pilipinas* (BSP) reference rate bulletin on the day of the bid opening.

- 16.2. If so allowed in accordance with **ITB** Clause 16.1, the Procuring Entity for purposes of bid evaluation and comparing the bid prices will convert the amounts in various currencies in which the bid price is expressed to Philippine Pesos at the foregoing exchange rates.
- 16.3. Unless otherwise specified in the **BDS**, payment of the contract price shall be made in Philippine Pesos.

17. Bid Validity

- 17.1. Bids shall remain valid for the period specified in the **BDS** which shall not exceed one hundred twenty (120) calendar days from the date of the opening of bids.
- 17.2. In exceptional circumstances, prior to the expiration of the bid validity period, the Procuring Entity may request Bidders to extend the period of validity of their bids. The request and the responses shall be made in writing. The bid security described in **ITB** Clause 18 should also be extended corresponding to the extension of the bid validity period at the least. A Bidder may refuse the request without forfeiting its bid security, but his bid shall no longer be considered for further evaluation and award. A Bidder granting the request shall not be required or permitted to modify its bid.

18. Bid Security

18.1. The Bidder shall submit a Bid Securing Declaration or any form of Bid Security in the amount stated in the **BDS**, which shall be not less than the percentage of the ABC in accordance with the following schedule:

Form of Bid Security	Amount of Bid Security (Not Less than the Percentage of the ABC)
 (a) Cash or cashier's/manager's check issued by a Universal or Commercial Bank. For biddings conducted by LGUs, the Cashier's/Manager's Check may be issued by other banks certified by the BSP as authorized to issue such financial instrument. 	Two percent (2%)

 (b) Bank draft/guarantee or irrevocable letter of credit issued by a Universal or Commercial Bank: Provided, however, that it shall be confirmed or authenticated by a Universal or Commercial Bank, if issued by a foreign bank. For biddings conducted by LGUs, Bank Draft/Guarantee, or Irrevocable Letter of Credit may be issued by other banks certified by the BSP as authorized to issue such financial instrument. 	
(c) Surety bond callable upon demand issued by a surety or insurance company duly certified by the Insurance Commission as authorized to issue such security.	Five percent (5%)

The Bid Securing Declaration mentioned above is an undertaking which states, among others, that the Bidder shall enter into contract with the procuring entity and furnish the performance security required under ITB Clause 33.2, within ten (10) calendar days from receipt of the Notice of Award, and commits to pay the corresponding amount as fine, and be suspended for a period of time from being qualified to participate in any government procurement activity in the event it violates any of the conditions stated therein as provided in the guidelines issued by the GPPB.

- 18.2. The bid security should be valid for the period specified in the **BDS**. Any bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.
- 18.3. No bid securities shall be returned to Bidders after the opening of bids and before contract signing, except to those that failed or declared as post-disqualified, upon submission of a written waiver of their right to file a request for reconsideration and/or protest, or upon the lapse of the reglementary period to file a request for reconsideration or protest. Without prejudice on its forfeiture, bid securities shall be returned only after the Bidder with the Lowest Calculated Responsive Bid (LCRB) has signed the contract and furnished the performance security, but in no case later than the expiration of the bid security validity period indicated in **ITB** Clause 18.2.
- 18.4. Upon signing and execution of the contract pursuant to **ITB** Clause 32, and the posting of the performance security pursuant to **ITB** Clause 33, the successful Bidder's bid security will be discharged, but in no case later than the bid security validity period as indicated in the **ITB** Clause 18.2.

- 18.5. The bid security may be forfeited:
 - (a) if a Bidder:
 - (i) withdraws its bid during the period of bid validity specified in **ITB** Clause 17;
 - (ii) does not accept the correction of errors pursuant to **ITB** Clause 28.3(b);
 - (iii) has a finding against the veracity of any of the documents submitted as stated in **ITB** Clause 29.2;
 - (iv) submission of eligibility requirements containing false information or falsified documents;
 - (v) submission of bids that contain false information or falsified documents, or the concealment of such information in the bids in order to influence the outcome of eligibility screening or any other stage of the public bidding;
 - (vi) allowing the use of one's name, or using the name of another for purposes of public bidding;
 - (vii) withdrawal of a bid, or refusal to accept an award, or enter into contract with the Government without justifiable cause, after the Bidder had been adjudged as having submitted the LCRB;
 - (viii) refusal or failure to post the required performance security within the prescribed time;
 - (ix) refusal to clarify or validate in writing its bid during postqualification within a period of seven (7) calendar days from receipt of the request for clarification;
 - (x) any documented attempt by a Bidder to unduly influence the outcome of the bidding in his favor;
 - (xi) failure of the potential joint venture partners to enter into the joint venture after the bid is declared successful; or
 - (xii) all other acts that tend to defeat the purpose of the competitive bidding, such as habitually withdrawing from bidding, submitting late Bids or patently insufficient bid, for at least three (3) times within a year, except for valid reasons.
 - (b) if the successful Bidder:
 - (i) fails to sign the contract in accordance with **ITB** Clause 32; or

(ii) fails to furnish performance security in accordance with **ITB** Clause 33.

19. Format and Signing of Bids

- 19.1. Bidders shall submit their bids through their duly authorized representative using the appropriate forms provided in
- 19.2. Section VIII. Bidding Forms on or before the deadline specified in the **ITB** Clauses 21 in two (2) separate sealed bid envelopes, and which shall be submitted simultaneously. The first shall contain the technical component of the bid, including the eligibility requirements under **ITB** Clause 12.1, and the second shall contain the financial component of the bid. This shall also be observed for each lot in the case of lot procurement.
- 19.3. Forms as mentioned in **ITB** Clause 19.1 must be completed without any alterations to their format, and no substitute form shall be accepted. All blank spaces shall be filled in with the information requested.
- 19.4. The Bidder shall prepare and submit an original of the first and second envelopes as described in **ITB** Clauses 12 and 13. In addition, the Bidder shall submit copies of the first and second envelopes. In the event of any discrepancy between the original and the copies, the original shall prevail.
- 19.5. Each and every page of the Bid Form, including the Schedule of Prices, under Section VIII hereof, shall be signed by the duly authorized representative/s of the Bidder. Failure to do so shall be a ground for the rejection of the bid.
- 19.6. Any interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the duly authorized representative/s of the Bidder.

20. Sealing and Marking of Bids

- 20.1. Bidders shall enclose their original eligibility and technical documents described in **ITB** Clause 12 in one sealed envelope marked "ORIGINAL TECHNICAL COMPONENT", and the original of their financial component in another sealed envelope marked "ORIGINAL FINANCIAL COMPONENT", sealing them all in an outer envelope marked "ORIGINAL BID".
- 20.2. Each copy of the first and second envelopes shall be similarly sealed duly marking the inner envelopes as "COPY NO. ____ TECHNICAL COMPONENT" and "COPY NO. ____ FINANCIAL COMPONENT" and the outer envelope as "COPY NO. ____", respectively. These envelopes containing the original and the copies shall then be enclosed in one single envelope.

- 20.3. The original and the number of copies of the Bid as indicated in the **BDS** shall be typed or written in ink and shall be signed by the Bidder or its duly authorized representative/s.
- 20.4. All envelopes shall:
 - (a) contain the name of the contract to be bid in capital letters;
 - (b) bear the name and address of the Bidder in capital letters;
 - (c) be addressed to the Procuring Entity's BAC in accordance with **ITB** Clause 1.1;
 - (d) bear the specific identification of this bidding process indicated in the **ITB** Clause 1.2; and
 - (e) bear a warning "DO NOT OPEN BEFORE..." the date and time for the opening of bids, in accordance with **ITB** Clause 21.
- 20.5. Bid envelopes that are not properly sealed and marked, as required in the bidding documents, shall not be rejected, but the Bidder or its duly authorized representative shall acknowledge such condition of the bid as submitted. The BAC or the Procuring Entity shall assume no responsibility for the misplacement of the contents of the improperly sealed or marked bid, or for its premature opening.

D. Submission and Opening of Bids

21. Deadline for Submission of Bids

Bids must be received by the Procuring Entity's BAC at the address and on or before the date and time indicated in the **BDS**.

22. Late Bids

Any bid submitted after the deadline for submission and receipt of bids prescribed by the Procuring Entity, pursuant to **ITB** Clause 21, shall be declared "Late" and shall not be accepted by the Procuring Entity. The BAC shall record in the minutes of bid submission and opening, the Bidder's name, its representative and the time the late bid was submitted.

23. Modification and Withdrawal of Bids

23.1. The Bidder may modify its bid after it has been submitted; provided that the modification is received by the Procuring Entity prior to the deadline prescribed for submission and receipt of bids. The Bidder shall not be allowed to retrieve its original bid, but shall be allowed to submit another bid equally sealed and properly identified in accordance with ITB Clause 20, linked to its original bid marked as "TECHNICAL MODIFICATION" or "FINANCIAL MODIFICATION" and stamped "received" by the BAC. Bid modifications received after the applicable deadline shall not be considered and shall be returned to the Bidder unopened.

- 23.2 A Bidder may, through a Letter of Withdrawal, withdraw its bid after it has been submitted, for valid and justifiable reason; provided that the Letter of Withdrawal is received by the Procuring Entity prior to the deadline prescribed for submission and receipt of bids. The Letter of Withdrawal must be executed by the duly authorized representative of the Bidder identified in the Omnibus Sworn Statement, a copy of which should be attached to the letter.
- 23.3. Bids requested to be withdrawn in accordance with **ITB** Clause 23.1 shall be returned unopened to the Bidders. A Bidder, who has acquired the bidding documents, may also express its intention not to participate in the bidding through a letter which should reach and be stamped by the BAC before the deadline for submission and receipt of bids. A Bidder that withdraws its bid shall not be permitted to submit another bid, directly or indirectly, for the same contract.
- 23.4. No bid may be modified after the deadline for submission of bids. No bid may be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Financial Bid Form. Withdrawal of a bid during this interval shall result in the forfeiture of the Bidder's bid security, pursuant to **ITB** Clause 18.5, and the imposition of administrative, civil and criminal sanctions as prescribed by RA 9184 and its IRR.

24. Opening and Preliminary Examination of Bids

- 24.1. The BAC shall open the bids in public, immediately after the deadline for the submission and receipt of bids, as specified in the **BDS**. In case the Bids cannot be opened as scheduled due to justifiable reasons, the BAC shall take custody of the Bids submitted and reschedule the opening of Bids on the next working day or at the soonest possible time through the issuance of a Notice of Postponement to be posted in the PhilGEPS website and the website of the Procuring Entity concerned.
- 24.2. Unless otherwise specified in the **BDS**, the BAC shall open the first bid envelopes and determine each Bidder's compliance with the documents prescribed in **ITB** Clause 12, using a non-discretionary "pass/fail" criterion. If a Bidder submits the required document, it shall be rated "passed" for that particular requirement. In this regard, bids that fail to include any requirement or are incomplete or patently insufficient shall be considered as "failed". Otherwise, the BAC shall rate the said first bid envelope as "passed".
- 24.3. Unless otherwise specified in the **BDS**, immediately after determining compliance with the requirements in the first envelope, the BAC shall forthwith open the second bid envelope of each remaining eligible bidder whose first bid envelope was rated "passed". The second envelope of each complying bidder shall be opened within the same day. In case one or

more of the requirements in the second envelope of a particular bid is missing, incomplete or patently insufficient, and/or if the submitted total bid price exceeds the ABC unless otherwise provided in **ITB** Clause 13.2, the BAC shall rate the bid concerned as "failed". Only bids that are determined to contain all the bid requirements for both components shall be rated "passed" and shall immediately be considered for evaluation and comparison.

- 24.4. Letters of Withdrawal shall be read out and recorded during bid opening, and the envelope containing the corresponding withdrawn bid shall be returned to the Bidder unopened.
- 24.5. All members of the BAC who are present during bid opening shall initial every page of the original copies of all bids received and opened.
- 24.6. In the case of an eligible foreign bidder as described in **ITB** Clause 5, the following Class "A" Documents may be substituted with the appropriate equivalent documents, if any, issued by the country of the foreign Bidder concerned, which shall likewise be uploaded and maintained in the PhilGEPS in accordance with Section 8.5.2 of the IRR:
 - (a) Registration certificate from the Securities and Exchange Commission (SEC), Department of Trade and Industry (DTI) for sole proprietorship, or CDA for cooperatives;
 - (b) Mayor's/Business permit issued by the local government where the principal place of business of the bidder is located; and
 - (c) Audited Financial Statements showing, among others, the prospective bidder's total and current assets and liabilities stamped "received" by the Bureau of Internal Revenue or its duly accredited and authorized institutions, for the preceding calendar year which should not be earlier than two years from the date of bid submission.
- 24.7. Each partner of a joint venture agreement shall likewise submit the requirements in **ITB** Clause 12.1(a)(i). Submission of documents required under **ITB** Clauses 12.1(a)(ii) to 12.1(a)(iii) by any of the joint venture partners constitutes compliance.
- 24.8. The Procuring Entity shall prepare the minutes of the proceedings of the bid opening that shall include, as a minimum: (a) names of Bidders, their bid price (per lot, if applicable, and/or including discount, if any), bid security, findings of preliminary examination, and whether there is a withdrawal or modification; and (b) attendance sheet. The BAC members shall sign the abstract of bids as read.
- 24.8 The bidders or their duly authorized representatives may attend the opening of bids. The BAC shall ensure the integrity, security, and confidentiality of all submitted bids. The Abstract of Bids as read and the minutes of the bid opening shall be made available to the public upon

written request and payment of a specified fee to recover cost of materials.

24.9 To ensure transparency and accurate representation of the bid submission, the BAC Secretariat shall notify in writing all bidders whose bids it has received through its PhilGEPS-registered physical address or official e-mail address. The notice shall be issued within seven (7) calendar days from the date of the bid opening.

E. Evaluation and Comparison of Bids

25. Process to be Confidential

- 25.1. Members of the BAC, including its staff and personnel, as well as its Secretariat and TWG, are prohibited from making or accepting any kind of communication with any bidder regarding the evaluation of their bids until the issuance of the Notice of Award, unless otherwise allowed in the case of **ITB** Clause 26.
- 25.2. Any effort by a bidder to influence the Procuring Entity in the Procuring Entity's decision in respect of bid evaluation, bid comparison or contract award will result in the rejection of the Bidder's bid.

26. Clarification of Bids

To assist in the evaluation, comparison, and post-qualification of the bids, the Procuring Entity may ask in writing any Bidder for a clarification of its bid. All responses to requests for clarification shall be in writing. Any clarification submitted by a Bidder in respect to its bid and that is not in response to a request by the Procuring Entity shall not be considered.

27. Domestic Preference

- 27.1. Unless otherwise stated in the **BDS**, the Procuring Entity will grant a margin of preference for the purpose of comparison of bids in accordance with the following:
 - (a) The preference shall be applied when the lowest Foreign Bid is lower than the lowest bid offered by a Domestic Bidder.
 - (b) For evaluation purposes, the lowest Foreign Bid shall be increased by fifteen percent (15%).
 - (c) In the event that the lowest bid offered by a Domestic Bidder does not exceed the lowest Foreign Bid as increased, then the Procuring Entity shall award the contract to the Domestic Bidder at the amount of the lowest Foreign Bid.
 - (d) If the Domestic Bidder refuses to accept the award of contract at the amount of the Foreign Bid within two (2) calendar days from receipt of written advice from the BAC, the Procuring Entity shall

award to the bidder offering the Foreign Bid, subject to postqualification and submission of all the documentary requirements under these Bidding Documents.

27.2. A Bidder may be granted preference as a Domestic Bidder subject to the certification from the DTI that the Bidder is offering unmanufactured articles, materials or supplies of the growth or production of the Philippines, or manufactured articles, materials, or supplies manufactured or to be manufactured in the Philippines substantially from articles, materials, or supplies of the growth, production, or manufacture, as the case may be, of the Philippines.

28. Detailed Evaluation and Comparison of Bids

- 28.1. The Procuring Entity will undertake the detailed evaluation and comparison of bids which have passed the opening and preliminary examination of bids, pursuant to **ITB** Clause 24, in order to determine the Lowest Calculated Bid.
- 28.2. The Lowest Calculated Bid shall be determined in two steps:
 - (a) The detailed evaluation of the financial component of the bids, to establish the correct calculated prices of the bids; and
 - (b) The ranking of the total bid prices as so calculated from the lowest to the highest. The bid with the lowest price shall be identified as the Lowest Calculated Bid.
- 28.3. The Procuring Entity's BAC shall immediately conduct a detailed evaluation of all bids rated "passed," using non-discretionary pass/fail criteria. The BAC shall consider the following in the evaluation of bids:
 - (a) <u>Completeness of the bid.</u> Unless the **BDS** allows partial bids, bids not addressing or providing all of the required items in the Schedule of Requirements including, where applicable, Schedule of Prices, shall be considered non-responsive and, thus, automatically disqualified. In this regard, where a required item is provided, but no price is indicated, the same shall be considered as nonresponsive, but specifying a zero (0) or a dash (-) for the said item would mean that it is being offered for free to the Procuring Entity, except those required by law or regulations to be provided for; and
 - (b) <u>Arithmetical corrections.</u> Consider computational errors and omissions to enable proper comparison of all eligible bids. It may also consider bid modifications. Any adjustment shall be calculated in monetary terms to determine the calculated prices.
- 28.4. Based on the detailed evaluation of bids, those that comply with the above-mentioned requirements shall be ranked in the ascending order of their total calculated bid prices, as evaluated and corrected for computational errors, discounts and other modifications, to identify the Lowest Calculated Bid. Total calculated bid prices, as evaluated and

corrected for computational errors, discounts and other modifications, which exceed the ABC shall not be considered, unless otherwise indicated in the **BDS**.

- 28.5. The Procuring Entity's evaluation of bids shall be based on the bid price quoted in the Bid Form, which includes the Schedule of Prices.
- 28.6. Bids shall be evaluated on an equal footing to ensure fair competition. For this purpose, all bidders shall be required to include in their bids the cost of all taxes, such as, but not limited to, value added tax (VAT), income tax, local taxes, and other fiscal levies and duties which shall be itemized in the bid form and reflected in the detailed estimates. Such bids, including said taxes, shall be the basis for bid evaluation and comparison.
- 28.7. If so indicated pursuant to **ITB** Clause 1.2, Bids are being invited for individual lots or for any combination thereof, provided that all Bids and combinations of Bids shall be received by the same deadline and opened and evaluated simultaneously so as to determine the Bid or combination of Bids offering the lowest calculated cost to the Procuring Entity. Bid prices quoted shall correspond to all items specified for each lot and to all quantities specified for each item of a lot. Bid Security as required by **ITB** Clause 18 shall be submitted for each contract (lot) separately. The basis for evaluation of lots is specified in BDS Clause 28.3.

29. Post-Qualification

- 29.1. The BAC shall determine to its satisfaction whether the Bidder that is evaluated as having submitted the Lowest Calculated Bid complies with and is responsive to all the requirements and conditions specified in **ITB** Clauses 5, 12, and 13.
- 29.2. Within a non-extendible period of five (5) calendar days from receipt by the bidder of the notice from the BAC that it submitted the Lowest Calculated Bid, the Bidder shall submit its latest income and business tax returns filed and paid through the BIR Electronic Filing and Payment System (eFPS) and other appropriate licenses and permits required by law and stated in the **BDS**.

Failure to submit any of the post-qualification requirements on time, or a finding against the veracity thereof, shall disqualify the bidder for award. Provided in the event that a finding against the veracity of any of the documents submitted is made, it shall cause the forfeiture of the bid security in accordance with Section 69 of the IRR of RA 9184.

29.3. The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted pursuant to **ITB** Clauses 12 and 13, as well as other information as the Procuring Entity deems necessary and appropriate, using a non-discretionary "pass/fail" criterion, which shall be completed within a period of twelve (12) calendar days.

- 29.4. If the BAC determines that the Bidder with the Lowest Calculated Bid passes all the criteria for post-qualification, it shall declare the said bid as the LCRB, and recommend to the HoPE the award of contract to the said Bidder at its submitted price or its calculated bid price, whichever is lower.
- 29.5. A negative determination shall result in rejection of the Bidder's Bid, in which event the Procuring Entity shall proceed to the next Lowest Calculated Bid with a fresh period to make a similar determination of that Bidder's capabilities to perform satisfactorily. If the second Bidder, however, fails the post qualification, the procedure for post qualification shall be repeated for the Bidder with the next Lowest Calculated Bid, and so on until the LCRB is determined for recommendation for contract award.
- 29.6. Within a period not exceeding fifteen (15) calendar days from the determination by the BAC of the LCRB and the recommendation to award the contract, the HoPE or his duly authorized representative shall approve or disapprove the said recommendation.
- 29.7. In the event of disapproval, which shall be based on valid, reasonable, and justifiable grounds as provided for under Section 41 of the IRR of RA 9184, the HoPE shall notify the BAC and the Bidder in writing of such decision and the grounds for it. When applicable, the BAC shall conduct a post-qualification of the Bidder with the next Lowest Calculated Bid. A request for reconsideration may be filed by the bidder with the HoPE in accordance with Section 37.1.3 of the IRR of RA 9184.

30. Reservation Clause

- 30.1. Notwithstanding the eligibility or post-qualification of a Bidder, the Procuring Entity concerned reserves the right to review its qualifications at any stage of the procurement process if it has reasonable grounds to believe that a misrepresentation has been made by the said Bidder, or that there has been a change in the Bidder's capability to undertake the project from the time it submitted its eligibility requirements. Should such review uncover any misrepresentation made in the eligibility and bidding requirements, statements or documents, or any changes in the situation of the Bidder which will affect its capability to undertake the project so that it fails the preset eligibility or bid evaluation criteria, the Procuring Entity shall consider the said Bidder as ineligible and shall disqualify it from submitting a bid or from obtaining an award or contract.
- 30.2. Based on the following grounds, the Procuring Entity reserves the right to reject any and all bids, declare a Failure of Bidding at any time prior to the contract award, or not to award the contract, without thereby incurring any liability, and make no assurance that a contract shall be entered into as a result of the bidding:

- (a) If there is *prima facie* evidence of collusion between appropriate public officers or employees of the Procuring Entity, or between the BAC and any of the Bidders, or if the collusion is between or among the bidders themselves, or between a Bidder and a third party, including any act which restricts, suppresses or nullifies or tends to restrict, suppress or nullify competition;
- (b) If the Procuring Entity's BAC is found to have failed in following the prescribed bidding procedures; or
- (c) For any justifiable and reasonable ground where the award of the contract will not redound to the benefit of the GOP as follows:
 - (i) If the physical and economic conditions have significantly changed so as to render the project no longer economically, financially or technically feasible as determined by the HoPE;
 - (ii) If the project is no longer necessary as determined by the HoPE; and
 - (iii) If the source of funds for the project has been withheld or reduced through no fault of the Procuring Entity.
- 30.3. In addition, the Procuring Entity may likewise declare a failure of bidding when:
 - (a) No bids are received;
 - (b) All prospective Bidders are declared ineligible;
 - (c) All bids fail to comply with all the bid requirements or fail postqualification; or
 - (d) The bidder with the LCRB refuses, without justifiable cause to accept the award of contract, and no award is made in accordance with Section 40 of the IRR of RA 9184.

F. Award of Contract

31. Contract Award

- 31.1. Subject to **ITB** Clause 29, the HoPE or its duly authorized representative shall award the contract to the Bidder whose bid has been determined to be the LCRB.
- 31.2. Prior to the expiration of the period of bid validity, the Procuring Entity shall notify the successful Bidder in writing that its bid has been accepted, through a Notice of Award duly received by the Bidder or its

representative personally or sent by registered mail or electronically, receipt of which must be confirmed in writing within two (2) days by the Bidder with the LCRB and submitted personally or sent by registered mail or electronically to the Procuring Entity.

- 31.3. Notwithstanding the issuance of the Notice of Award, award of contract shall be subject to the following conditions:
 - (a) Submission of the following documents within ten (10) calendar days from receipt of the Notice of Award:
 - (i) Valid JVA, if applicable; or
 - (ii) In the case of procurement by a Philippine Foreign Service Office or Post, the PhilGEPS Registration Number of the winning foreign Bidder;
 - (b) Posting of the performance security in accordance with **ITB** Clause 33;
 - (c) Signing of the contract as provided in **ITB** Clause 32; and
 - (d) Approval by higher authority, if required, as provided in Section 37.3 of the IRR of RA 9184.
- 31.4. At the time of contract award, the Procuring Entity shall not increase or decrease the quantity of goods originally specified in Section VI. Schedule of Requirements.

32. Signing of the Contract

- 32.1. At the same time as the Procuring Entity notifies the successful Bidder that its bid has been accepted, the Procuring Entity shall send the Contract Form to the Bidder, which contract has been provided in the Bidding Documents, incorporating therein all agreements between the parties.
- 32.2. Within ten (10) calendar days from receipt of the Notice of Award, the successful Bidder shall post the required performance security, sign and date the contract and return it to the Procuring Entity.
- 32.3. The Procuring Entity shall enter into contract with the successful Bidder within the same ten (10) calendar day period provided that all the documentary requirements are complied with.
- 32.4. The following documents shall form part of the contract:
 - (a) Contract Agreement;
 - (b) Bidding Documents;
 - (c) Winning bidder's bid, including the Technical and Financial Proposals, and all other documents/statements submitted (*e.g.*,

bidder's response to request for clarifications on the bid), including corrections to the bid, if any, resulting from the Procuring Entity's bid evaluation;

- (d) Performance Security;
- (e) Notice of Award of Contract; and
- (f) Other contract documents that may be required by existing laws and/or specified in the **BDS**.

33. Performance Security

- 33.1. To guarantee the faithful performance by the winning Bidder of its obligations under the contract, it shall post a performance security within a maximum period of ten (10) calendar days from the receipt of the Notice of Award from the Procuring Entity and in no case later than the signing of the contract.
- 33.2. The Performance Security shall be denominated in Philippine Pesos and posted in favor of the Procuring Entity in an amount not less than the percentage of the total contract price in accordance with the following schedule:

Form of Performance Security	Amount of Performance Security (Not less than the Percentage of the Total Contract Price)
 (a) Cash or cashier's/manager's check issued by a Universal or Commercial Bank. For biddings conducted by the 	
LGUs, the Cashier's/Manager's Check may be issued by other banks certified by the BSP as authorized to issue such financial instrument.	Five percent (5%)
(b) Bank draft/guarantee or irrevocable letter of credit issued by a Universal or Commercial Bank: Provided, however, that it shall be confirmed or authenticated by a Universal or Commercial Bank, if issued by a foreign bank.	
For biddings conducted by the LGUs, the Bank Draft/ Guarantee or Irrevocable Letter of Credit may be issued by other banks	

certified by the BSP as authorized to issue such financial instrument.	
 (c) Surety bond callable upon demand issued by a surety or insurance company duly certified by the Insurance Commission as authorized to issue such security. 	Thirty percent (30%)

33.3. Failure of the successful Bidder to comply with the above-mentioned requirement shall constitute sufficient ground for the annulment of the award and forfeiture of the bid security, in which event the Procuring Entity shall have a fresh period to initiate and complete the post qualification of the second Lowest Calculated Bid. The procedure shall be repeated until the LCRB is identified and selected for recommendation of contract award. However if no Bidder passed post-qualification, the BAC shall declare the bidding a failure and conduct a re-bidding with re-advertisement, if necessary.

34. Notice to Proceed

Within seven (7) calendar days from the date of approval of the contract by the appropriate government approving authority, the Procuring Entity shall issue the Notice to Proceed (NTP) together with a copy or copies of the approved contract to the successful Bidder. All notices called for by the terms of the contract shall be effective only at the time of receipt thereof by the successful Bidder.

35. Protest Mechanism

Decisions of the procuring entity at any stage of the procurement process may be questioned in accordance with Section 55 of the IRR of RA 9184.

Section III. Bid Data Sheet

Bid Data Sheet

ITB Clause		
1.1	The Procuring Entity is OFFICE OF THE SOLICITOR GENERAL	
1.2	The identification number of the Contract is <i>Lot 1: Office Productivity;</i> <i>Lot 2: Server and Storage Upgrade; and Lot 3: LAN and Wireless Upgrade</i> <i>all under OSG PR No. 018-04-135.</i>	
	The lot(s) and reference is/are:	
	Lot 1, Lot 2 & Lot 3: OSG PR No. 018-04-135	
	The Funding Source is:	
	The Government of the Philippines (GOP) through FY 2018 General Appropriations Act, R.A. 10964 in the amount of:	
	Lot 1: ₱14,108,500.00 – Office Productivity	
2	Lot 2: 5,640,500.00 – Server and Storage Upgrade	
	Lot 3: 2,412,000.00 – LAN and Wireless Upgrade	
	TOTAL: ₱22,161,000.00 (inclusive of all government taxes)	
	The name of the Project is:	
	Procurement of ICT Equipment	
3.1	No further instructions.	
5.1	No further instructions.	
5.2	Foreign bidders, except those falling under ITB Clause 5.2(b), may not participate in this Project.	
5.4	The Bidder must have completed, within the period specified in the Invitation to Bid and ITB Clause 12.1(a)(ii), a single contract that is similar to this Project, equivalent to at least fifty percent (50%) of the ABC.	
7	No further instructions.	
8.1	Subcontracting is not allowed.	
8.2	Not applicable.	
9.1	The Procuring Entity will hold a pre-bid conference for this Project on <i>August 7, 2018 at 1:30pm</i> at the <i>Quintin Paredes Division, 4th Flr., OSG Bldg., 134 Amorsolo St., Legaspi Village, Makati City.</i>	

	The Procuring Entity's address is:
	OSG Building, 134 Amorsolo St., Legaspi Village, Makati City
10.1	<i>Jane J. Burigsay</i> Member, BAC Secretariat Telephone Nos. 9881-674 local 789; 9881-693 Email address: jjburigsay@osg.gov.ph
12.1(a)	 The bidder shall submit the following: 1) Current valid manufacturer's certification stating that it is the authorized reseller/authorized dealer of the brand being offered for a period of at least five (5) years (for all IT equipment); 2) At least two (2) customer satisfaction certificate from previous client companies/agencies (for all IT equipment); 3) Current valid manufacturer's certification stating that it is an Authorized Service Partner (ASP) of the brand being offered (additional requirement for laptop computers); 4) Certification stating that brand being offered is among the latest Top 3 in the Leaders Group of Gartner's List for Global Enterprise Notebook and Desktop.
12.1(a)(ii)	The bidder's SLCC similar to the contract to be bid should have been completed within <i>five (5) years</i> prior to the deadline for the submission and receipt of bids.
13.1	No additional requirements.
13.1(b)	No further instructions.
13.1(c)	No additional requirements.
13.2	The ABC is: Lot 1: ₱14,108,500.00 – Office Productivity Lot 2: 5,640,500.00 – Server and Storage Upgrade Lot 3: 2,412,000.00 – LAN and Wireless Upgrade TOTAL: ₱22,161,000.00 (inclusive of all government taxes) Any bid with a financial component exceeding this amount shall not be accepted.
15.4(a)(iv)	No incidental services are required.
15.4(b)	Not applicable.
16.1(b)	The Bid prices for Goods supplied from outside of the Philippines shall be quoted in Philippine Pesos.
16.3	Payment shall be made in <i>Philippine Pesos</i>
17.1	Bids will be valid until <i>120 calendar days.</i>

1. If the bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit, the amount shall not be less than: 18.1 18.1	The bid security shall be in the form of a Bid Securing Declaration, of the following forms and amounts:		a Bid Securing Declaration, or any	
18.1 Lot 1 P282,170.00 Lot 2 112,810.00 Lot 3 48,240.00 2. If the bid security is in Surety Bond, the amount shall not be less than: 5% of the ABC Lot 1 P705,425.00 Lot 2 282,025.00 Lot 3 120,600.00 18.2 The bid security shall be valid until 120 calendar days from date of opening of bids. 20.3 Each Bidder shall submit one (1) original and two (2) copies of the first and second components of its bid. 20.3 Note: All eligibility documents not original shall be certified by the originating/issuing agencies or, the bidder may bring the original copies for comparison and validation purposes. 21 The address for submission of bids is: Administrative Division 21 Padile for submission of bids is: August 20, 2018 @ 1:25pm. 24.1 The place of bid opening is: August 20, 2018 @ 1:30pm. 24.2 No further instructions. 24.2 No further instructions.		draft/guarantee or irrevocable let	draft/guarantee or irrevocable letter of credit, the amount shall not	
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2. If the bid security is in Surety Bond, the amount shall not be less than:	18.1			
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18.2The bid security shall be valid until 120 calendar days from date of opening of bids.20.3Each Bidder shall submit one (1) original and two (2) copies of the first and second components of its bid.20.3Note: All eligibility documents not original shall be certified by the originating/issuing agencies or, the bidder may bring the original copies for comparison and validation purposes.21The address for submission of bids is:21Administrative Division 2nd Flr., OSG Bldg., 134 Amorsolo St., Legaspi Village, Makati City21The deadline for submission of bids is:21Padilla Hall, 9th Flr., OSG Bldg., 134 Amorsolo St., Legaspi Village, Makati City21The deadline for submission of bids is:21August 20, 2018 @ 1:25pm.24.1The place of bid opening is:24.2No further instructions.24.3No further instructions.				
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	24.2			
27.1 No further instructions.	24.3	No further instructions.	No further instructions.	
	27.1	No further instructions.		

28.3 (a)	Partial bids are allowed. All Goods are grouped in lots listed below. Bidders shall have the option of submitting a proposal on any or all lots and evaluation and contract award will be undertaken on a per lot basis. Lots shall not be divided further into sub-lots for the purpose of bidding, evaluation, and contract award.In all cases, the NFCC computation, if applicable, must be sufficient for all the lots or contracts to be awarded to the Bidder.	
	Lot 1: ₱14,108,500.00 – Office Productivity Lot 2: 5,640,500.00 – Server and Storage Upgrade	
	Lot 2: 5,640,500.00 – Server and Storage Upgrade Lot 3: 2,412,000.00 – LAN and Wireless Upgrade	
	TOTAL: ₱22,161,000.00 (inclusive of all government taxes)	
28.4	No further instructions.	
29.2	Must present the licenses and certifications required in the Terms of Reference.	
32.4(f)	Including the Terms of Reference and Supplemental Bid Bulletin, if any.	

Section IV. General Conditions of Contract

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1. Definitions

- 1.1. In this Contract, the following terms shall be interpreted as indicated:
 - (a) "The Contract" means the agreement entered into between the Procuring Entity and the Supplier, as recorded in the Contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
 - (b) "The Contract Price" means the price payable to the Supplier under the Contract for the full and proper performance of its contractual obligations.
 - (c) "The Goods" means all of the supplies, equipment, machinery, spare parts, other materials and/or general support services which the Supplier is required to provide to the Procuring Entity under the Contract.
 - (d) "The Services" means those services ancillary to the supply of the Goods, such as transportation and insurance, and any other incidental services, such as installation, commissioning, provision of technical assistance, training, and other such obligations of the Supplier covered under the Contract.
 - (e) "GCC" means the General Conditions of Contract contained in this Section.
 - (f) "SCC" means the Special Conditions of Contract.
 - (g) "The Procuring Entity" means the organization purchasing the Goods, as named in the <u>SCC</u>.
 - (h) "The Procuring Entity's country" is the Philippines.
 - (i) "The Supplier" means the individual contractor, manufacturer distributor, or firm supplying/manufacturing the Goods and Services under this Contract and named in the <u>SCC</u>.
 - (j) The "Funding Source" means the organization named in the <u>SCC</u>.
 - (k) "The Project Site," where applicable, means the place or places named in the **SCC**.
 - (l) "Day" means calendar day.
 - (m) The "Effective Date" of the contract will be the date of signing the contract, however the Supplier shall commence performance of its obligations only upon receipt of the Notice to Proceed and copy of the approved contract.

(n) "Verified Report" refers to the report submitted by the Implementing Unit to the HoPE setting forth its findings as to the existence of grounds or causes for termination and explicitly stating its recommendation for the issuance of a Notice to Terminate.

2. Corrupt, Fraudulent, Collusive, and Coercive Practices

- 2.1. Unless otherwise provided in the **SCC**, the Procuring Entity as well as the bidders, contractors, or suppliers shall observe the highest standard of ethics during the procurement and execution of this Contract. In pursuance of this policy, the Procuring Entity:
 - (a) defines, for the purposes of this provision, the terms set forth below as follows:
 - (i) "corrupt practice" means behavior on the part of officials in the public or private sectors by which they improperly and unlawfully enrich themselves, others, or induce others to do so, by misusing the position in which they are placed, and it includes the offering, giving, receiving, or soliciting of anything of value to influence the action of any such official in the procurement process or in contract execution; entering, on behalf of the Government, into any contract or transaction manifestly and grossly disadvantageous to the same, whether or not the public officer profited or will profit thereby, and similar acts as provided in Republic Act 3019.
 - (ii) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Procuring Entity, and includes collusive practices among Bidders (prior to or after bid submission) designed to establish bid prices at artificial, non-competitive levels and to deprive the Procuring Entity of the benefits of free and open competition.
 - (iii) "collusive practices" means a scheme or arrangement between two or more Bidders, with or without the knowledge of the Procuring Entity, designed to establish bid prices at artificial, non-competitive levels.
 - (iv) "coercive practices" means harming or threatening to harm, directly or indirectly, persons, or their property to influence their participation in a procurement process, or affect the execution of a contract;
 - (v) "obstructive practice" is

- (aa) deliberately destroying, falsifying, altering or concealing of evidence material to an administrative proceedings or investigation or making false statements to investigators in order to materially impede an administrative proceedings or investigation the Procuring Entity any foreign of or government/foreign international or financing institution into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the administrative proceedings or investigation or from pursuing such proceedings or investigation; or
- (bb) acts intended to materially impede the exercise of the inspection and audit rights of the Procuring Entity or any foreign government/foreign or international financing institution herein.
- (b) will reject a proposal for award if it determines that the Bidder recommended for award has engaged in any of the practices mentioned in this Clause for purposes of competing for the contract.
- 2.2. Further the Funding Source, Borrower or Procuring Entity, as appropriate, will seek to impose the maximum civil, administrative and/or criminal penalties available under the applicable law on individuals and organizations deemed to be involved with any of the practices mentioned in **GCC** Clause 2.1(a).

3. Inspection and Audit by the Funding Source

The Supplier shall permit the Funding Source to inspect the Supplier's accounts and records relating to the performance of the Supplier and to have them audited by auditors appointed by the Funding Source, if so required by the Funding Source.

4. Governing Law and Language

- 4.1. This Contract shall be interpreted in accordance with the laws of the Republic of the Philippines.
- 4.2. This Contract has been executed in the English language, which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Contract. All correspondence and other documents pertaining to this Contract exchanged by the parties shall be written in English.

5. Notices

- 5.1. Any notice, request, or consent required or permitted to be given or made pursuant to this Contract shall be in writing. Any such notice, request, or consent shall be deemed to have been given or made when received by the concerned party, either in person or through an authorized representative of the Party to whom the communication is addressed, or when sent by registered mail, telex, telegram, or facsimile to such Party at the address specified in the **SCC**, which shall be effective when delivered and duly received or on the notice's effective date, whichever is later.
- 5.2. A Party may change its address for notice hereunder by giving the other Party notice of such change pursuant to the provisions listed in the <u>SCC</u> for **GCC** Clause 5.1.

6. Scope of Contract

- 6.1. The Goods and Related Services to be provided shall be as specified in Section VI. Schedule of Requirements.
- 6.2. This Contract shall include all such items, although not specifically mentioned, that can be reasonably inferred as being required for its completion as if such items were expressly mentioned herein. Any additional requirements for the completion of this Contract shall be provided in the <u>SCC</u>.

7. Subcontracting

- 7.1. Subcontracting of any portion of the Goods, if allowed in the **BDS**, does not relieve the Supplier of any liability or obligation under this Contract. The Supplier will be responsible for the acts, defaults, and negligence of any subcontractor, its agents, servants or workmen as fully as if these were the Supplier's own acts, defaults, or negligence, or those of its agents, servants or workmen.
- 7.2. If subcontracting is allowed, the Supplier may identify its subcontractor during contract implementation. Subcontractors disclosed and identified during the bidding may be changed during the implementation of this Contract. In either case, subcontractors must submit the documentary requirements under **ITB** Clause 12 and comply with the eligibility criteria specified in the **BDS.** In the event that any subcontractor is found by the Procuring Entity to be ineligible, the subcontracting of such portion of the Goods shall be disallowed.

8. Procuring Entity's Responsibilities

- 8.1. Whenever the performance of the obligations in this Contract requires that the Supplier obtain permits, approvals, import, and other licenses from local public authorities, the Procuring Entity shall, if so needed by the Supplier, make its best effort to assist the Supplier in complying with such requirements in a timely and expeditious manner.
- 8.2. The Procuring Entity shall pay all costs involved in the performance of its responsibilities in accordance with **GCC** Clause 6.

9. Prices

- 9.1. For the given scope of work in this Contract as awarded, all bid prices are considered fixed prices, and therefore not subject to price escalation during contract implementation, except under extraordinary circumstances and upon prior approval of the GPPB in accordance with Section 61 of R.A. 9184 and its IRR or except as provided in this Clause.
- 9.2. Prices charged by the Supplier for Goods delivered and/or services performed under this Contract shall not vary from the prices quoted by the Supplier in its bid, with the exception of any change in price resulting from a Change Order issued in accordance with **GCC** Clause 29.

10. Payment

- 10.1. Payments shall be made only upon a certification by the HoPE to the effect that the Goods have been rendered or delivered in accordance with the terms of this Contract and have been duly inspected and accepted. Except with the prior approval of the President no payment shall be made for services not yet rendered or for supplies and materials not yet delivered under this Contract. Ten percent (10%) of the amount of each payment shall be retained by the Procuring Entity to cover the Supplier's warranty obligations under this Contract as described in **GCC** Clause 17.
- 10.2. The Supplier's request(s) for payment shall be made to the Procuring Entity in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and/or Services performed, and by documents submitted pursuant to the **SCC** provision for **GCC** Clause 6.2, and upon fulfillment of other obligations stipulated in this Contract.
- 10.3. Pursuant to **GCC** Clause 10.2, payments shall be made promptly by the Procuring Entity, but in no case later than sixty (60) days after submission of an invoice or claim by the Supplier. Payments shall be in accordance with the schedule stated in the <u>SCC</u>.
- 10.4. Unless otherwise provided in the **SCC**, the currency in which payment is made to the Supplier under this Contract shall be in Philippine Pesos.

10.5. Unless otherwise provided in the **SCC**, payments using Letter of Credit (LC), in accordance with the Guidelines issued by the GPPB, is allowed. For this purpose, the amount of provisional sum is indicated in the **SCC**. All charges for the opening of the LC and/or incidental expenses thereto shall be for the account of the Supplier.

11. Advance Payment and Terms of Payment

- 11.1. Advance payment shall be made only after prior approval of the President, and shall not exceed fifteen percent (15%) of the Contract amount, unless otherwise directed by the President or in cases allowed under Annex "D" of RA 9184.
- 11.2. All progress payments shall first be charged against the advance payment until the latter has been fully exhausted.
- 11.3. For Goods supplied from abroad, unless otherwise indicated in the **SCC**, the terms of payment shall be as follows:
 - (a) On Contract Signature: Fifteen Percent (15%) of the Contract Price shall be paid within sixty (60) days from signing of the Contract and upon submission of a claim and a bank guarantee for the equivalent amount valid until the Goods are delivered and in the form provided in Section VIII. Bidding Forms.
 - (b) On Delivery: Sixty-five percent (65%) of the Contract Price shall be paid to the Supplier within sixty (60) days after the date of receipt of the Goods and upon submission of the documents (i) through (vi) specified in the <u>SCC</u> provision on Delivery and Documents.
 - (c) On Acceptance: The remaining twenty percent (20%) of the Contract Price shall be paid to the Supplier within sixty (60) days after the date of submission of the acceptance and inspection certificate for the respective delivery issued by the Procuring Entity's authorized representative. In the event that no inspection or acceptance certificate is issued by the Procuring Entity's authorized representative within forty five (45) days of the date shown on the delivery receipt, the Supplier shall have the right to claim payment of the remaining twenty percent (20%) subject to the Procuring Entity's own verification of the reason(s) for the failure to issue documents (vii) and (viii) as described in the <u>SCC</u> provision on Delivery and Documents.

12. Taxes and Duties

The Supplier, whether local or foreign, shall be entirely responsible for all the necessary taxes, stamp duties, license fees, and other such levies imposed for the completion of this Contract.

13. Performance Security

- 13.1. Within ten (10) calendar days from receipt of the Notice of Award from the Procuring Entity but in no case later than the signing of the contract by both parties, the successful Bidder shall furnish the performance security in any the forms prescribed in the **ITB** Clause 33.2.
- 13.2. The performance security posted in favor of the Procuring Entity shall be forfeited in the event it is established that the winning bidder is in default in any of its obligations under the contract.
- 13.3. The performance security shall remain valid until issuance by the Procuring Entity of the Certificate of Final Acceptance.
- 13.4. The performance security may be released by the Procuring Entity and returned to the Supplier after the issuance of the Certificate of Final Acceptance subject to the following conditions:
 - (a) There are no pending claims against the Supplier or the surety company filed by the Procuring Entity;
 - (b) The Supplier has no pending claims for labor and materials filed against it; and
 - (c) Other terms specified in the <u>SCC</u>.
- 13.5. In case of a reduction of the contract value, the Procuring Entity shall allow a proportional reduction in the original performance security, provided that any such reduction is more than ten percent (10%) and that the aggregate of such reductions is not more than fifty percent (50%) of the original performance security.

14. Use of Contract Documents and Information

- 14.1. The Supplier shall not, except for purposes of performing the obligations in this Contract, without the Procuring Entity's prior written consent, disclose this Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the Procuring Entity. Any such disclosure shall be made in confidence and shall extend only as far as may be necessary for purposes of such performance.
- 14.2. Any document, other than this Contract itself, enumerated in **GCC** Clause 14.1 shall remain the property of the Procuring Entity and shall be returned (all copies) to the Procuring Entity on completion of the Supplier's performance under this Contract if so required by the Procuring Entity.

15. Standards

The Goods provided under this Contract shall conform to the standards mentioned in Section VII. Technical Specifications; and, when no applicable standard is mentioned, to the authoritative standards appropriate to the Goods' country of origin. Such standards shall be the latest issued by the institution concerned.

16. Inspection and Tests

- 16.1. The Procuring Entity or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Contract specifications at no extra cost to the Procuring Entity. The <u>SCC</u> and Section VII. Technical Specifications shall specify what inspections and/or tests the Procuring Entity requires and where they are to be conducted. The Procuring Entity shall notify the Supplier in writing in a timely manner, of the identity of any representatives retained for these purposes.
- 16.2. If applicable, the inspections and tests may be conducted on the premises of the Supplier or its subcontractor(s), at point of delivery, and/or at the goods' final destination. If conducted on the premises of the Supplier or its subcontractor(s), all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Procuring Entity. The Supplier shall provide the Procuring Entity with results of such inspections and tests.
- 16.3. The Procuring Entity or its designated representative shall be entitled to attend the tests and/or inspections referred to in this Clause provided that the Procuring Entity shall bear all of its own costs and expenses incurred in connection with such attendance including, but not limited to, all traveling and board and lodging expenses.
- 16.4. The Procuring Entity may reject any Goods or any part thereof that fail to pass any test and/or inspection or do not conform to the specifications. The Supplier shall either rectify or replace such rejected Goods or parts thereof or make alterations necessary to meet the specifications at no cost to the Procuring Entity, and shall repeat the test and/or inspection, at no cost to the Procuring Entity, upon giving a notice pursuant to **GCC** Clause 5.
- 16.5. The Supplier agrees that neither the execution of a test and/or inspection of the Goods or any part thereof, nor the attendance by the Procuring Entity or its representative, shall release the Supplier from any warranties or other obligations under this Contract.

17. Warranty

- 17.1. The Supplier warrants that the Goods supplied under the Contract are new, unused, of the most recent or current models, and that they incorporate all recent improvements in design and materials, except when the technical specifications required by the Procuring Entity provides otherwise.
- 17.2. The Supplier further warrants that all Goods supplied under this Contract shall have no defect, arising from design, materials, or workmanship or from any act or omission of the Supplier that may develop under normal use of the supplied Goods in the conditions prevailing in the country of final destination.
- 17.3. In order to assure that manufacturing defects shall be corrected by the Supplier, a warranty shall be required from the Supplier for a minimum period specified in the **SCC**. The obligation for the warranty shall be covered by, at the Supplier's option, either retention money in an amount equivalent to at least one percent (1%) of every progress payment, or a special bank guarantee equivalent to at least one percent (1%) of the total Contract Price or other such amount if so specified in the **SCC**. The said amounts shall only be released after the lapse of the warranty period specified in the **SCC**; provided, however, that the Supplies delivered are free from patent and latent defects and all the conditions imposed under this Contract have been fully met.
- 17.4. The Procuring Entity shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall, within the period specified in the <u>SCC</u> and with all reasonable speed, repair or replace the defective Goods or parts thereof, without cost to the Procuring Entity.
- 17.5. If the Supplier, having been notified, fails to remedy the defect(s) within the period specified in **GCC** Clause 17.4, the Procuring Entity may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Procuring Entity may have against the Supplier under the Contract and under the applicable law.

18. Delays in the Supplier's Performance

- 18.1. Delivery of the Goods and/or performance of Services shall be made by the Supplier in accordance with the time schedule prescribed by the Procuring Entity in Section VI. Schedule of Requirements.
- 18.2. If at any time during the performance of this Contract, the Supplier or its Subcontractor(s) should encounter conditions impeding timely delivery of the Goods and/or performance of Services, the Supplier shall promptly notify the Procuring Entity in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the

Supplier's notice, and upon causes provided for under **GCC** Clause 22, the Procuring Entity shall evaluate the situation and may extend the Supplier's time for performance, in which case the extension shall be ratified by the parties by amendment of Contract.

18.3. Except as provided under **GCC** Clause 22, a delay by the Supplier in the performance of its obligations shall render the Supplier liable to the imposition of liquidated damages pursuant to **GCC** Clause 19, unless an extension of time is agreed upon pursuant to **GCC** Clause 29 without the application of liquidated damages.

19. Liquidated Damages

Subject to **GCC** Clauses 18 and 22, if the Supplier fails to satisfactorily deliver any or all of the Goods and/or to perform the Services within the period(s) specified in this Contract inclusive of duly granted time extensions if any, the Procuring Entity shall, without prejudice to its other remedies under this Contract and under the applicable law, deduct from the Contract Price, as liquidated damages, the applicable rate of one tenth (1/10) of one (1) percent of the cost of the unperformed portion for every day of delay until actual delivery or performance. The maximum deduction shall be ten percent (10%) of the amount of contract. Once the maximum is reached, the Procuring Entity may rescind or terminate the Contract pursuant to **GCC** Clause 23, without prejudice to other courses of action and remedies open to it.

20. Settlement of Disputes

- 20.1. If any dispute or difference of any kind whatsoever shall arise between the Procuring Entity and the Supplier in connection with or arising out of this Contract, the parties shall make every effort to resolve amicably such dispute or difference by mutual consultation.
- 20.2. If after thirty (30) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the Procuring Entity or the Supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given.
- 20.3. Any dispute or difference in respect of which a notice of intention to commence arbitration has been given in accordance with this Clause shall be settled by arbitration. Arbitration may be commenced prior to or after delivery of the Goods under this Contract.
- 20.4. In the case of a dispute between the Procuring Entity and the Supplier, the dispute shall be resolved in accordance with Republic Act 9285 ("R.A. 9285"), otherwise known as the "Alternative Dispute Resolution Act of 2004."

20.5. Notwithstanding any reference to arbitration herein, the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and the Procuring Entity shall pay the Supplier any monies due the Supplier.

21. Liability of the Supplier

- 21.1. The Supplier's liability under this Contract shall be as provided by the laws of the Republic of the Philippines, subject to additional provisions, if any, set forth in the <u>SCC</u>.
- 21.2. Except in cases of criminal negligence or willful misconduct, and in the case of infringement of patent rights, if applicable, the aggregate liability of the Supplier to the Procuring Entity shall not exceed the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment.

22. Force Majeure

- 22.1. The Supplier shall not be liable for forfeiture of its performance security, liquidated damages, or termination for default if and to the extent that the Supplier's delay in performance or other failure to perform its obligations under the Contract is the result of a *force majeure*.
- 22.2. For purposes of this Contract the terms "*force majeure*" and "fortuitous event" may be used interchangeably. In this regard, a fortuitous event or *force majeure* shall be interpreted to mean an event which the Supplier could not have foreseen, or which though foreseen, was inevitable. It shall not include ordinary unfavorable weather conditions; and any other cause the effects of which could have been avoided with the exercise of reasonable diligence by the Supplier. Such events may include, but not limited to, acts of the Procuring Entity in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.
- 22.3. If a *force majeure* situation arises, the Supplier shall promptly notify the Procuring Entity in writing of such condition and the cause thereof. Unless otherwise directed by the Procuring Entity in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the *force majeure*.

23. Termination for Default

- 23.1. The Procuring Entity shall terminate this Contract for default when any of the following conditions attends its implementation:
 - (a) Outside of *force majeure*, the Supplier fails to deliver or perform any or all of the Goods within the period(s) specified in the contract, or within any extension thereof granted by the Procuring

Entity pursuant to a request made by the Supplier prior to the delay, and such failure amounts to at least ten percent (10%) of the contact price;

- (b) As a result of *force majeure*, the Supplier is unable to deliver or perform any or all of the Goods, amounting to at least ten percent (10%) of the contract price, for a period of not less than sixty (60) calendar days after receipt of the notice from the Procuring Entity stating that the circumstance of force majeure is deemed to have ceased; or
- (c) The Supplier fails to perform any other obligation under the Contract.
- 23.2. In the event the Procuring Entity terminates this Contract in whole or in part, for any of the reasons provided under **GCC** Clauses 23 to 0, the Procuring Entity may procure, upon such terms and in such manner as it deems appropriate, Goods or Services similar to those undelivered, and the Supplier shall be liable to the Procuring Entity for any excess costs for such similar Goods or Services. However, the Supplier shall continue performance of this Contract to the extent not terminated.
- 23.3. In case the delay in the delivery of the Goods and/or performance of the Services exceeds a time duration equivalent to ten percent (10%) of the specified contract time plus any time extension duly granted to the Supplier, the Procuring Entity may terminate this Contract, forfeit the Supplier's performance security and award the same to a qualified Supplier.

24. Termination for Insolvency

The Procuring Entity shall terminate this Contract if the Supplier is declared bankrupt or insolvent as determined with finality by a court of competent jurisdiction. In this event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the Procuring Entity and/or the Supplier.

25. Termination for Convenience

- 25.1. The Procuring Entity may terminate this Contract, in whole or in part, at any time for its convenience. The HoPE may terminate a contract for the convenience of the Government if he has determined the existence of conditions that make Project Implementation economically, financially or technically impractical and/or unnecessary, such as, but not limited to, fortuitous event(s) or changes in law and national government policies.
- 25.2. The Goods that have been delivered and/or performed or are ready for delivery or performance within thirty (30) calendar days after the Supplier's receipt of Notice to Terminate shall be accepted by the

Procuring Entity at the contract terms and prices. For Goods not yet performed and/or ready for delivery, the Procuring Entity may elect:

- (a) to have any portion delivered and/or performed and paid at the contract terms and prices; and/or
- (b) to cancel the remainder and pay to the Supplier an agreed amount for partially completed and/or performed goods and for materials and parts previously procured by the Supplier.
- 25.3. If the Supplier suffers loss in its initial performance of the terminated contract, such as purchase of raw materials for goods specially manufactured for the Procuring Entity which cannot be sold in open market, it shall be allowed to recover partially from this Contract, on a *quantum meruit* basis. Before recovery may be made, the fact of loss must be established under oath by the Supplier to the satisfaction of the Procuring Entity before recovery may be made.

26. Termination for Unlawful Acts

- 26.1. The Procuring Entity may terminate this Contract in case it is determined *prima facie* that the Supplier has engaged, before or during the implementation of this Contract, in unlawful deeds and behaviors relative to contract acquisition and implementation. Unlawful acts include, but are not limited to, the following:
 - (a) Corrupt, fraudulent, and coercive practices as defined in **ITB** Clause 3.1(a);
 - (b) Drawing up or using forged documents;
 - (c) Using adulterated materials, means or methods, or engaging in production contrary to rules of science or the trade; and
 - (d) Any other act analogous to the foregoing.

27. Procedures for Termination of Contracts

- 27.1. The following provisions shall govern the procedures for termination of this Contract:
 - (a) Upon receipt of a written report of acts or causes which may constitute ground(s) for termination as aforementioned, or upon its own initiative, the Implementing Unit shall, within a period of seven (7) calendar days, verify the existence of such ground(s) and cause the execution of a Verified Report, with all relevant evidence attached;

- (b) Upon recommendation by the Implementing Unit, the HoPE shall terminate this Contract only by a written notice to the Supplier conveying the termination of this Contract. The notice shall state:
 - (i) that this Contract is being terminated for any of the ground(s) afore-mentioned, and a statement of the acts that constitute the ground(s) constituting the same;
 - (ii) the extent of termination, whether in whole or in part;
 - (iii) an instruction to the Supplier to show cause as to why this Contract should not be terminated; and
 - (iv) special instructions of the Procuring Entity, if any.
- (c) The Notice to Terminate shall be accompanied by a copy of the Verified Report;
- (d) Within a period of seven (7) calendar days from receipt of the Notice of Termination, the Supplier shall submit to the HoPE a verified position paper stating why this Contract should not be terminated. If the Supplier fails to show cause after the lapse of the seven (7) day period, either by inaction or by default, the HoPE shall issue an order terminating this Contract;
- (e) The Procuring Entity may, at any time before receipt of the Supplier's verified position paper described in item (d) above withdraw the Notice to Terminate if it is determined that certain items or works subject of the notice had been completed, delivered, or performed before the Supplier's receipt of the notice;
- (f) Within a non-extendible period of ten (10) calendar days from receipt of the verified position paper, the HoPE shall decide whether or not to terminate this Contract. It shall serve a written notice to the Supplier of its decision and, unless otherwise provided, this Contract is deemed terminated from receipt of the Supplier of the notice of decision. The termination shall only be based on the ground(s) stated in the Notice to Terminate;
- (g) The HoPE may create a Contract Termination Review Committee (CTRC) to assist him in the discharge of this function. All decisions recommended by the CTRC shall be subject to the approval of the HoPE; and
- (h) The Supplier must serve a written notice to the Procuring Entity of its intention to terminate the contract at least thirty (30) calendar days before its intended termination. The Contract is deemed terminated if it is not resumed in thirty (30) calendar days after the receipt of such notice by the Procuring Entity.

28. Assignment of Rights

The Supplier shall not assign his rights or obligations under this Contract, in whole or in part, except with the Procuring Entity's prior written consent.

29. Contract Amendment

Subject to applicable laws, no variation in or modification of the terms of this Contract shall be made except by written amendment signed by the parties.

30. Application

These General Conditions shall apply to the extent that they are not superseded by provisions of other parts of this Contract.

Section V. Special Conditions of Contract

Special Conditions of Contract

GCC Clause	
1.1(g)	The Procuring Entity is OFFICE OF THE SOLICITOR GENERAL .
1.1(i)	The Supplier is
1.1(j)	The Funding Source is: the Government of the Philippines (GOP) through FY 2018 General Appropriations Act, R.A. 10964 in the amount of: Lot 1: \ddagger 14,108,500.00 – Office Productivity Lot 2: 5,640,500.00 – Server and Storage Upgrade Lot 3:: 2,412,000.00 – LAN and Wireless Upgrade TOTAL: \ddagger 22,161,000.00 (inclusive of all government taxes)
	for the: Procurement of ICT Equipment
1.1(k)	The Project Site is OSG Building , 134 Amorsolo St. , Legaspi Village, Makati City and extension offices located at the nearby APMC and Montepino Buildings.
2.1	No further instructions.
	The Procuring Entity's address for Notices is: OSG Building, 134 Amorslo St., Legaspi Village, Makati City
5.1	Jane J. Burigsay Telephone Nos. 9881-789 Email address: jjburigsay@osg.gov.ph
	The Supplier's address for Notices is:
	Delivery and Documents – "The delivery terms applicable to this Contract are delivered to OSG Building, 134 Amorsolo St., Legaspi Village, Makati City. Risk and title will pass from the Supplier to the Procuring Entity upon receipt and final acceptance of the Goods at their final destination."
6.2	Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in Section VI. Schedule of Requirements. The details of shipping and/or other documents to be furnished by the Supplier are as follows:
	Upon delivery of the Goods to the Project Site, the Supplier shall notify the Procuring Entity and present the following documents to the Procuring Entity:

r	
(i)	Original and four (4) copies of the Supplier's invoice showing Goods' description, quantity, unit price, and total
(ii)	amount; Original four (4) copies of delivery receipt/note, railway receipt, or truck receipt;
(iii)	
	Original and four (4) copies of the Manufacturer's and/or
	Supplier's warranty certificate;
(v)	Original and four (4) copies of the certificate of original (for imported Goods);
(vi)	Delivery receipt detailing number and description of items received signed by the authorized receiving personnel;
(vii)) Certificate of Acceptance/Inspection Report signed by the
	Procuring Entity's representative at the Project Site; and
(viii) Four (4) copies of the Invoice Receipt for Property signed by the Procuring Entity's representative at the Project Site.
Inci	dental Services –
incl	Supplier is required to provide all of the following services, uding additional services, if any, specified in Section VI. edule of Requirements:
(a)	Performance and supervision of on-site assembly and/or
(b)	start-up of the supplied Goods; Furnishing of tools required for assembly and/or
(c)	maintenance of the supplied Goods; Furnishing of a detailed operations and maintenance manual
(d)	for each appropriate unit of the supplied Goods; Performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and
(e)	Training of the Procuring Entity's personnel, at the
	Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied Goods.
by t prev	Contract price for the Goods shall include the prices charged the Supplier for incidental services and shall not exceed the vailing rates charged to other parties by the Supplier for ilar services.
Spa	re Parts –
noti	Supplier is required to provide all of the following materials fications, and information pertaining to spare parts nufactured or distributed by the Supplier:

	(a) Such spare parts as the Procuring Entity may elect to purchase from the Supplier, provided that this election shall not relieve the Supplier of any warranty obligations under this Contract.
	The spare parts required are listed in Section VI. Schedule of Requirements and the cost thereof are included in the Contract Price.
:	The Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spares for the Goods for two (2) years beyond the warranty.
	The spare parts and components shall be supplied as promptly as possible, but in any case within one (1) month of placing the order.
	Packaging –
	The Supplier shall provide such packaging of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in this Contract. The packaging shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packaging case size and weights shall take into consideration, where appropriate, the remoteness of the GOODS' final destination and the absence of heavy handling facilities at all points in transit.
	A packaging list identifying the contents and quantities of the package is to be placed on an accessible point of the outer packaging if practical. If not practical, the packaging list is to be placed inside the outer packaging but outside the secondary packaging.
	Insurance –
	The Goods supplied under this Contract shall be fully insured by the Supplier in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage, and delivery. The Goods remain at the risk and title of the Supplier until their final acceptance by the Procuring Entity.
	Transportation –
	Where the Supplier is required under Contract to deliver the Goods CIF, CIP or DDP, transport of the Goods to the port of destination or such other named place of destination in the

	Philippines, as shall be specified in this Contract, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price. Where the Supplier is required under this Contract to transport the Goods to a specified place of destination within the Philippines, defined as the Project Site, transport to such place of destination in the Philippines, including insurance and storage, as shall be specified in this Contract, shall be arranged by the Supplier, and related costs shall be included in the Contract Price. Where the Supplier is required under this Contract to deliver the Goods CIF, CIP or DDP, Goods are to be transported on carriers of Philippine registry. In the event that no carrier of Philippine registry is available, Goods may be shipped by a carrier which is not of Philippine registry provided that the Supplier obtains and presents to the Procuring Entity certification to this effect from the nearest Philippine consulate to the port of dispatch. In the event that carriers of Philippine registry are available but their
	schedule delays the Supplier in its performance of this Contract, the period from when the Goods were first ready for shipment and the actual date of shipment, the period of delay will be considered <i>force majeure</i> in accordance with GCC Clause 22.
	The Procuring Entity accepts no liability for the damage of Goods during transit other than those prescribed by INCOTERMS for DDP Deliveries. In the case of Goods supplied from within the Philippines or supplied by domestic Suppliers, risk and title will not be deemed to have passed to the Procuring Entity until their receipt and final acceptance at the final destination.
	Patent Rights –
	The Supplier shall indemnify the Procuring Entity against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods or any part thereof.
10.4	Not applicable.
10.1	Payment using LC is not allowed.
11.3	Maintain the GCC Clause.
13.4(c)	No further instructions.
16.1	As the need arises.
17.3	Please refer to Terms of Reference
17.4	Please refer to Terms of Reference
21.1	No additional provision.

Section VI. Schedule of Requirements

Section VI. Schedule of Requirements

The delivery schedule expressed as weeks/months stipulates hereafter a delivery date which is the date of delivery to the project site.

Item No.	Description	Quantity	Total	Delivered, Weeks/Months	
	Information and Communication Technology (ICT) Equipment:				
1.	Lot 1: Office Productivity			Within 90 days from	
2.	Lot 2: Server and Storage Upgrade			receipt of NTP	
3.	Lot 3: LAN and Wireless Upgrade				

Conforme:	
	(Name/Signature)
Designation/Position:	
Company:	
Address of the Company:	
Tel. No./ E-mail Address:	
Date:	

Section VII. Technical Specifications

Technical Specifications

Item	Specifications	Statement of ComplianceBidders must state here either "Comply" or "Not Comply" against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of "Comply" or "Not Comply" must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer's un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidder's statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the provisions of ITB Clause		

Technical Specifications

Procurement of ICT Equipment

Lot 1: OFFICE PRODUCTIVITY							
Item	Item Specifications						
CORPORATE NOTEBOOK PC (180 Units)							
Classification	True Branded Notebook PC						
	Must belong in the top 3 of the Leaders Group of						
Certification	Gartner's Magic Quadrant for Global Enterprise						
	Notebook and Desktop (Must provide certificate)						
Processor							
	i5-8250U (3.40 GHz Max. Turbo Frequency)						
Cache Memory	6 MB SmartCache						
Chipset	Intel SoC (System on Chip) platform						
Memory	8G (1X8GBDDR4 2400) On Board						
Max Memory	up to 20 GB of DDR4-2400Mhz, dual channel capable						
Graphics	AMD Radeon R17M-M1-70 GDDR5 2G						
	supports three independent displays;						
	Max resolution: 3840x2160@30Hz (HDMI);						
	1920x1200@60Hz (VGA)						
HDD	1TB 7MM 5400RPM						
Support HDD	Must Support Dual HDD (SSD + Traditional HDD)						
Display	14.0" (355mm) FHD TN (1920x1080) Anti-Glare, LED						
Display	backlight, 220 nits, 16:9 aspect ration						
Connectivity	Integrated 10/100/1000 MBps Lan Controller;						
Connectivity	Wireless 802.11 ac 1x1 and Bluetooth 4.1						
	Two USB 3.0 (one with optional Always On), one USB						
	3.1 Type-C Gen 1, one optional USB 3.1 Type-C Gen 1						
Ports	(with the function of DisplayPort and PowerDelivery),						
	one optional USB 2.0 in Ultra-bay, VGA, HDMI,						
	Ethernet (RJ-45)						
Audio Support	HD Audio, Stereo speakers with Dolby® Audio™, 2W x 2						
Keyboard	6-row, spill-resistant, multimedia Fn keys						
Touchpad	One-piece touchpad, multi-touch						
	Security chip Fingerprint reader						
Security	Power-on password, hard disk password, supervisor						
	password, security keyhole						
Security Chip	Firmware TPM 2.0, integrated in chipset						
Fingerprint	Touch-type fingerprint reader						
Multimedia Integrated Stereo Speakers, at least 0.3MP fixed focus							
Options	physical camera shutter						
Operating	Windows 10 Pro Standard Preinstalled (Must provide						
System	certificate from the manufacturer that the OS installed						
System	is Genuine OS)						

Features	Sleek and robust design	
Color	Iron Gray	
	2-cell 30Wh + 2-cell 39Wh Li-Polymer	
Battery Adapter	BLACK 65W 3-PIN	
Carrying Case	Standard Carrying Case	
Call ying Case	WxDxH: 13.5" x 9.72" x 0.79"; 343mm x 247mm x	
Dimensions	20.3mm	
Maximum Weight	Must be 1.85 kg / 4.07 lb	
Other	Must include branded MiniSaver™ lock	
	Must include an Optical Travel Mouse	
Warranty	Must be 3 years warranty on parts and labor	
Environment	EPEAT Silver; ENERGY STAR ² 6.1; RoHS-compliant	
	2 IN 1 TABLET (60 Units)	
Classification	Must be 2 in 1 Tablet	
	Must be 10.1" IPS FHD display	
Dimension	Width (mm / inches) 256.6 / 10.1"	
	Thickness (mm / inches) 9.6 / 0.38"	
	Height (mm / inches) 170.8 /6.72"	
Weight	690 g (1.52 lbs)	
Operating System	Android™ 6.0.1 Marshmallow (upgradable)	
Processor	Intel® Atom [™] x5-Z8550 Processor (2M Cache, Quad- Core, Up to 2.4 GHz)	
Sound	Dolby Atmos	
Memory	RAM (4 GB LPDDR3)	
	ROM (64 GB)	
	Card Slot (microSD™; Supports Up to 128 GB)	
Battery	Type : Li-ion Polymer	
	Capacity : 8500 mAh	
	Standby Time : Over 70 Days	
	General Usage : 15 Hours	
Display	Size : 10.1" FHD IPS (1920 x 1200)	
	Color Depth : 16.7 Million	
	Color Gamut : 70%	
	Brightness : 400 nits	
	Touch :	
	On Screen : Capacitive Touch with AnyPen Technology	
	Create Pad : Capacitive Touch and EMR Pen	
	Technology	
	Material : Magnesium Aluminum Alloy	
Colors	Gunmetal Grey	
Connectivity	WLAN : WiFi 802.11 a/b/g/n/ac; Dual Channel (2.4	
•	GHz and 5 GHz)	
Camera	Rear : 8 MP Auto-Focus	
	Front : 2 MP Fixed-Focus	
Keyboard	Halo Keyboard	
Sensors	Vibrator	

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RECORDING Full / Window / Rectangle		, , ,	
	CAPTURE		
ZOOM In / Out (100% ~ 400%)	RECORDING		
	ZOOM	In / Out (100% ~ 400%)	

WRITING		
SPACE RESIZE	Resize From 1,920 x 1,080 to 3,840 x 2,160	
Touch	GUI for FHD/UHD resolution	
Available object	Ø 8mm	
size for touch		
Scan Time	9 ~ 14ms	
Accuracy	1mm	
Interface	USB 2.0	
Protection	2.8T (Anti-Glare)	
Glass Thickness		
Operating	Windows 7, Windows 8 / Mac OS X (10.7 or later) /	
Systme Support Touch	Android / Linux (Kernel 3.9 or later)	
Resolution	1,428 x 803	
Overlay		
Dimension (W x	997 x 586 x 23.5 mm (Max 60 mm)	
H x D)		
Weight	6.5kg	
Warranty	One year on parts and labor	
	ON 75" COMMERCIAL UHD TV With Adjustable Steel TV (Cart (2 Units)
Display	Diagonal Size: 74.6"	
	Type: Edge LED	
	Resolution: 3,840 x 2,160 (4K UHD)	
	Brightness: 400cd/m2	
	Dynamic Contrast Ratio: 1,000,000:1	
	Viewing Angle Degree: 178° / 178°	
Broadcasting System	Analog: NTSC	
-	Digital: ATSC/VSB/Clear QAM	
Audio	Audio Output / Speaker System: 10W + 10W / 2.0 ch	
	Sound Mode: 6 modes (Standard, Cinema, Clear Voice	
	III, Sports, Music, Game)	
Interface	Side: HDMI In, USB 2.0	
	Rear: RF In, AV In (Sharing with Component In), Component In + Video, Optical Digital Audio Out, HDMI In, RS 232-C In, RJ45 (SNMP), External Speaker	
	Out Pozol Width (L/P, LL, P), on bozol based (mm), 14.7	
Dimension	Bezel Width (L/R, U, B) : on bezel based (mm): 14.7, 14.7, 14.7	
	Bezel Width (L/R, U, B) : off bezel based (mm): 12.7, 12.7, 12.7	
Vesa (mm)	600 x 400	
WxHxD/weight	66.8" x 38.6" x 1.5" / 91.1lb	
(without stand)	00.0 A 50.0 A 1.5 / 51.110	
WxHxD/weight	66.8" x 41.4" x 11.7" / 92.6lb	
(with stand)	,	
Display	Diagonal Size: 74.6"	
	Type: Edge LED	

	Resolution: 3,840 x 2,160 (4K UHD)	
_	Brightness: 400cd/m2	
	Dynamic Contrast Ratio: 1,000,000:1	
	Viewing Angle Degree: 178° / 178°	
Broadcasting	Analog: NTSC	
System		
	Digital: ATSC/VSB/Clear QAM	
Audio	Audio Output / Speaker System: 10W + 10W / 2.0 ch	
	Sound Mode: 6 modes (Standard, Cinema, Clear Voice	
	III, Sports, Music, Game)	
Interface	Side: HDMI In, USB 2.0	
	Rear: RF In, AV In (Sharing with Component In),	
	Component In + Video, Optical Digital Audio Out, HDMI In, RS 232-C In, RJ45 (SNMP), External Speaker	
	Out	
	Bezel Width (L/R, U, B) : on bezel based (mm): 14.7,	
Dimension	14.7, 14.7	
	Bezel Width (L/R, U, B) : off bezel based (mm): 12.7,	
	12.7, 12.7	
Vesa (mm)	600 x 400	
WxHxD/weight	$((0)^{n} = 20)^{n} = 1 \frac{\pi}{2} / 01 \frac{1}{2}$	
(without stand)	66.8" x 38.6" x 1.5" / 91.1lb	
WxHxD/weight	66.8" x 41.4" x 11.7" / 92.6lb	
(with stand)	00.0 X 41.4 X 11.7 / 92.010	
	IGHT ADJUSTABLE ULTRA LARGE DISPLAY STEEL TV	CART FOR 60"-
TELESCOPIC HE	100" TV (2 Units)	CART FOR 60"-
	100" TV (2 Units) Height adjustable TV mount	CART FOR 60"-
TELESCOPIC HE	100" TV (2 Units)Height adjustable TV mountFree-tilting design for multiple monitor viewing angles	CART FOR 60"-
TELESCOPIC HE	100" TV (2 Units)Height adjustable TV mountFree-tilting design for multiple monitor viewing anglesQuick-release spring lock adjusts height effortlessly	CART FOR 60"-
TELESCOPIC HE	100" TV (2 Units)Height adjustable TV mountFree-tilting design for multiple monitor viewing anglesQuick-release spring lock adjusts height effortlesslyQuick assembly shelf assures easy post-installation	CART FOR 60"-
TELESCOPIC HE	100" TV (2 Units)Height adjustable TV mountFree-tilting design for multiple monitor viewing anglesQuick-release spring lock adjusts height effortlesslyQuick assembly shelf assures easy post-installationand height adjustable	CART FOR 60"-
TELESCOPIC HE	100" TV (2 Units)Height adjustable TV mountFree-tilting design for multiple monitor viewing anglesQuick-release spring lock adjusts height effortlesslyQuick assembly shelf assures easy post-installationand height adjustableCable management keeps everything organized	CART FOR 60"-
TELESCOPIC HE	100" TV (2 Units)Height adjustable TV mountFree-tilting design for multiple monitor viewing anglesQuick-release spring lock adjusts height effortlesslyQuick assembly shelf assures easy post-installationand height adjustableCable management keeps everything organizedHeavy-duty casters offer maximum portability and	CART FOR 60"-
TELESCOPIC HE Features	100" TV (2 Units)Height adjustable TV mountFree-tilting design for multiple monitor viewing anglesQuick-release spring lock adjusts height effortlesslyQuick assembly shelf assures easy post-installationand height adjustableCable management keeps everything organized	CART FOR 60"-
TELESCOPIC HE	100" TV (2 Units)Height adjustable TV mountFree-tilting design for multiple monitor viewing anglesQuick-release spring lock adjusts height effortlesslyQuick assembly shelf assures easy post-installationand height adjustableCable management keeps everything organizedHeavy-duty casters offer maximum portability andmobility	CART FOR 60"-
TELESCOPIC HE Features Specifications:	100" TV (2 Units)Height adjustable TV mountFree-tilting design for multiple monitor viewing anglesQuick-release spring lock adjusts height effortlesslyQuick assembly shelf assures easy post-installationand height adjustableCable management keeps everything organizedHeavy-duty casters offer maximum portability and	CART FOR 60"-
TELESCOPIC HE Features Specifications: Material:	100" TV (2 Units)Height adjustable TV mountFree-tilting design for multiple monitor viewing anglesQuick-release spring lock adjusts height effortlesslyQuick assembly shelf assures easy post-installationand height adjustableCable management keeps everything organizedHeavy-duty casters offer maximum portability andmobilitySteel, Plastic	CART FOR 60"-
TELESCOPIC HE Features Specifications: Material: Color:	100" TV (2 Units)Height adjustable TV mountFree-tilting design for multiple monitor viewing anglesQuick-release spring lock adjusts height effortlesslyQuick assembly shelf assures easy post-installationand height adjustableCable management keeps everything organizedHeavy-duty casters offer maximum portability andmobilitySteel, PlasticBlack	CART FOR 60"-
TELESCOPIC HE Features Specifications: Material: Color: Surface Finish:	100" TV (2 Units)Height adjustable TV mountFree-tilting design for multiple monitor viewing anglesQuick-release spring lock adjusts height effortlesslyQuick assembly shelf assures easy post-installationand height adjustableCable management keeps everything organizedHeavy-duty casters offer maximum portability andmobilitySteel, PlasticBlackPowder Coating60X110X2.0 Thickness X990mm Length1350x683x2325mm (53.1"x26.9"x91.5"	CART FOR 60"-
TELESCOPIC HE Features Secifications: Material: Color: Surface Finish: Column Size: Dimension: Fit screen size:	100" TV (2 Units)Height adjustable TV mountFree-tilting design for multiple monitor viewing anglesQuick-release spring lock adjusts height effortlesslyQuick assembly shelf assures easy post-installationand height adjustableCable management keeps everything organizedHeavy-duty casters offer maximum portability andmobilitySteel, PlasticBlackPowder Coating60X110X2.0 Thickness X990mm Length1350x683x2325mm (53.1"x26.9"x91.5"60"-100"	CART FOR 60"-
TELESCOPIC HE Features Sectifications: Material: Color: Surface Finish: Column Size: Dimension: Fit screen size: VESA	100" TV (2 Units)Height adjustable TV mountFree-tilting design for multiple monitor viewing anglesQuick-release spring lock adjusts height effortlesslyQuick assembly shelf assures easy post-installationand height adjustableCable management keeps everything organizedHeavy-duty casters offer maximum portability andmobilitySteel, PlasticBlackPowder Coating60X110X2.0 Thickness X990mm Length1350x683x2325mm (53.1"x26.9"x91.5"60"-100"200x200,300x300,400x200,400x400,600x400,800x40	CART FOR 60"-
TELESCOPIC HE Features Features Specifications: Material: Color: Surface Finish: Column Size: Dimension: Fit screen size: VESA Compatible:	100" TV (2 Units)Height adjustable TV mountFree-tilting design for multiple monitor viewing anglesQuick-release spring lock adjusts height effortlesslyQuick assembly shelf assures easy post-installationand height adjustableCable management keeps everything organizedHeavy-duty casters offer maximum portability andmobilitySteel, PlasticBlackPowder Coating60X110X2.0 Thickness X990mm Length1350x683x2325mm (53.1"x26.9"x91.5"60"-100"	CART FOR 60"-
TELESCOPIC HE Features Features Specifications: Material: Color: Surface Finish: Column Size: Dimension: Fit screen size: VESA Compatible: Weight	100" TV (2 Units)Height adjustable TV mountFree-tilting design for multiple monitor viewing anglesQuick-release spring lock adjusts height effortlesslyQuick assembly shelf assures easy post-installationand height adjustableCable management keeps everything organizedHeavy-duty casters offer maximum portability andmobilitySteel, PlasticBlackPowder Coating60X110X2.0 Thickness X990mm Length1350x683x2325mm (53.1"x26.9"x91.5"60"-100"200x200,300x300,400x200,400x400,600x400,800x400,800x600,1000x600	CART FOR 60"-
TELESCOPIC HE Features Specifications: Material: Color: Surface Finish: Column Size: Dimension: Fit screen size: VESA Compatible: Weight Capacity:	100" TV (2 Units)Height adjustable TV mountFree-tilting design for multiple monitor viewing anglesQuick-release spring lock adjusts height effortlesslyQuick assembly shelf assures easy post-installationand height adjustableCable management keeps everything organizedHeavy-duty casters offer maximum portability andmobilitySteel, PlasticBlackPowder Coating60X110X2.0 Thickness X990mm Length1350x683x2325mm (53.1"x26.9"x91.5"60"-100"200x200,300x300,400x200,400x400,600x400,800x400,800x600,1000x600100kg (220lbs)	CART FOR 60"-
TELESCOPIC HE Features Specifications: Material: Color: Surface Finish: Column Size: Dimension: Fit screen size: VESA Compatible: Weight Capacity: Tilt Range:	100" TV (2 Units)Height adjustable TV mountFree-tilting design for multiple monitor viewing anglesQuick-release spring lock adjusts height effortlesslyQuick assembly shelf assures easy post-installationand height adjustableCable management keeps everything organizedHeavy-duty casters offer maximum portability andmobilitySteel, PlasticBlackPowder Coating60X110X2.0 Thickness X990mm Length1350x683x2325mm (53.1"x26.9"x91.5"60"-100"200x200,300x300,400x200,400x400,600x400,800x400,800x600,1000x600	CART FOR 60"-
TELESCOPIC HE Features Specifications: Material: Color: Surface Finish: Column Size: Dimension: Fit screen size: VESA Compatible: Weight Capacity:	100" TV (2 Units)Height adjustable TV mountFree-tilting design for multiple monitor viewing anglesQuick-release spring lock adjusts height effortlesslyQuick assembly shelf assures easy post-installationand height adjustableCable management keeps everything organizedHeavy-duty casters offer maximum portability andmobilitySteel, PlasticBlackPowder Coating60X110X2.0 Thickness X990mm Length1350x683x2325mm (53.1"x26.9"x91.5"60"-100"200x200,300x300,400x200,400x400,600x400,800x400,800x600,1000x600100kg (220lbs)	CART FOR 60"-

Matal Chast	Panel T=1.8mm ; Bracket T=2.0mm (Panel	
Metal Sheet		
Thickness:	T=0.071" ; Bracket T=0.079")	
Weight		
Capacity per	5kg (11lbs)	
Layer:		
Features	Height adjustable TV mount	
	Free-tilting design for multiple monitor viewing angles	
	Quick-release spring lock adjusts height effortlessly	
	Quick assembly shelf assures easy post-installation and height adjustable	
	Cable management keeps everything organized	
	Heavy-duty casters offer maximum portability and mobility	
Specifications:		
Material:	Steel, Plastic	
Color:	Black	
Surface Finish:	Powder Coating	
Column Size:	60X110X2.0 Thickness X990mm Length	
Dimension:	1350x683x2325mm (53.1"x26.9"x91.5"	
Fit screen size:	60"-100"	
VESA	200x200,300x300,400x200,400x400,600x400,800x40	
Compatible:	0,800x600,1000x600	
Weight Capacity:	100kg (220lbs)	
Tilt Range:	+5°~ -10°	
Adjustable		
Height:	Yes	
Metal Sheet	Panel T=1.8mm ; Bracket T=2.0mm (Panel	
Thickness:	T=0.071" ; Bracket T=0.079")	
Weight		
Capacity per	5kg (11lbs)	
Layer:	5Kg (1105)	
	ATTACHED STORAGE FOR DIVISIONS (FILE STORAGE)) (6 Units)
Technology	Must be High performance 2-bay NAS server	
	Must have High-speed data transfer and must be AES-	
Features	NI hardware encryption engine	
	Must be screw less drive bay design and hot-	
	swappable support	
	Must be dual core processor	
	Must have 4K Ultra HD video transcoding that allows	
	you to transcode H.264 4K videos to 1080p and stream	
	them to high-definition TVs, digital media players,	
	mobile handsets, and computers in the required	
	format	
	Must have User Home feature that automatically	
	create a "home" folder for every user account	
	Must have Ultimate file center feature	
	Must be comprehensive network protocol support	

	including FTP, SMB2, AFP, NFS and WebDAV. With	·,
	Windows AD and LDAP integration	
	Must have Cloud Station Back up feature	
OS	Must include DiskStation Manager	
Specifications	Must include Diskstation Manager	
specifications	Intel Coloner N2060 Duel Corre 1.6 hunst un to 2.40	
CPU	Intel Celeron N3060 Dual Core 1.6 burst up to 2.48 GHz 64 bit	
System Memory	1GB	
Storage	2 Drive Bays (Hot Swappable)	
	2 x 2TB NAS HDD, Interface : SATA 6Gb/s, Cache :	
	64MB, Spin Speed : 5900RPM	
	* Max Sustained Data Transfer Rate OD (MB/s): 159	
	* Voltage Tolerance, Including Noise (5V): ±5%	
	* Voltage Tolerance, Including Noise (12V): ±10%	
	* Load/Unload tested to 600,000 cycles	
Compatible		
Drive Type	3.5" SATA III / SATA II HDD	
	2.5" SATA III / SATA II HDD	
	2.5" SATA III / SATA II SSD	
Supported RAID		
Туре	Hybrid RAID	
	Basic	
	IBOD	
	RAID 0	
	RAID 1	
RAID Migration	Basic to RAID 1	
File Sharing Capacity	Maximum Local User Accounts: 2048	
	Maximum Local Groups: 256	
	Maximum Shared Folder: 256	
	Maximum Shared Folder Sync Tasks: 4	
	Maximum Concurrent CIFS/AFP/FTP Connections:	
	256	
Snapshot Replication	Maximum Snapshots per Shared Folder: 256	
	Maximum Snapshots of all Shared Folder: 4096	
External Ports)	2 x USB 2.0 Port	
	1 x USB 3.0 Port	
	1 x eSATA Port	
	USB Copy	
Size (Height x Width x Depth)	165 mm x 108 mm x 233.2 mm	
Weight	1.25 kg	
Warranty	One year on parts and labor	
	The bidder must be an authorized reseller of the brand	
	being offered	
MI	ULTIMEDIA PROJECTOR WITH MOUNTING KIT (6 Units)	
Features	Must have ColorBoost3D & ColorSafe II Features	
1 0000103		

Decolution	Native VCA (1.024×760)	
Resolution	Native XGA (1,024 x 768)	
A	Maximum WUXGA (1,920 x 1,200)	
Aspect Ratio	4:3 (Native), 16:9 (Supported)	
Contrast Ratio	Dynamic Black 20,000:1	
Displayable	1.07 Billion Colors	
Colors		
Brightness	3,600 ANSI Lumens (Standard),	
	2,880 ANSI Lumens (ECO),	
D	(Compliant with ISO 21118 standard)	
Projection		
Screen Size	27" ~ 300" (69cm ~ 762cm)	
(Diagonal)		
Projection	1.2m ~ 11.8m (3.9' ~ 38.8')	
Distance		
Throw ratio	$1.94 \sim 2.16 (51''@2m)$	
Projection lens	F = 2.41 ~ 2.53, f = 21.85mm ~ 24.01mm, Manual Zoom & Focus	
Lamp Tyme		
Lamp Type	Osram 195W	
Lamp Life	5,000 Hours (Standard),	
	6,000 Hours (ECO),	
	10,000 Hours (ExtremeEco)*	
	Lamp Life of ExtremeEco mode is based on an	
	industrial standard of educational usage cycle, which	
	consists of 45 minutes of Full, ECO and/or Dynamic modes, 75 minutes of ExtremeEco (lowest lamp	
	power) mode and 15 minutes of Power Off mode	
Ceiling	power j mode and 15 minutes of Power on mode	
Mounting	Yes	
Capability		
Audio	3W Speaker x 1	
Keystone		
correction	+ / - 40° (Vertical, Manual)	
Weight	2.5 Kg (5.5 lbs)	
Dimensions	314 x 223 x 93 mm	
	(12.4" x 8.8" x 3.7")	1
Remote Control	IR remote control,	
	PgUp/PgDn functions	
Power Supply	AC input 100~240V,	
- on or ouppry	50/60 Hz	
Power		
Consumption	235 Watts (Standard),	
puon	195 Watts (ECO),	
	<0.5 Watts (Standby)	
Noise Level	31 dBA (Standard),	
	28 dBA (ECO)	
Input Interface	Analog RGB/Component Video (D-sub) x 1	
	HDMI (Video, Audio, HDCP) x 1	
<u> </u>	PC Audio (Stereo mini jack) x 1	
	\mathbf{I} \mathbf{I} \mathbf{I} \mathbf{I} \mathbf{I} \mathbf{I} \mathbf{I} \mathbf{I} \mathbf{I}	

Control	USB (Mini-B) x 1	
interface		
Mounting Kit	Universal Projector Ceiling mount bracket	
Accessories	10 Meter VGA Cable and HDMI cable	
Warranty	One year on parts and labor on site	
Features	Must have ColorBoost3D & ColorSafe II Features	
Resolution	Native XGA (1,024 x 768)	
	Maximum WUXGA (1,920 x 1,200)	
Aspect Ratio	4:3 (Native), 16:9 (Supported)	
Contrast Ratio	Dynamic Black 20,000:1	
Displayable	1.07 Billion Colors	
Colors		
Brightness	3,600 ANSI Lumens (Standard),	
	2,880 ANSI Lumens (ECO),	
	(Compliant with ISO 21118 standard)	
Projection		
Screen Size	27" ~ 300" (69cm ~ 762cm)	
(Diagonal)		
Projection	1.2m ~ 11.8m (3.9' ~ 38.8')	
Distance	$1.211 \sim 11.811 (3.9 \sim 38.8)$	
Throw ratio	1.94 ~ 2.16 (51"@2m)	
Drojection long	F = 2.41 ~ 2.53, f = 21.85mm ~ 24.01mm, Manual	
Projection lens	Zoom & Focus	
Lamp Type	Osram 195W	
Lamp Life	5,000 Hours (Standard),	
	6,000 Hours (ECO),	
	10,000 Hours (ExtremeEco)*	
	Lamp Life of ExtremeEco mode is based on an	
	industrial standard of educational usage cycle, which	
	consists of 45 minutes of Full, ECO and/or Dynamic	
	modes, 75 minutes of ExtremeEco (lowest lamp	
	power) mode and 15 minutes of Power Off mode	
Ceiling		
Mounting	Yes	
Capability		
Audio	3W Speaker x 1	
Keystone	40° (Vortical Manual)	
correction	+ / - 40° (Vertical, Manual)	
Weight	2.5 Kg (5.5 lbs)	
Dimensions	314 x 223 x 93 mm	
	(12.4" x 8.8" x 3.7")	
Remote Control	IR remote control,	
	PgUp/PgDn functions	
Power Supply	AC input 100~240V,	
	50/60 Hz	
Power	,	
Consumption	235 Watts (Standard),	
•	195 Watts (ECO),	
		1

	<0.5 Watts (Standby)	
Noise Level	31 dBA (Standard),	
NUISE LEVEI	28 dBA (ECO)	
Input Interface	Analog RGB/Component Video (D-sub) x 1	
Input internace	HDMI (Video, Audio, HDCP) x 1	
Control	PC Audio (Stereo mini jack) x 1	
interface	USB (Mini-B) x 1	
	Universal Drojector Coiling mount breaket	
Mounting Kit Accessories	Universal Projector Ceiling mount bracket 10 Meter VGA Cable and HDMI cable	
Warranty	One year on parts and labor on site	
T	SCANNER (AUTO DOCUMENT FEEDER) (6 Units)	
Туре	Desktop sheet-fed scanner	
Document size	Plain paper	
	U-turn path:	
	Width: 50.8 to 216mm	
	Length:70 to 356mm	
	Straight path:	
	Width: 50.8 to 216mm,	
	Length:53.9 to 356mm	
	Use Long Document mode to scan documents up to	
	3,000mm long	
	Business card	
	50 x 53.9mm or larger. Vertical feeding only	
	Plastic Card	
	53.9 x 85.5mm (ISO standard). Embossed cards can be	
	scanned	
Document	Plain paper	
thickness		
	U-turn path:	
	52 - 128g/m2 (0.06 - 0.15mm)	
	Straight path:	
	40 - 209g/m2 (0.05 - 0.25mm)	
	Business card	
	300g/m2 0.35mm or less	
	Plastic Card	
	0.76mm or less	
Document	Automatic sheet feeding	
feeding		
Feeding	6mm stack (including curls) or 30 sheets of 80g/m2	
Capacity		
Scanning	CMOS CIS	
element		
Light source	LED (Red, Green, and Blue)	
Scanning side	Simplex / Duplex / Skip Blank Page / Folio	
Scanning	Black and white, Error diffusion, Advanced Text	
modes	Enhancement, Advanced Text Enhancement II (for	
	Windows only), 256-level grayscale, 24-bit colour	

Scanning 150 x 150dpi, 200 x 200dpi, 300 x 300dpi, 400 x Resolutions 400dpi, 600 x 600dpi Scanning Speed Simplex: *2 Simplex: 200dpi) Duplex: 200dpi) Duplex: 501pm Interfaces Hi-Speed USB 2.0 Software Software Windows: Interfaces Hi-Speed USB 2.0 Software Windows: ISIS / TWAIN driver, CaptureOnTouch, Prestol BizCard,Omnipage, PaperPort, eCopy PDF Pro Office, Evernote Mac TWAIN driver, CaptureOnTouch, Prestol BizCard,Prestol PageManager, Evernote BizCard,Prestol PageManager, Evernote Dimensions (W 300 x220 x156mm with the feed tray closed Weight Approx.2.7kg Power Scanning: Consumption Scanning: Operating Eep: 1.8W or less Sleep: 1.8W or less OFF: 0.0SW or less OFF: 0.0SW or less OF 0.0SW or less OSUD STATE HARD DRIVE SOOGB 2.5" SATA (21 Units) Capacity S00 6B S	Commission of	
Scanning Speed Simplex: (A4 / LTR, Portrait, 200dpi) Duplex: 50ipm Interfaces Hi-Speed USB 2.0 Interfaces Software Windows: ISIS / TWAIN driver, CaptureOnTouch, Prestol BizCard,Omnipage, PaperPort, eCopy PDF Pro Office, Evernote Mac TWAIN driver, CaptureOnTouch, Prestol BizCard,Prestol PageManager, Evernote Dimensions (W x D x H) 300 x220 x156mm with the feed tray closed Weight Approx. 2.7kg Power Requirements Power Scanning: 12.8W or less Sleep: 1.8W or less OFF: 0.5W or less Operating environment Temperature: 10°C to 32.5°C Humidity: 20% to 80% RH SOLD STATE HARD DRIVE 500GB 2.5° SATA (21 Units) Capacity S01 GB Interface SATA 6Gb/s Interface, compatible with SATA 3Gb/s & SATA 1.5Gb/s interface Sequential	-	
*2 * Simplex: (A4 / LTR, Portrait, Z5ppm 200dpi)		400dpl, 600 x 600dpl
'2 (A4 / LTR, Portrait, 200dpi) 25ppm Duplex: 50ipm Interfaces Hi-Speed USB 2.0 Software Windows: ISIS / TWAIN driver, CaptureOnTouch, Prestol BizCard,Omnipage, PaperPort, eCopy PDF Pro Office, Evernote Mac TWAIN driver, CaptureOnTouch, Prestol BizCard,Ornnipage, PaperPort, eCopy PDF Pro Office, Evernote Mac TWAIN driver, CaptureOnTouch, Prestol BizCard,Prestol PageManager, Evernote Dimensions (W x D x H) 300 x220 x156mm with the feed tray closed Weight Power AC100 to 240V (50 / 60Hz) Power Consumption 12.8W or less Sleep: 1.8W or less OFF: 0.5W or less Operating environment Temperature: 10°C to 32.5°C Humidity: 20% to 80% RH SOLID STATE HARD DRIVE 500GB 2.5" SATA (21 Units) Capacity S00 GB Interface SATA 6Gb/s Interface, compatible with SATA 3Gb/s & SATA 1.5Gb/s interface Sequential Write Speed Up to 540 MB/s Sequential Read Sequential Write Speed <td< th=""><th>.</th><th>Simplex:</th></td<>	.	Simplex:
Portrait, 2004p)25ppm2004p)Duplex:50ipmInterfacesHi-Speed USB 2.0SoftwareWindows:ISIS / TWAIN driver, CaptureOnTouch, Presto! BizCard,Omipage, PaperPort, eCopy PDF Pro Office, EvernoteMacTWAIN driver, CaptureOnTouch, Presto! BizCard,Presto! PageManager, EvernoteDimensions (W x D x H)300 x220 x156mm with the feed tray closedPower RequirementsAC100 to 240V (50 / 60Hz)Power Consumption12.8W or lessSelep:1.8W or lessSleep:1.8W or lessOFF:0.5W or lessOperating environmentTemperature:10°C to 32.5°CHumidity:20% to 80% RH20% to 80% RHStart A GSb/s Interface, compatible with SATA 3Gb/s & SATA 1.5Gb/s interfaceKey FeaturesSequential Read SpeedVib to 540 MB/s Sequential ReadSequential Write SpeedRandom WriteRandom WriteRandom WriteRandom WriteRandom WriteRandom Write		
200dpj) Interfaces 50ipm Interfaces Hi-Speed USB 2.0 Software Software Windows: Ists / TWAIN driver, CaptureOnTouch, Prestol BizCard,Omnipage, PaperPort, eCopy PDF Pro Office, Evernote Mac Interfaces TWAIN driver, CaptureOnTouch, Prestol BizCard,Prestol PageManager, Evernote Dimensions (W X D x H) 300 x220 x156mm with the feed tray closed Weight Approx. 2.7kg Power AC100 to 240V (50 / 60Hz) Power Scanning: Consumption Scanning: 12.8W or less O Sleep: Interface 1.8W or less O Operating environment Temperature: 10°C to 32.5°C Interface Humidity: Interface 20% to 80% RH Sol GB Sol GB SaTA 6Gb/s Interface, compatible with SATA 3Gb/s & SATA 1.5Gb/s interface Key Features Sath A Gb/s Interface, compatible with SATA 3Gb/s & SATA 1.5Gb/s interface Key Featureal Up to 540 MB/s Sequential Read Read Speed SATA 6Gb/s Interface, compatible with SATA 3Gb/s & SATA 1.5Gb/s interface Random Write Random Wri	• •	
Duplex:50ipmInterfacesHi-Speed USB 2.0SoftwareWindows:ISIS / TWAIN driver, CaptureOnTouch, PrestolBizCard,Omnipage, PaperPort, eCopy PDF Pro Office, EvernoteMacTWAIN driver, CaptureOnTouch, PrestolBizCard,Prestol PageManager, EvernoteDimensions (W x D x H)300 x220 x156mm with the feed tray closedPower RequirementsAC100 to 240V (50 / 60Hz)Power Consumption12.8W or lessSleep:1.8W or lessSleep:1.8W or lessOFF:0.5W or lessOperating environment10°C to 32.5°CHumidity: 20% to 80% RH20% to 80% RHSATA 6Gb/s Interface, compatible with SATA 3Gb/s & SATA 1.5Gb/s interfaceKey FeaturesSequential write SpeedUp to 520 MB/s Sequential ReadRead SpeedUp to 520 MB/s Sequential ReadRead SpeedRandom WriteRandom WriteRandom WriteRandom WriteRandom WriteRandom WriteRandom WriteRandom WriteRandom Write	•	25ppm
50ipmInterfacesHi-Speed USB 2.0SoftwareWindows:ISIS / TWAIN driver, CaptureOnTouch, Presto! BizCard,Omnipage, PaperPort, eCopy PDF Pro Office, EvernoteMacMacTWAIN driver, CaptureOnTouch, Presto! BizCard,Presto! PageManager, EvernoteDimensions (W x D x H)300 x220 x156mm with the feed tray closedWeightApprox. 2.7kgPower RequirementsConsumption12.8W or lessSileep:1.8W or lessOFF:0.5W or lessOperating environment10°C to 32.5°CHumidity:20% to 80% RHSCLD STATE HARD DRIVE 500GB 2.5" SATA (21 Units)Capacity500 G BInterface sATA 6Gb/s Interface, compatible with SATA 3Gb/s & SATA 1.5Gb/s interfaceKey FeaturesSequential Read SpeedUp to 520 MB/s Sequential ReadRandom Read SATA 1.5Gb/s interfaceRandom Read SATA 1.5Gb/s interfaceRandom WriteRandom WriteRandom WriteRandom WriteRandom WriteRandom WriteRandom WriteRandom Write	200dpi)	
Interfaces Hi-Speed USB 2.0 Software Windows: ISIS / TWAIN driver, CaptureOnTouch, Prestol BizCard,Omnipage, PaperPort, eCopy PDF Pro Office, Evernote Mac 1 TWAIN driver, CaptureOnTouch, Prestol BizCard,Prestol PageManager, Evernote Dimensions (W x D x H) 300 x220 x156mm with the feed tray closed Weight Approx. 2.7kg Power Ac100 to 240V (50 / 60Hz) Requirements Scanning: Power Scanning: 2.8W or less 12.8W or less Sleep: 1.8W or less 0FF: 0 0.5W or less 0 OFF: 0 0.5W or less 0 0FF: 0 0.5W or less 0 0FF: 0 0.5W or less		
Software Windows: ISIS / TWAIN driver, CaptureOnTouch, Prestol BizCard,Omnipage, PaperPort, eCopy PDF Pro Office, Evernote Mac TWAIN driver, CaptureOnTouch, Prestol BizCard,Prestol PageManager, Evernote Dimensions (W x D x H) 300 x220 x156mm with the feed tray closed Weight Approx. 2.7kg Power Requirements Power Consumption 12.8W or less Sleep: 1.8W or less OFF: 0.5W or less 0FF: 0.5W or less 05W to 80% RH 20% to 80% RH SOLID STATE HARD DRIVE 500GB 2.5" SATA (21 Units) Capacity 500 GB SATA 6Gb/s Interface, compatible with SATA 3Gb/s & SATA 1.5Gb/s interface Key Features Sequential Up to 520 MB/s Sequential Read Sequential Read Speed Up to 520 MB/s Sequential Write Write Speed SATA 6Gb/s Interface, compa		^
ISIS / TWAIN driver, CaptureOnTouch, Prestol BizCard,Omnipage, PaperPort, eCopy PDF Pro Office, Evernote Mac TWAIN driver, CaptureOnTouch, Prestol BizCard,Prestol PageManager, Evernote Dimensions (W x D x H) 300 x220 x156mm with the feed tray closed Weight Approx. 2.7kg Power Requirements Power Scanning: 12.8W or less Sleep: 1.8W or less OFF: 0.5W or less OFF: 0.5W or less OFF: 0.5W or less Operating environment To°c to 32.5°C Humidity: 20% to 80% RH SOLID STATE HARD DRIVE SOUGB 2.5" SATA (21 Units) Capacity 500 GB Interface SATA 6Gb/s Interface, compatible with SATA 3Gb/s & SATA 1.5Gb/s interface Key Features Sequential Up to 540 MB/s Sequential Read Read Speed SATA 6Gb/s Interface, compatible with SATA 3Gb/s & SATA 1.5Gb/s interface Random Write SATA 6Gb/s Interface Random Write Random Write		
BizCard,Omnipage, PaperPort, eCopy PDF Pro Office, EvernoteMacMacTWAIN driver, CaptureOnTouch, Presto! BizCard,Presto! PageManager, EvernoteDimensions (W x D x H)300 x220 x156mm with the feed tray closedWeightApprox. 2.7kgPower RequirementsAC100 to 240V (50 / 60Hz)Power ConsumptionScanning:12.8W or lessSleep:1.8W or less0.5W to 80% RH20% to 80% RH5ULID STATE HARD DRIVE 500GB 2.5" SATA (21 Units)Capacity500 GBSATA 616b/s Interface, compatible with SATA 3Gb/s & SATA 1.5Gb/s interfaceKey FeaturesSequential Read SpeedUp to 520 MB/s Sequential ReadWrite SpeedSATA 66b/s Interface, compatible with SATA 3Gb/s & SpeedSATA 1.5Gb/s interfaceRandom WriteRandom WriteRandom WriteRandom WriteRandom WriteRandom WriteRandom WriteRandom WriteRandom WriteRandom Write	Software	
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XDX H)Approx. 2.7kgWeightApprox. 2.7kgPower RequirementsAC100 to 240V (50 / 60Hz)Power ConsumptionScanning:I.2.8W or lessI.2.8W or lessSleep:I.3.8W or lessOPF:I.3.8W or lessOperating environmentTemperature:Io°C to 32.5°CIIo°C to 32.5°CHumidity:IIO°C to 32.5°C20% to 80% RHIIO°C to 32.5°CSolution STATE HARD DRIVE 500GB 2.5" SATA (21 Units)Capacity500 GBSolution STATE HARD DRIVE 500GB 2.5" SATA (21 Units)Capacity500 GBInterfaceSATA 6Gb/s Interface, compatible with SATA 3Gb/s & SATA 1.5Gb/s interfaceKey FeaturesIup to 540 MB/s Sequential ReadSequential Write SpeedUp to 520 MB/s Sequential WriteRandom Read SpeedSATA 6Gb/s Interface, compatible with SATA 3Gb/s & SATA 1.5Gb/s interfaceRandom WriteRandom Write (4KB, QD32):Up to 90,000 IOPSSpeedRandom Write	Dimensions (W	300 x220 x156mm with the feed tray closed
Power RequirementsAC100 to 240V (50 / 60Hz)Power ConsumptionScanning:12.8W or less		
RequirementsAC100 to 240V (50 / 60Hz)Power ConsumptionScanning:12.8W or less	Weight	Approx. 2.7kg
RequirementsConstant of the second secon	Power	$AC100 \pm 0.240V (50.760Hz)$
ConsumptionScanning:12.8W or less	Requirements	
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Speed Random Write	-	· · · · · · · · · · · · · · · · · · ·
	Speed	
memory speea Samsung 32 layer 3D V-NANDSamsung 512 MB Low	Memory Speed	Samsung 32 layer 3D V-NANDSamsung 512 MB Low

	Power DDR3 SDRAM
Controller	Samsung MGX Controller
Trim Support	Yes
	AES 256 bit Encryption (Class 0) , TCG/Opal, IEEE1667
AES Encryption	(Encrypted drive)
Internal	
Storage	Yes
Temperature	V.
proof	Yes
General	
Power	
Consumption	50 MW
(W)	
Voltage	5V ± 5% Allowable voltage
Reliability	2 Million Hours Reliability (MTBF)
(MTBF)	
Environmental	
Specs	
Operating	32ºF - 158ºF
Temperature	
Form Factor	2.5" SATA III "
Dimensions (W	3.94" x 2.75" x 0.27"
x D x H)	0.1
Weight	0.1
Warranty	5 Years Limited Warranty or 150TBW Limited Warranty
	BARCODE PRINTER (23 Units)
Standard	
Standard	Must be 32 bit RISC processor
Features:	
Features:	Must have Co-resident EPL and ZPL programming
Features:	Must have Co-resident EPL and ZPL programming languages (emulator is not allowed)
Features:	Must have Co-resident EPL and ZPL programming languages (emulator is not allowed) Must have Triple connectivity: Serial, USB and parallel
Features:	languages (emulator is not allowed)
Features:	languages (emulator is not allowed) Must have Triple connectivity: Serial, USB and parallel
Features:	languages (emulator is not allowed)Must have Triple connectivity: Serial, USB and parallelPrint methods: Thermal transfer and direct thermal
Features:	languages (emulator is not allowed)Must have Triple connectivity: Serial, USB and parallelPrint methods: Thermal transfer and direct thermalmodes>> GC420t — thermal transfer and direct thermal* Construction: Dual-wall frame, reinforced plastic
Features:	languages (emulator is not allowed)Must have Triple connectivity: Serial, USB and parallelPrint methods: Thermal transfer and direct thermalmodes>> GC420t — thermal transfer and direct thermal* Construction: Dual-wall frame, reinforced plastic* OpenACCESS™ for easy media and ribbon loading
	languages (emulator is not allowed)Must have Triple connectivity: Serial, USB and parallelPrint methods: Thermal transfer and direct thermalmodes>> GC420t — thermal transfer and direct thermal* Construction: Dual-wall frame, reinforced plastic* OpenACCESS™ for easy media and ribbon loading* Certified Microsoft ® Windows ® drivers
Resolution	languages (emulator is not allowed)Must have Triple connectivity: Serial, USB and parallelPrint methods: Thermal transfer and direct thermalmodes>> GC420t — thermal transfer and direct thermal* Construction: Dual-wall frame, reinforced plastic* OpenACCESS™ for easy media and ribbon loading* Certified Microsoft ® Windows ® drivers203 dpi/ 8 dots per mm
Resolution Memory	languages (emulator is not allowed)Must have Triple connectivity: Serial, USB and parallelPrint methods: Thermal transfer and direct thermalmodes>> GC420t — thermal transfer and direct thermal* Construction: Dual-wall frame, reinforced plastic* OpenACCESS™ for easy media and ribbon loading* Certified Microsoft ® Windows ® drivers203 dpi/ 8 dots per mm8 MB Flash, 8 MB SDRAM (standard)
Resolution Memory Print Width	languages (emulator is not allowed)Must have Triple connectivity: Serial, USB and parallelPrint methods: Thermal transfer and direct thermalmodes>> GC420t — thermal transfer and direct thermal* Construction: Dual-wall frame, reinforced plastic* OpenACCESS™ for easy media and ribbon loading* Certified Microsoft ® Windows ® drivers203 dpi/ 8 dots per mm
Resolution Memory Print Width Maximum Print	languages (emulator is not allowed) Must have Triple connectivity: Serial, USB and parallel Print methods: Thermal transfer and direct thermal modes >> GC420t — thermal transfer and direct thermal * Construction: Dual-wall frame, reinforced plastic * OpenACCESS™ for easy media and ribbon loading * Certified Microsoft ® Windows ® drivers 203 dpi/ 8 dots per mm 8 MB Flash, 8 MB SDRAM (standard) 4.09"/104 mm
Resolution Memory Print Width Maximum Print Length	languages (emulator is not allowed)Must have Triple connectivity: Serial, USB and parallelPrint methods: Thermal transfer and direct thermalmodes>> GC420t — thermal transfer and direct thermal* Construction: Dual-wall frame, reinforced plastic* OpenACCESS™ for easy media and ribbon loading* Certified Microsoft ® Windows ® drivers203 dpi/ 8 dots per mm8 MB Flash, 8 MB SDRAM (standard)
Resolution Memory Print Width Maximum Print Length Maximum Print	languages (emulator is not allowed)Must have Triple connectivity: Serial, USB and parallelPrint methods: Thermal transfer and direct thermalmodes>> GC420t — thermal transfer and direct thermal* Construction: Dual-wall frame, reinforced plastic* OpenACCESS™ for easy media and ribbon loading* Certified Microsoft ® Windows ® drivers203 dpi/ 8 dots per mm8 MB Flash, 8 MB SDRAM (standard)4.09"/104 mm39"/990 mm
Resolution Memory Print Width Maximum Print Length Maximum Print Speed	languages (emulator is not allowed)Must have Triple connectivity: Serial, USB and parallelPrint methods: Thermal transfer and direct thermalmodes>> GC420t — thermal transfer and direct thermal* Construction: Dual-wall frame, reinforced plastic* OpenACCESS™ for easy media and ribbon loading* Certified Microsoft ® Windows ® drivers203 dpi/ 8 dots per mm8 MB Flash, 8 MB SDRAM (standard)4.09"/104 mm39"/990 mm4"/102 mm per second
Resolution Memory Print Width Maximum Print Length Maximum Print Speed Media Sensors	languages (emulator is not allowed)Must have Triple connectivity: Serial, USB and parallelPrint methods: Thermal transfer and direct thermalmodes>> GC420t — thermal transfer and direct thermal* Construction: Dual-wall frame, reinforced plastic* OpenACCESS™ for easy media and ribbon loading* Certified Microsoft ® Windows ® drivers203 dpi/ 8 dots per mm8 MB Flash, 8 MB SDRAM (standard)4.09"/104 mm39"/990 mm4"/102 mm per secondStandard: Fixed reflective and transmissive sensors
Resolution Memory Print Width Maximum Print Length Maximum Print Speed	languages (emulator is not allowed)Must have Triple connectivity: Serial, USB and parallelPrint methods: Thermal transfer and direct thermalmodes>> GC420t — thermal transfer and direct thermal* Construction: Dual-wall frame, reinforced plastic* OpenACCESS™ for easy media and ribbon loading* Certified Microsoft ® Windows ® drivers203 dpi/ 8 dots per mm8 MB Flash, 8 MB SDRAM (standard)4.09"/104 mm39"/990 mm4"/102 mm per second

Maximum	5"/127 mm 0.D. on a 1.00"/25.4 mm, 1.5"/38 mm I.D.	
media roll size	core	
Media thickness	0.003"/0.08 mm to 0.007"/0.18 mm	
Media types	Roll-fed or fan-fed, die cut or continuous direct thermal labels with or without black mark, tag stock, continuous receipt paper, wristbands, and optional liner-free direct thermal media	
Ribbon Characteristics:		
Outside diameter	1.34"/34 mm	
Standard length	244' (74 m)	
Ratio	1:1 media to roll to ribbon	
Width	1.33"/33.8 mm to 4.3"/110 mm	
Core I.D.	0.5"/12.7 mm	
Firmware:	* The printer must have Powerful programming language that lets printers run stand-alone applications, connect to peripherals, and much more (option)	
	 * The printer must have Programming utility that makes it dramatically easier for programmers to create and test complex ZBI 2.0 programs and distribute them to the printer * The printer must have Programming Language that 	
	provides sophisticated label formatting and printer control and is compatible with tabletop and mobile printers	
	* The printer must have Eltron Programming Language that simplifies label formatting and enables format compatibility with legacy applications Line Mode support (GK888d) enables format	
	Line Mode support (GK888d) enables format compatibility with legacy applications	
Fonts/Graphics /Symbologies:	• 16 resident expandable ZPL fonts	
	One resident scalable ZPL font	
	• 5 resident expandable EPL2 fonts	
	Supports user-defined fonts and graphics — including custom logos	
Bar Code Symbologies:	• Bar Code Ratios: 2:1 (non-rotated) and 3:1	
Standard Features:	Must be 32 bit RISC processor	
	Must have Co-resident EPL and ZPL programming languages (emulator is not allowed) Must have Triple connectivity: Serial, USB and parallel	
	Print methods: Thermal transfer and direct thermal modes	

	» GC420t — thermal transfer and direct thermal	
	* Construction: Dual-wall frame, reinforced plastic	
	* OpenACCESS [™] for easy media and ribbon loading * Certified Microsoft ® Windows ® drivers	
Resolution		
	203 dpi/ 8 dots per mm 8 MB Flash, 8 MB SDRAM (standard)	
Memory Print Width	4.09"/104 mm	
Maximum Print	4.09 / 104 IIIII	
Length	39"/990 mm	
Maximum Print		
Speed	4"/102 mm per second	
Media Sensors	Standard: Fixed reflective and transmissive sensors	
Media width	1.00"/25.4 mm to 4.24"/108 mm	
Media length	0.38"/9.6 mm to 39"/990 mm	
Maximum	5"/127 mm 0.D. on a 1.00"/25.4 mm, 1.5"/38 mm I.D.	
media roll size	core	
Media		
thickness	0.003"/0.08 mm to 0.007"/0.18 mm	
	Roll-fed or fan-fed, die cut or continuous direct	
Madiatumaa	thermal labels with or without black mark, tag stock,	
Media types	continuous receipt paper, wristbands, and optional	
	liner-free direct thermal media	
Ribbon		
Characteristics:		
Outside	1.34"/34 mm	
diameter	,	
Standard length	244' (74 m)	
Ratio	1:1 media to roll to ribbon	
Width	1.33"/33.8 mm to 4.3"/110 mm	
Core I.D.	0.5"/12.7 mm	
	* The printer must have Powerful programming	
Firmware:	language that lets printers run stand-alone	
	applications, connect to peripherals, and much more	
	(option)	
	* The printer must have Programming utility that	
	makes it dramatically easier for programmers to	
	create and test complex ZBI 2.0 programs and distribute them to the printer	
	distribute them to the printer * The printer must have Programming Language that	
	provides sophisticated label formatting and printer	
	control and is compatible with tabletop and mobile	
	printers	
	* The printer must have Eltron Programming	
	Language that simplifies label formatting and enables	
	format compatibility with legacy applications	
	Line Mode support (GK888d) enables format	
	compatibility with legacy applications	
Fonts/Graphics	• 16 resident expandable ZPL fonts	
		I

/Symbologies:	
	One resident scalable ZPL font
	• 5 resident expandable EPL2 fonts
	Supports user-defined fonts and graphics —
	including custom logos
Bar Code Symbologies:	• Bar Code Ratios: 2:1 (non-rotated) and 3:1
Warranty	One year on parts and labor
	BARCODE/QR CODE SCANNER (6 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
D	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
Dimensions	cm W)
Warranty	One year on parts and labor
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	
Dimensions	cm W)	
Warranty	One year on parts and labor	
HI	-RESOLUTION DOCUMENT SCANNER (75PPM) (2 Units	
Туре	Must be Desktop sheet-fed scanner	
Document	Must be Automatic or manual sheet feeding	
Feeding		
Document size		
Width	Must be 50.8 - 305mm	
Length	Must be 70 - 432mm	
Long Document	Must be up to 3,000mm	
Mode:		
Document		
thickness and		
weight Continuous		
Feeding	Must be 20 - 209g/m2, 0.04 - 0.25mm	
Non-Separation		
Mode	Must be 20 - 255 g/m2, 0.04 - 0.3mm	
Feeding		
Capacity	Must be 48mm stack or 500 sheets of 80 g/m2	
Scanning	Must be 3-line CMOS CIS	
Element		
Light Source	Must be LED (red, green, and blue)	
Scanning Side	Must be Simplex / Duplex	
	Black and White, Error Diffusion, Advanced Text	
Scanning Modes	Enhancement, Advanced Text Enhancement II, 256-level Grayscale, 24-bit Color, Auto Colour Detection	
Scanning	Grayscale, 24-bit Color, Auto Colour Detection	
Resolutions	150 x 150dpi, 200 x 200dpi, 240 x 240dpi, 300 x 300dpi,	
Resolutions	400 x 400dpi, 600 x 600dpi	
Scanning		
speed*1 (A4 /		
LTR, 200dpi)		
	Portrait: DR-G1100: 75ppm (Simplex) / 150ipm	
B&W	(Duplex) Landscape	
	Landscape: DR-G1100: 100ppm (Simplex) / 200ipm	
	(Duplex)	

	Boutwoit DD (1100, 75 mm (Simular)) / 150 mm	
Grayscale	Portrait: DR-G1100: 75ppm (Simplex) / 150ipm (Duplex)	
	Landscape: DR-G1100: 100ppm (Simplex) / 200ipm (Duplex)	
	Portrait: DR-G1100: 75ppm (Simplex) / 150ipm	
Colour	(Duplex)	
	Landscape: DR-G1100: 100ppm (Simplex) / 200ipm	
	(Duplex)	
Interface	Hi-Speed USB 2.0	
Technical		
Specification		
Scanner driver	ISIS / TWAIN	
Useful functions	Job Function, Ultrasonic Double-Feed Detection, Staple Detection, Text Enhancement, Dropout and Color Enhancement, Auto Page Size Detection, 3-D Color Correction, Image Rotation, Skip Blank Page, Edge Emphasis, Moiré Removal, Prevent Bleed Through / Remove Background, Contrast Adjustment, Shading Correction, Brightness Adjustment, Deskew, Border Removal, Scanning Side Selection, Scan Area Settings, Add-on Settings, Text Orientation Recognition, Punch Hole Removal, Folio Scan, Unnecessary dots removal, Notch removal, Background Smoothing, Character Emphasis, Count Only Mode, Verify Scan, Rapid Recovery System, MultiStream [™]	
Power		
requirements	AC220-240V (50 / 60Hz)	
Power Consumption	220 - 240V: 94.3W (Scanning), 1.7W (Sleep mode)	
Operating	10 - 32.5°C	
Environment		
Dimonsions	Humidity: 20 - 80% RH	
Dimensions	Feed trays closed: 480 x 535 x 315mm	
(W x D x H) Weight	Approx. 22.8kg	
Warranty	One year on parts and labor	
warranty	VOIP PHONE WITH ADAPTOR (93 Units)	
Technology	Must be Business Media Phone	
reennonogy	Must have 2 programmable lines/registrations	
	Must have 2.5" Graphical backlit LCD display with 5-	
	way navigation cluster for control	
<u> </u>	Must be HD voice and Acoustic Fence Technology	
	Must have 2 x Ethernet 10/100 for network pass through	
	Must have RJ9 Headset support with electronic hook switch	
	Must have full duplex Type 1-compliant speakerphone features	
	Must be designed for interoperability and is certified	

	to interoperate with the industry's broadest range of	
	PBX systems and SIP call control platforms	
	Must have Zero Touch Provisioning and web-based	
	configuration tool	
	Must be simple to deploy, easy to administer,	
User interface	upgrade, and maintain	
features	Must have Voicemail support	
leatures	Reversible desk stand/wall mount	
	Unicode UTF-8-character support	
Feature Keys	4 context-sensitive "soft" keys	
reature Keys	2-line keys with bi-color (red/green) LED	
	"Home" feature key	
	4-way navigation key cluster with center "Select" key	
	2 volume control keys	
	Dedicated hold key	
	Dedicated headset key Dedicated hands free speakerphone key	
	Dedicated hands-free speakerphone key	
Call handling	Dedicated microphone mute key	
Call handling features	Shared call/bridged line appearance	
	Distinctive incoming call treatment/call waiting	
	Call timer and call waiting	
	Call transfer, hold, divert (forward), pickup	
	Called, calling, connected party information	
	Local three-way audio conferencing	
	One-touch speed dial, redial	
	Remote missed call notification	
	Do not disturb function	
	Electronic hook switch capable	
	Local configurable digit map/dial plan	
Network and provisioning	SIP Protocol Support	
1 0	SDP	
	IETF SIP (RFC 3261 and companion RFCs)	
	Two-port Ethernet switch	
	10/100Base-TX across LAN and PC Ports	
	Manual or dynamic host configuration protocol	
	(DHCP) network setup	
	Time and date synchronization using SNTP	
	FTP/FTPS/TFTP/HTTP/HTTPS server based central	
	provisioning for mass deployments	
	Provisioning and call server redundancy supported	
	QoS Support–IEEE 802.1p/Q tagging (VLAN), Layer 3	
	TOS, and DHCP	
	Network Address Translation (NAT) – support for	
	static configuration and "Keep-Alive" SIP signaling	
	RTCP and RTP support	

	Event logging	
	Syslog	
	Hardware diagnostics	
	Status and statistics reporting	
Security	802.1X Authentication and EAPOL	
	Media encryption via SRTP	
	Transport Layer Security (TLS)	
	Encrypted configuration files	
	Digest authentication	
	Password login	
	Support for URL syntax with password for boot	
	server address	
	HTTPS secure provisioning	
-	Support for signed software executables	
Power Adaptor	Must include External Universal AC Adapter 12V	
	Must be One year with premier service program that	
	provides Service Partners with technical telephone	
Warranty	support, advance parts replacement, software	
Warrancy	upgrades & updates, and access to Polycom's	
	enhanced support portal. The SLA must be included	
-	on the technical requirements	
	The bidder must be an authorized reseller of the	
	brand being offered.	

Lot 2: SERVER AND STORAGE UPGRADE		
Item	Specifications	Statement of Compliance
	BLADE SERVER SYSTEM (1 Unit)	
Compatibility	Blade Chassis System must be compatible with	
	existing Blade Chassis of the OSG (IBM Blade Server	
	E) including its existing Storage Area Network (DS	
	3400 and Dell VNXe System). New and existing SAN	
	should be seen by the New Blade Chassis System.	
	CHASSIS (1 Unit)	
Form Factor	Blade with 10U chassis that can accommodate up to	
	14x half-width horizontal nodes. Supports mixing 2P,	
	4P and 8P nodes on the same chassis	
Midplane	Must have passive midplane	
Management	Blade Chassis should have 2x redundant management	
Module	module	
Network Switch	Blade Chassis should have 2x network switch that	
	includes 14 internal 10 GbE ports enabled (one to	
	each compute node) and 10 external 10 GbE ports	
	enabled with options to upgrade (per Switch). With	
	10x initially activated ports with 10x 10Gb base-T	
	SFP+ Transceivers and 10x 1GbE Transceivers.	
	Standard with Flexible Port Mapping capability.	

SAN Switch	Blade Chassis should have 2x SAN switch that	
	includes 28 internal full duplex 16/8Gb FC ports (per	
	Switch). 24 external ports for 16 Gb or 8 Gb SFP+	
	transceivers supporting 4 Gb, 8 Gb, and 16 Gb port	
	speeds (per Switch). With 12x initially activated	
	external ports per switch with 12x 16Gb and 12x 8Gb	
	FC Transceivers.	
Fans and Cooling	Blade Chassis should have 10x redundant Fans.	
	Should be capable of Zoned Adaptive Cooling with	
	fans can be independently slowed or sped up.	
Power Supply	Blade Chassis should have 6x redundant 2500W PSU	
Power	Must be 12,900 watts maximum	
Consumption		
Power Cable	Blade Chassis should have 6x 2.5m, 16A/100-240V,	
	C19 to IEC 320-C20 Rack Power Cable	
Warranty	3 Years Parts, Labour, On Site, 4Hr Response Time,	
	24x7	
Implementation	Installation and configuration must be included	
Services		
	BLADE SERVER NODE (4 Units)	
Form Factor	Half-width	
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	Installation and configuration must be included	
Services		
	STORAGE AREA NETWORK (1 Unit)	
Form Factor	2U Rackmount SAN	
Controller	16 GB per system (8 GB per controller module)	
memory		
Controller	Dual Redundant Converged Network Controller	
RAID Levels	RAID 1, 5, 6, and 10	
Storage	3x 400GB SSD and 15x 1.2TB HDD	
Ports	4x SFP/SFP+ host ports with two built-in dual-port	
	CNCs (each port on the same CNC must have the same	
	connectivity type; different CNCs might have different	
	connectivity types) and 1x 1GbE ports for	
	management per Controller.	
Transceivers	8x 16GB FC SFP+ Transceivers	
Features	SSD Tierring	
		1

PerformanceDual controller configuration Up to 250000 random disk read IOPS Up to 7 GBps sequential disk read throughput Up to 6 GBps sequential disk write throughputCoolingRedundant cooling with two fans built into power and cooling modules (PCMs).Power supplyTwo redundant hot-swap 580 W AC power supplies built into PCMs.Management interfaces1 GbE port (UTP, RJ-45) and serial port (Mini-USB) on the controller modules. Web-based interface (WBI);	
Image: Provide with the controller modules.Up to 7 GBps sequential disk read throughput Up to 6 GBps sequential disk write throughputCoolingRedundant cooling with two fans built into power and cooling modules (PCMs).Power supplyTwo redundant hot-swap 580 W AC power supplies built into PCMs.Management interfaces1 GbE port (UTP, RJ-45) and serial port (Mini-USB) on the controller modules. Web-based interface (WBI);	
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interfaces the controller modules. Web-based interface (WBI);	
Tolnot XXII or Direct Connect (ICD (The SNMD and	
Telnet, SSH, or Direct Connect USB CLI; SNMP and email notifications.	
Cables 2x 4.3m, 10A/100-250V, C13 to IEC 320-C14 Rack	
Power Cable and 8x 5m LC-LC OM3 MMF Cable	
Warranty3Yr 24x7 4Hr Response + Drive Retention	
Implementation Installation and configuration must be included	
Services	
Misc	
FC HBA 1x Dual port 8Gb FC HBA for x3550 M5 (5463)	
NIC1x Dual port 000 F0 HbHH01 x5500 M5 (5165)	
ImplementationInstallation and configuration must be included	
Services	
Scope of Work	
Blade Chassis	
Unboxing and initial setup	
Racking	
Assembly of Power Supply and Cooling Fans	
Initial Configuration of Chassis Management Module	
(CMM)	
Initial Configuration of Flex Network Switch	
Initial Configuration of Flex SAN Switch with SAN	
Zoning	
Installation of Server Nodes	
Knowledge Transfer	
Server Nodes Generation Server Nodes	
Configuration of Server Nodes	
RAID Configuration	
OS Installation (Windows Only)	
Knowledge Transfer	
Storage	
Unboxing and initial setup	
Racking	
Create Storage Pool	
Create Host	_
Mount volumes to Host	
Testing	
Knowledge Transfer	

Existing x3550 M5	
	Removal of 2x Single port FC HBA
	Installation of 1x Dual port FC HBA
	Installation of 1x Dual port 10GbBase-T NIC
	PC SERVER (1 Unit)
Case Type	Full Tower
M/B	
Compatibility	E-ATX (12" x 13"), ATX, Micro-ATX, Mini-ITX
Expansion Slots	PCI-E x 8
Maximum Compatibility	VGA Card Length: 370mm
Front Ports	At least 2x USB 3.0
Power Supply Compatibility	PSII: ATX12V and EPS12V
	- Length up to 230mm
	MOTHERBOARD (1 Unit)
Chipset	Intel B250
CPU SUPPORT	7th & 6th Gen Intel LGA 1151 Processor
MEMORY	Support Dual Channel DDR4 2400/ 2133/ 1866 MHz
	2 x DDR4 DIMM Memory Slot
	Max. Supports up to 32GB Memory
EXPANSION SLOT	1 x PCI-E 3.0 x16 Slot
	11 x PCI-E 3.0 x1 Slot
STORAGE	6 x SATA3 Connector
USB	4 x USB 3.0 Port
	1 x USB 3.0 Header
	2 x USB 2.0 Port
	2 x USB 2.0 Port (only 5V power, up to 1.5A) 2 x USB 2.0 Header
LAN	
LAN	Realtek RTL8111H - 10/100/1000 ControllerSupport Super LAN Surge Protection
CODEC	Realtek ALC887 8-Channel HD Audio
	Support HD Audio
REAR I/O	1 x PS/2 Mouse
/ -	1 x PS/2 Keyboard
	4 x USB 3.0 Port
	2 x USB 2.0 Port
	2 x USB 2.0 Port (only 5V power, up to 1.5A)
	1 x DVI-D Connector, resolution up to 1920 x 1200
	@60Hz
	1 x RJ-45 Port
	3 x Audio Connector
INTERNAL I/O	1 x USB 3.0 Header
	2 x USB 2.0 Header
	6 x SATA3 6Gb/s Connector
	1 x SATA Power Connector (for rear USB power

	enhancement)	
	1 x Front Audio Header	
	1 x Front Panel Header	
	1 x CPU Fan Header	
	2 x System Fan Header	
	1 x Serial Header	
	2 x PCI-E 12V 4Pin Connector	
DIMENCION		
DIMENSION	ATX Form Factor Dimension: 29.5cm x 21cm (W x L)	
OS SUPPORT	Supports Windows 10(x64) for Intel 7th Generation Processor	
FEATURES	Supports 100% Solid capacitor	
	Supports Charger Booster	
	Supports BIOS Online Update	
	CPU SPECIFICATIONS (i5-7600K) (1 Unit)	
Performance	# of Cores 4	
	# of Threads 4	
	Processor Base Frequency 3.80 GHz	
	Max Turbo Frequency 4.20 GHz	
	Cache 6 MB SmartCache	
	Bus Speed 8 GT/s DMI3	
	# of QPI Links 0	
	TDP 91 W	
Memory	Max Memory Size (dependent on memory type) 64	
Specifications	GB	
•	Memory Types DDR4-2133/2400, DDR3L-	
	1333/1600 @ 1.35V	
	Max # of Memory Channels 2	
	ECC Memory Supported ‡ No	
Processor Graphics	Processor Graphics ‡ Intel® HD Graphics 630	
•	Graphics Base Frequency 350 MHz	
	Graphics Max Dynamic Frequency 1.15 GHz	
	Graphics Video Max Memory 64 GB	
	4K Support Yes, at 60Hz	
	Max Resolution (HDMI 1.4)‡ 4096x2304@24Hz	
	Max Resolution (DP)‡ 4096x2304@60Hz	
	Max Resolution (eDP - Integrated Flat Panel)‡	
	4096x2304@60Hz	
	DirectX* Support 12	
	OpenGL* Support 4.4	
	Intel® Quick Sync Video Yes	
	Intel® InTru™ 3D Technology Yes	
	Intel® Clear Video HD Technology Yes	
	Intel® Clear Video Technology Yes	
	# of Displays Supported ‡ 3	
	Device ID 0x5912	
Expansion	Scalability 1S Only	
Options	Scalability 15 Olly	

	PCI Express Revision 3.0
	PCI Express Configurations ‡ Up to 1x16, 2x8,
	1x8+2x4
	Max # of PCI Express Lanes 16
Package	
Specifications	Sockets Supported FCLGA1151
■	Max CPU Configuration 1
	Thermal Solution Specification PCG 2015C (65W)
	TJUNCTION 100°C
	Package Size 37.5mm x 37.5mm
	Low Halogen Options Available See MDDS
Advanced Technologies	Intel® Optane™ Memory Supported ‡ Yes
	Intel® Turbo Boost Technology ‡ 2.0
	Intel® vPro™ Technology ‡ No
	Intel® Hyper-Threading Technology ‡ No
	Intel® Virtualization Technology (VT-x) ‡ Yes
	Intel® Virtualization Technology for Directed I/O
	(VT-d) ‡ Yes
	Intel® VT-x with Extended Page Tables (EPT) ‡ Yes
	Intel® TSX-NI Yes
	Intel® 64 ‡ Yes
	Instruction Set 64-bit
	Instruction Set Extensions Intel® SSE4.1, Intel®
	SSE4.2, Intel® AVX2
	Idle States Yes
	Enhanced Intel SpeedStep® Technology Yes
	Thermal Monitoring Technologies Yes
	Intel® Identity Protection Technology ‡ Yes
	Intel® Stable Image Platform Program (SIPP) No
Security & Reliability	Intel® AES New Instructions Yes
	Secure Key Yes
	Intel® Software Guard Extensions (Intel® SGX) Yes
	Intel® Memory Protection Extensions (Intel® MPX)
	Yes
	Intel® OS Guard Yes
	Execute Disable Bit ‡ Yes
	Intel® Boot Guard Yes
<u>RAM</u> SPECIFICATIONS	8GB DDR4 Compatible w/ mother board & cpu
6X USB 3.0 PCI	-E EXPRESS 1X TO 16X EXTENDER RISER CARD ADAPTER POWER CABLE (6 Units)
Power	Sata 15 PIN POWER / 6 PIN POWER CABLE / MOLEX
Connector	4 PIN
The board size	130mm * 50mm
USB Cable	600mm
Length	600mm

Compatible use	With any graphics cards	
SSD	1 unit	
SPECIFICATIONS		
Capacity	At least 120GB	
Form Factor	2.5"	
NAND Flash	3D NAND	
Dimensions (L x	100.45 x 69.85 x 7mm	
W x H)		
Weight	47.5g	
Interface	SATA 6Gb/s	
Sequential R/W		
performance	Up to 520 / 450MB/s	
(max)	15000 /0 5	
Shock resistance	1500G / 0.5ms	
MTBF	2,000,000 hours	
Computa Unita	6x GPU SPECIFICATIONS (RX 580) (6 Units) 36	
Compute Units		
Base Frequency	Up to 1257 MHz Up to 1340 MHz	
Boost Frequency Peak Pixel Fill-	UP to 1340 MHZ	
Rate	Up to 42.88 GP/s	
Peak Texture		
Fill-Rate	Up to 192.96 GT/s	
Max		
Performance	Up to 6.2 TFLOPs	
ROPs	32	
Stream		
Processors	2304	
Texture Units	144	
Transistor Count	5.7 B	
Memory Speed (Effective)	8 Gbps	
Max Memory Size	8 GB	
Memory Type (GPU)	GDDR5	
Memory Interface	256-bit	
Max. Memory Bandwidth	256 GB/s	
Features	Crossfire Technology	
	Vulkan API	
	2x PSU SPECIFICATIONS	2 Units
Wattage	1200 Watts	
Form Factor	ATX 12 V	
Features	Full Modular	
	80 PLUS Platinum Certified	
	Multi-GPU setup	

Lot 3: LAN AND WIRELESS UPGRADE		
Item	Specifications	Statement of Compliance
WIRELESS A	CCESS POINT COMPATIBLE WITH EXISTING ACCESS P	OINT AND
	CONTROLLER (ARUBA) (20 Units)	
Specifications	Must be Wave 2 access points that deliver high	
	performance and superb user experience for medium	
	density environments	
	Must have 3x3:3SS MU-MIMO capability	
	Must provide simultaneous data transmission to	
	multiple devices (up to two)	
	Must have advanced ClientMatch radio management	
	technology Must have RF management features	
	Must have KF management reactives Must be Dual Radio 802.11ac Access Point	
	Must be buar Radio 802.11ac Access Form	
	Must have Advanced Cellular Coexistence (ACC) that	
	minimize interference from 3G/4G cellular networks,	
	distributed antenna systems and commercial small cell/	
	femtocell equipment	
	Must support priority handling and policy enforcement	
	for unified communication apps, including Microsoft	
	Skype for Business with encrypted videoconferencing,	
	voice, chat and desktop sharing	
	Must have Adaptive Radio Management (ARM)	
	technology that automatically assigns channel and	
	power settings	
	The APs must be configured to provide part-time or	
	dedicated air monitoring for spectrum analysis and	
	wireless intrusion protection, VPN tunnels to extend	
	remote locations to corporate resources, and wireless	
	mesh connections where Ethernet drops are not	
	available	
	Must have Intelligent app visibility and control	
	Must provide comprehensive protection against advanced online threats	
	Must have Integrated wireless intrusion protection	
	offers threat protection and mitigation, and eliminates	
	the need for separate RF sensors and security	
	appliances	
	Must have Intelligent Power Monitoring (IPM)	
	Must be 5GHz 802.11ac 3x3 MIMO (1,300 Mbps max	
	rate) and 2.4GHz 802.11n 2x2 MIMO (300 Mbps max	
	rate) radios, with a total of three integrated omni- directional downtilt	
	dual- band antennas.	
	Must Support for up to 256 associated client devices per	
	radio, and up to 16 BSSIDs per radio	
	Must have Dynamic frequency selection (DFS) that	
	optimizes the use of available RF spectrum	

	Supported radio technologies:	
	- 802.11b: Direct-sequence spread-spectrum (DSSS)	
	- 802.11a/g/n/ac: Orthogonal frequency-division	
	multiplexing (OFDM)'	
	• Supported data rates (Mbps):	
	'- 802.11b: 1, 2, 5.5, 11	
	- 802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54	
	- 802.11n (2.4GHz): 6.5 to 300 (MCS0 to MCS15)	
	- 802.11n (5GHz): 6.5 to 450 (MCS0 to MCS23)	
	- 802.11ac: 6.5 to 1,300 (MCS0 to MCS9, NSS = 1 to 3	
	for VHT20/40/80'	
	The Transmit power must be configurable in	
	increments of 0.5 dBm	
	802.11n high-throughput (HT) support: HT 20/40	
	802.11ac very high throughput (VHT) support: VHT	
	20/40/80	
	802.11n/ac packet aggregation: A-MPDU, A-MSDU	
Interface	• 10/100/1000BASE-T Ethernet network interface	
	(RJ-45)	
	Auto-sensing link speed and MDI/MDX	
	- 802.3az Energy Efficient Ethernet (EEE)	
	- PoE-PD: 48 Vdc (nominal) 802.3af PoE	
	• DC power interface, accepts 1.7/4.0-mm center-	
	positive	
	circular plug with 9.5-mm length	
	Visual indicators (LEDs):	
	Power/system status	
	Ethernet link status (ENET)	
	- Radio status (two; RAD0, RAD1)	
	• Reset button: factory reset (during device power	
	up)	
	Serial console interface (RJ-45)	
	Kensington security slot	
	Must include the following:	
Licenses	Must have AP Licenses	20 Units
	The LIC-AP Controller must be per AP Capacity	
	License	
Support	The licenses must include 1 year foundation care	
	24x7 Support	
Mounting Kit	Must be Flat Surface Wall/Ceiling White AP Basic	20 Units
	Flat Surface Mount Kit	
Warranty	Must be lifetime warranty on parts	
	Must include 1 Year Foundation Care Next Business Day	
	Exchange	
Certification	Must belong to the Leaders Magic Quadrant for the	
	Wired and Wireless LAN Access Infrastructure	
	(please attach certificate)	

LIC-PEF CONTROLLER POLICY ENFORCEMENT FIREWALL PER AP LICENSE E-LTU		41 Units
LICENSE E-LIO	* The PEF Controller must be compatible to the	
	existing AP	
The IDENTITY-BA	SED POLICY CONTROLS must have the following:	
	* PEF with AppRF technology provides user-level	
	awareness of all traffic across the network. This	
	Mobility Controllers support multiple user categories	
	on a single network, spanning wired, wireless and	
	VPNs.	
	*During the network sign-on process, the identity and	
	role of each user or device is learned. Employees and	
	other authorized internal users can be treated as a	
	single class or further subdivided according to	
	information found in a directory server.	
The INTELLIGENT	APPLICATION IDENTIFICATION must be:	
	*Mobile applications:	
	The AppRF technology distinguishes corporate	
	applications like Box from personal applications like	
	Apple FaceTime, even when they are running on the	
	same mobile device.	
	*Network services like Apple AirPrint and AirPlay:	
	IT optimizes IP multicast video traffic and	
	automatically prioritizes services, and adds policy	
	controls.	
	*Web-based applications use the same part to	
	Many web-based applications use the same port to	
	communicate with clients and appear as HTTP traffic.TheAppRFtechnologyresolves	
	the destination address to identify unique	
	applications like	
	Facebook, Twitter, Box, WebEx and hundreds of	
	others.	
	*Encrypted applications:	
	For encrypted traffic, The AppRF technology uses	
	heuristics to look for traffic patterns and establishes a	
	unique fingerprint to identify those applications.	
COMPREHENSIVE	VOICE MANAGEMENT AND CONTROL	
	*Phone number association – SIP-enabled devices can	
	be	
	tracked and displayed by their phone number	
	*Call quality tracking – Automatically calculate,	
	display and	
	track the R-value for each SIP call being processed	
	through a Mobility Controller.	
	*SIP authentication tracking – Track the registration	
	of SIP	
	devices to an IP PBX to determine if they are	
	authenticated	

	*Call detail records (CDRs) – Display calls made to	
	and from	
	Wi-Fi clients, including originator, terminator,	
	termination	
	reason, rejected and failed calls, duration, and call	
	quality.	
	* Real-time call admission control (CAC) information	
	_	
	Quickly determine call density, CAC state and active	
	calls	
	for load balancing.	
Support	* Must include 1Y Foundation Care 24x7 support	
Certification	* Must belong to the Leaders Magic Quadrant for the	
Certification	Wired and Wireless LAN Access Infrastructure	
	(please attach certificate)	1 11
Countrals Tra-	MODULAR CORE SWITCH	1 Unit
Switch Type	Must be Modular Chassis	
Routing/	Must be Layer 3 Advanced	
Switching		
Management	Must be Fully Managed	
Included		
Accessories		
	* Must include zl2 Management Module	
	* zl2 Switch Fan Tray	
Features		
	* Must be Powerful Layer 3 modular switch series	
	with VSF stacking, Tunnel Node, low latency and	
	resiliency	
	* Must be Smart Rate for high-speed multi-gigabit	
	bandwidth (IEEE 802.3bz) and PoE+ power	
	* Must be Scalable line rate 40GbE for wireless traffic	
	aggregation	
	* Must be Ready for the software defined network	
	with REST APIs and OpenFlow support	
	* Must have Security and network management tools	
	with ClearPass Policy Manager, AirWave and cloud-	
	based Central	
I AN Donto		
LAN Ports	up to 144 with optional modules	
Dual Porconality	N/A	
Personality		
Ports		
SFP Ports	up to 144 with optional modules	
SFP+ Ports	up to 48 with optional modules	
SFP28 Ports	N/A	
XFP Ports	N/A	
X2 Ports	N/A	
CX4 Ports	N/A	
10GBASE-T	up to 48 with optional modules	
	·	

Ports		
QSFP+ Ports	up to 12 with optional modules	
V		
QSFP28 Ports	N/A	
Module Slots	6 open module slots	
Console Port	1 RJ-45 serial console port	
Power Supplies		
Power supply	2x power supply slots	
slots		
Power supply	Must have 2 x 700W PoE+ zl2 PSU	
requirements		
Memory and		
Processor		
Memory and	N/A	
Processor		
Gigabit Module	v3 Gigabit Module: Dual ARM Cortex A9 @ 1 GHz;	
	Packet buffer size: 13.5 MB internal	
	v2 Gigabit Module: ARM 11 @ 450 MHz; Packet buffer	
	size: 18 MB internal	
10Gb Module	v3 10G Module: Dual ARM Cortex A9 @ 1 GHz; Packet	
	buffer size: 13.5 MB internal	
	v2 10G Module: ARM11 @ 550 MHz; packet buffer	
	size: 18 MB internal	
Management	Freescale P2020 dual core @ 1.2 GHz, 16 MB flash, 1	
Module	GB SD Card, 4 GB DDR3 SODIMM	
Fabric Module	N/A	
I/O Module	v3 40G Module: Dual ARM Cortex A9 @ 1 GHz; Packet	
	buffer size: 13.5 MB internal	
Mounting		
Mounting	Mounts in an EIA-standard 19 in. telco rack or	
	equipment cabinet (hardware included); horizontal	
	surface mounting only	
Performance		
100 Mb	[no data]	
Latency		
1000 Mb	< 2.8 µs (FIFO 64-byte packets)	
Latency		
10 Gbps	< 1.8 µs (FIFO 64-byte packets)	
Latency		
40 Gbps	< 1.5 µs (FIFO 64-byte packets)	
Latency		
Throughput	up to 571.4 Mpps	
Switching	960 Gbps	
Capacity	-	
Switch Fabric	1015 Gbps	
Speed	*	
Routing Table	10000 entries (IPv4), 5000 entries (IPv6)	

Size		
MAC Address	64000 entries	
Table Size	04000 entries	
Electrical		
Characteristics		
Description	N / A	
· · · · · · · · · · · · · · · · · · ·	N/A 100-127 / 200-240 VAC	
Voltage Current		
	[no data]	
Frequency	50/60 Hz	
Maximum	[no data]	
Power		
Consumption	2450 DTU/by $(2504$ bU/by) (may non DoE)	
Maximum Heat Dissipation	2450 BTU/hr (2584 kJ/hr), (max. non-PoE); 3700 BTU/hr (3903 kJ/hr) (max. using PoE)	
	Heat dissipation does not include heat dissipated by the PoE-powered devices themselves.	
PoE power	* Each 700W power supply provides 630 W chassis power and up to 275 W of PoE/PoE+ power.	
	* Each 1100W power supply provides up to 630 W chassis power and up to 900 W of PoE/PoE+ power.	
	* Each 2750W power supply provides up to 630 W system power and up to 2500 W of PoE/PoE+ power with both line cords.	
Management		
Management	IMC - Intelligent Management Center, command-line interface, Web browser, configuration menu, out-of- band management (RJ-45 Ethernet), out-of-band management (serial RS-232), SNMP Manager	
Other		
Accessories		
	* Must include 4U/7U Univ 4-post Rackmount Kit	1 Unit
	* Must include 1 x 8p 1G/10GbE SFP+ v3 zl2 Module	1 Unit
	* Must include 1 x 24p 1000BASE-T PoE+ v3 zl2 Module	1 Unit
	* Must include 1 x 24p 1000BASE-T v3 zl2 Module	1 Unit
	* Must include 4 x 10G SFP+ LC SR Transceiver	4 Units
Warranty and Support	* Must be limited lifetime warranty on parts	
	* Must include 1 Year Foundation Care Next Business	
	Day on site support	
Certification	* Must belong to the Leaders Magic Quadrant for the Wired and Wireless LAN Access Infrastructure	
	(please attach certificate)	

24	PORT LAYER 3 WITH 4SFP+ SWITCH	1 Unit
Switch Type	Must be Fixed Port	
Routing/	Must be Layer 3 Dynamic	
Switching		
Management	Must be Fully Managed	
Features		
	* Must be Layer 3 switch series with VSF stacking, static,	
	Rip and Access OSPF Routing, Tunnel Node, ACLs, and	
	robust QoS	
	* Must be Consistent wired/wireless experience with	
	AirWave and ClearPass Policy Manager	
	* Must be Ready for the software defined network with	
	REST APIs and OpenFlow support	
	* Must be Simple deployment with Zero Touch	
	Provisioning and cloud-based Aruba Central support	
	* Must Supports multiple programmatic interfaces,	
	including REST APIs and Openflow 1.0 and 1.3, to enable	
	automation of network operations, monitoring, and troubleshooting	
Management		
Management	* SNMPv1, v2, and v3 provide complete support of	
	SNMP; provide full support of industry-standard	
	Management Information Base (MIB) plus private	
	extensions; SNMPv3 supports increased security using	
	encryption	
	* Central cloud-based management platform offers a	
	simple, secure and cost-effective way to manage	
	switches	
	* Zero Touch Provisioning (ZTP) simplifies installation	
	of the switch infrastructure using the Aruba Activate-	
	based or a DHCP-based process with AirWave Network	
	Management	
	* Supports multiple programmatic interfaces,	
	including REST APIs and Openflow 1.0 and 1.3, to	
	enable automation of network operations,	
Laver 2	monitoring, and troubleshooting	
Layer 2 switching		
Switching	• VLAN support and tagging support IEEE 802.1Q	
	(4,094 VLAN IDs) and 2K VLANs simultaneously	
	• Jumbo packet support improves the performance of	
	large data transfers; supports frame size of up to	
	9,220 bytes	
	• IEEE 802.1v protocol VLANs isolate select non-IPv4	
	protocols automatically into their own VLANs	
	• Rapid Per-VLAN Spanning Tree (RPVST+) allows	
	each VLAN to build a separate spanning tree to	
	improve link bandwidth usage; is compatible with	
	mprove mix bandwiddi usage, is compatible with	

	PVST+	
	• GVRP and MVRP allows automatic learning and	
	dynamic assignment of VLANs	
	• VxLAN encapsulation (tunneling) protocol for	
	overlay network that enables a more scalable virtual	
	network deployment	
Layer 3 services		
Layer 5 services	• DHCP server centralizes and reduces the cost of	
	IPv4 address management	
	ii v+ autress management	
Layer 3 routing		
	• Static IP routing provides manually configured	
	routing; includes ECMP capability	
	• 256 static and 10,000 RIP routes facilitate	
	segregation of user data, without adding external	
	hardware	
	• Routing Information Protocol (RIP) provides RIPv1,	
	RIPv2, and RIPng routing	
	• Access OSPF	
	- Provide OSPFv2 and OSPFv3 protocols for routing	
	between access and the next layer on the LAN. Only	
	one OSPF area and up to 8 interfaces are supported	
	• Policy-based routing uses a classifier to select	
	traffic that can be forwarded based on policy set by	
	the network administrator (limited to 16 next hop	
	routes)	
Physical		
Properties		
Dimensions	17.42(w) x 7.88(d) x 1.73(h) in	
	(44.25 x 20.02 x 4.39 cm)	
	(1U height)	
Weight	5.31 lb (2.41 kg)	
I/O Ports and		
Slots		
	* 24 RJ-45 autosensing 10/100/1000 ports (IEEE	
	802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-	
	TX, IEEE 802.3ab Type 1000BASE-T); Duplex:	
	10BASE-T/100BASE-TX: half or full; 1000BASE-T:full	
	only	
A 1 11-1 - 1	* 4 SFP+ 1/10GbE ports; PHY-less	
Additional Ports		
and Slots		
	* 1 dual-personality (RJ-45 or USB micro-B) serial	
Dout Torres	console port	
Port Types	24 DL 45 autoconcirca 10/100/1000	
LAN Ports	24 RJ-45 autosensing 10/100/1000 ports	

		1
	(IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type	
	100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex:	
	10BASE-T/100BASE-TX: half or full; 1000BASE-T:full	
	only	
SFP+ Ports	4 SFP+ 1/10GbE ports; PHY-less	
Console Port	1 dual-personality (RJ-45 or USB micro-B) serial console	
	port	
Memory and		
Processor		
Memory and	Dual Core ARM Coretex A9 @ 1016 MHz, 1 GB DDR3	
Processor	SDRAM; Packet buffer size: 12.38 MB, 4.5MB	
	Ingress/7.785 Egress, 4 GB eMMC	
Mounting		
Mounting	Mounts in an EIA-standard 19-inch telco rack or	
	equipment cabinet (rack-mounting kit available);	
Daufauna	horizontal surface mounting; wall mounting.	
Performance		
4000	IPv6 Ready Certified	
1000 Mb	< 3.8 µs (64-byte packets)	
Latency		
10 Gbps	< 1.6 µs (64-byte packets)	
Latency		
Throughput	up to 95.2 Mpps	
Switching	128 Gbps	
Capacity		
Routing Table	10,000 entries (IPv4), 5,000 entries (IPv6)	
Size		
MAC Address	32,768 entries	
Table Size		
Electrical		
Characteristics		
Voltage	100 - 127 / 200 - 240 VAC, rated	
Current	0.6/0.4 A	
Frequency	50/60 Hz	
Maximum	29.3 W (idle power: 19.5 W)	
Power		
Consumption		
Maximum Heat	100 BTU/hr (105.5 kJ/hr)	
Dissipation		
Warranty and		
Support		
	Must be limited lifetime on parts	
	Must include 1 Year Foundation Care Next Business	
	Day on site support	
Certification	Must belong to the Leaders Magic Quadrant for the	
	Wired and Wireless LAN Access Infrastructure (please	
	attach certificate)	

MANAG	ED NETWORK SWITCH POE L2 (24-PORT)	6 Units
Technology	Must be basic smart-managed, fixed-configuration	
recimology	Gigabit Ethernet Layer 2 switches	
	Must provide non-blocking Gigabit per port	
	performance	
	Must include SFP ports for fiber connectivity	
	Must be Power over Ethernet Switch	
	Must be customizable operation using intuitive Web	
	interface	
	Must supports HTTP and HTTP Secure (HTTPS)	
	Flexible deployment options including wall, under	
	table and desktop mounting	
	Must be latest energy-saving capabilities, including	
	Energy Efficient Ethernet (EEE) and idle-port power	
	down.	
	Must have Port Mirroring and Dual Flash Images	
	Must have Default DHCP client mode	
	Must be 1U Height	
Connectivity	Auto-MDI/MDIX	
	IEEE 802.3X flow control	
	Loop protection	
	IEEE 802.3at Power over Ethernet (PoE+)	
	PoE+ port availability	
	Auto PoE power configuration	
	PoE shut down mode	
I/O ports and	12 RJ-45 autosensing 10/100/1000 PoE+ ports;	
slots	Duplex: 10BASET/100BASE-TX: half or full;	
	1000BASE-T: full only	
	12 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3	
	Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE	
	802.3ab Type 1000BASE-T); Duplex: 10BASE- T (100BASE TX: balf or full: 1000BASE T: full only	
	T/100BASE-TX: half or full; 1000BASE-T: full only 2 SFP 100/1000 Mbps ports (IEEE 802.3z Type	
	1000BASE-X, IEEE 802.3u Type 100BASE-FX)	
Memory and	ARM Cortex-A9 @ 400 MHz, 128 MB SDRAM; Packet	
processor	buffer size: 1.5 MB, 16 MB flash	
Performance	100 Mb Latency: $< 7 \ \mu s$ (LIFO 64-byte packets)	
	1000 Mb Latency: $< 2 \ \mu s$ (LIFO 64-byte packets)	
	Throughput up to 38.6 Mpps (64-byte packets)	
	Switching capacity: 52 Gbps	
	MAC address table size 8000 entries	
	Encrypts all HTTP traffic, allowing secure access to	
Security	the browser-based management GUI in the switch	
	Monitors nine types of malicious attacks and protects	
	the network by blocking these attacks	
	Provides security so that only authorized access to	
	the Web browser interface is allowed	

Performance	Half-/full-duplex auto-negotiating capability on every
	port
	IGMP snooping
Resiliency and	IEEE 802.1D STP and IEEE 802.1W RSTP that
high availability	Provides redundant links while preventing network
	loops
-	Link aggregation (trunking)
Warranty	Limited Lifetime Warranty
	The bidder must be and authorized reseller of the
	brand being offered
	SERVICES
INSTALL, START-U	JP and CONFIGURATION OF CORE SWITCHES
	Scope of Works
A. Physical	i. Pre-staging
Checking	
Installation	
	ii. Hardware Testing
	iii. Rack mounting
	iv. Inserting/connecting power supplies
	v. Power-up
B. Management	i. Creation of management VLAN
	ii. Assigning of management IP address per switch or
	per stacked of switches
C. VLAN	i. Configuration of VLANS
Configuration	
	ii. Configuration of Tagged port (VLAN up links)
	iii. Configuration of inter-VLAN routing
D. Testing	i. Perform Inter VLAN connection
	CONFIGURATION OF CONTROLLER LICENSES
	A. System name
	B. Country Code
	C. Admin Password
	D. Date and Time
	E. Connectivity Settings
	F. Authentication Settings
	G. Management VLAN configuration
	H. Configuring Default Gateway
	I. License installation and activation
	INSTALLATION AND CONFIGURATION OF ACCESS
	POINTS
A. Access Point	i. Layer 2 Network Discovery
Controller	
Discovery	
	ii. DHCP Server Configuration
	DOCUMENTATION
	A. Electronic documentation as built
Knowledge	Include 1 Day Knowledge Transfers based on
Transfer	Implementation

CODE SWITCH	
CORE SWITCH	
ADDITIONAL	
MODULE	
INSTALL,	
START-UP and	
CONFIGURATIO	
N OF CORE	
SWITCH	
ADDITIONAL	
MODULE AND 24	
PORTS LAYER 3	
SWITCH	
A. Physical	i. Pre-staging
Checking	
Installation	
	ii. Hardware Testing
	iii. Rack mounting
	iv. Inserting/connecting power supplies
	v. Power-up
B. Management	i. Creation of management VLAN
	ii. Assigning of management IP address per switch or
	per stacked of switches
C. VLAN	i. Configuration of VLANS
Configuration	
	ii. Configuration of Tagged port (VLAN up links)
	iii. Configuration of inter-VLAN routing
D. Testing	i. Perform Inter VLAN connection
	DOCUMENTATION
	A. Electronic documentation as built
Knowledge	Include 1 Day Knowledge Transfers based on
Transfer	Implementation

Section VIII. Bidding Forms

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Bid Form

Date: _____ Invitation to Bid¹ Nº: _____

To: [name and address of Procuring Entity]

Gentlemen and/or Ladies:

Having examined the Bidding Documents including Bid Bulletin Numbers [insert numbers], the receipt of which is hereby duly acknowledged, we, the undersigned, offer to [supply/deliver/perform] [description of the Goods] in conformity with the said Bidding Documents for the sum of [total Bid amount in words and figures] or such other sums as may be ascertained in accordance with the Schedule of Prices attached herewith and made part of this Bid.

We undertake, if our Bid is accepted, to deliver the goods in accordance with the delivery schedule specified in the Schedule of Requirements.

If our Bid is accepted, we undertake to provide a performance security in the form, amounts, and within the times specified in the Bidding Documents.

We agree to abide by this Bid for the Bid Validity Period specified in **BDS** provision for **ITB** Clause 18.2 and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

Commissions or gratuities, if any, paid or to be paid by us to agents relating to this Bid, and to contract execution if we are awarded the contract, are listed below:²

Name and address of agent	Amount and Currency	Purpose of Commission or gratuity

(if none, state "None")

Until a formal Contract is prepared and executed, this Bid, together with your written acceptance thereof and your Notice of Award, shall be binding upon us.

We understand that you are not bound to accept the Lowest Calculated Bid or any Bid you may receive.

¹ If ADB, JICA and WB funded projects, use IFB.

² Applicable only if the Funding Source is the ADB, JICA or WB.

We certify/confirm that we comply with the eligibility requirements as per **ITB** Clause 5 of the Bidding Documents.

We likewise certify/confirm that the undersigned, [for sole proprietorships, insert: as the owner and sole proprietor or authorized representative of <u>Name of Bidder</u>, has the full power and authority to participate, submit the bid, and to sign and execute the ensuing contract, on the latter's behalf for the <u>Name of Project</u> of the <u>Name of the Procuring Entity</u>] [for partnerships, corporations, cooperatives, or joint ventures, insert: is granted full power and authority by the <u>Name of Bidder</u>, to participate, submit the bid, and to sign and execute the ensuing contract on the latter's behalf for <u>Name of Project</u> of the <u>Name of Project</u> of the <u>Name of Project</u>.

We acknowledge that failure to sign each and every page of this Bid Form, including the attached Schedule of Prices, shall be a ground for the rejection of our bid.

Dated this _____ day of _____ 20____.

[signature]

[in the capacity of]

Duly authorized to sign Bid for and on behalf of ______

List of On-going Government & Private Contracts including Contracts Awarded But Not Yet Started

Business Name:

Business Address:

	Name,		Ar	nount of Contrac	t	% of Accomplishment	
Name of Contract/ Project	Address & Kinds of Tel. Nos. of Goods/ Company/ Nature Owner's of Work Name	Total Amount of Contract	Amount of Accomplish- ment	Value of Outstanding Contracts	Date Started	Date of Comple- tion	
Governmen							
<u>t</u>							
<u>Private</u>							

Submitted By:	
5	(Printed Name & Signature)
Designation:	
Company:	
Date:	

Statement of all Completed Government & Private Contracts which are similar in nature and Complexity to the Contract to be Bid

Business Name:

Business Address:

Name of Contract/ Project	Name, Address & Tel. Nos. of Company/ Owner's Name	Nature/ Descriptio n of the Contract/ Project	Total Amount of Contract	Amount of Completion	Duration (From –To)	Date Completed	End User's Acceptance /Client Satisfaction Rating
Government							
Private							
<u>i i i i i i i i i i i i i i i i i i i </u>							

Submitted By:	
<i>y</i> <u> </u>	(Printed Name & Signature)
Designation:	
Company:	
Date:	

For Goods Offered From Within the Philippines

Name of Bidder ______. Invitation to Bid³ Number _____. Page_of

1	2	3	4	5	6	7	8	9	10
Item	Description	Country	Quantity	Unit price EXW	Transportatio	Sales and	Cost of	Total Price,	Total Price
		of origin		per item	n and	other taxes	Incidental	per unit	delivered Final
					Insurance and	payable if	Services, if	(col 5+6+7+8)	Destination
					all other costs	Contract is	applicable, per		(col 9) x (col 4)
					incidental to	awarded, per	item		
					delivery, per	item			
					item				

-

[signature]

[in the capacity of]

Duly authorized to sign Bid for and on behalf of _____

³ If ADB, JICA and WB funded projects, use IFB.

THIS AGREEMENT made the ____ day of _____ 20___ between [name of PROCURING ENTITY] of the Philippines (hereinafter called "the Entity") of the one part and [name of Supplier] of [city and country of Supplier] (hereinafter called "the Supplier") of the other part:

WHEREAS the Entity invited Bids for certain goods and ancillary services, viz., *[brief description of goods and services]* and has accepted a Bid by the Supplier for the supply of those goods and services in the sum of *[contract price in words and figures]* (hereinafter called "the Contract Price").

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.

2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:

- (a) the Supplier's Bid, including the Technical and Financial Proposals, and all other documents/statements submitted (*e.g.* bidder's response to clarifications on the bid), including corrections to the bid resulting from the Procuring Entity's bid evaluation;
- (b) the Schedule of Requirements;
- (c) the Technical Specifications;
- (d) the General Conditions of Contract;
- (e) the Special Conditions of Contract;
- (f) the Performance Security; and
- (g) the Entity's Notice of Award.

3. In consideration of the payments to be made by the Entity to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Entity to provide the goods and services and to remedy defects therein in conformity in all respects with the provisions of the Contract

4. The Entity hereby covenants to pay the Supplier in consideration of the provision of the goods and services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the contract at the time and in the manner prescribed by the contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of the Republic of the Philippines on the day and year first above written.

Signed, sealed, delivered by ______ the _____ (for the Entity)

Signed, sealed, delivered by ______ the _____ (for the Supplier).

REPUBLIC OF THE PHILIPPINES) CITY/MUNICIPALITY OF ____) S.S.

AFFIDAVIT

I, *[Name of Affiant]*, of legal age, *[Civil Status]*, *[Nationality]*, and residing at *[Address of Affiant]*, after having been duly sworn in accordance with law, do hereby depose and state that:

1. Select one, delete the other:

If a sole proprietorship: I am the sole proprietor or authorized representative of *[Name of Bidder]* with office address at *[address of Bidder]*;

If a partnership, corporation, cooperative, or joint venture: I am the duly authorized and designated representative of *[Name of Bidder]* with office address at *[address of Bidder]*;

2. Select one, delete the other:

If a sole proprietorship: As the owner and sole proprietor, or authorized representative of *[Name of Bidder]*, I have full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for *[Name of the Project]* of the *[Name of the Procuring Entity]*, as shown in the attached duly notarized Special Power of Attorney;

If a partnership, corporation, cooperative, or joint venture: I am granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for [Name of the Project] of the [Name of the Procuring Entity], as shown in the attached [state title of attached document showing proof of authorization (e.g., duly notarized Secretary's Certificate, Board/Partnership Resolution, or Special Power of Attorney, whichever is applicable;)];

- 3. *[Name of Bidder]* is not "blacklisted" or barred from bidding by the Government of the Philippines or any of its agencies, offices, corporations, or Local Government Units, foreign government/foreign or international financing institution whose blacklisting rules have been recognized by the Government Procurement Policy Board;
- 4. Each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the original, complete, and all statements and information provided therein are true and correct;

5. *[Name of Bidder]* is authorizing the Head of the Procuring Entity or its duly authorized representative(s) to verify all the documents submitted;

6. Select one, delete the rest:

If a sole proprietorship: The owner or sole proprietor is not related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

If a partnership or cooperative: None of the officers and members of *[Name of Bidder]* is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

If a corporation or joint venture: None of the officers, directors, and controlling stockholders of *[Name of Bidder]* is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

- 7. *[Name of Bidder]* complies with existing labor laws and standards; and
- 8. *[Name of Bidder]* is aware of and has undertaken the following responsibilities as a Bidder:
 - a) Carefully examine all of the Bidding Documents;
 - b) Acknowledge all conditions, local or otherwise, affecting the implementation of the Contract;
 - c) Made an estimate of the facilities available and needed for the contract to be bid, if any; and
 - d) Inquire or secure Supplemental/Bid Bulletin(s) issued for the [Name of the Project].
- 9. *[Name of Bidder]* did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.

IN WITNESS WHEREOF, I have hereunto set my hand this __ day of __, 20__ at ____, Philippines.

Bidder's Representative/Authorized Signatory

SUBSCRIBED AND SWORN to before me this ____ day of [month] [year] at [place of execution], Philippines. Affiant/s is/are personally known to me and was/were identified by me through competent evidence of identity as defined in the 2004 Rules on Notarial Practice (A.M. No. 02-8-13-SC). Affiant/s exhibited to me his/her [insert type of government identification card used], with his/her photograph and signature appearing thereon, with no. _____ and his/her Community Tax Certificate No. _____ issued on _____ at ____.

Witness my hand and seal this ___ day of [month] [year].

NAME OF NOTARY PUBLIC

Serial No. of Comn	nission
Notary Public for _	until
Roll of Attorneys N	No
PTR No	[date issued], [place issued]
IBP No	[date issued], [place issued]

Doc. No	
Page No.	
Book No.	
Series of	

* This form will not apply for WB funded projects.

Bank Guarantee Form for Advance Payment

To: [name and address of PROCURING ENTITY] [name of Contract]

Gentlemen and/or Ladies:

In accordance with the payment provision included in the Special Conditions of Contract, which amends Clause 10 of the General Conditions of Contract to provide for advance payment, *[name and address of Supplier]* (hereinafter called the "Supplier") shall deposit with the PROCURING ENTITY a bank guarantee to guarantee its proper and faithful performance under the said Clause of the Contract in an amount of *[amount of guarantee in figures and words]*.

We, the *[bank or financial institution]*, as instructed by the Supplier, agree unconditionally and irrevocably to guarantee as primary obligator and not as surety merely, the payment to the PROCURING ENTITY on its first demand without whatsoever right of objection on our part and without its first claim to the Supplier, in the amount not exceeding *[amount of guarantee in figures and words]*.

We further agree that no change or addition to or other modification of the terms of the Contract to be performed thereunder or of any of the Contract documents which may be made between the PROCURING ENTITY and the Supplier, shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition, or modification.

This guarantee shall remain valid and in full effect from the date of the advance payment received by the Supplier under the Contract until *[date]*.

Yours truly,

Signature and seal of the Guarantors

[name of bank or financial institution]

[address]

[date]

BID SECURING DECLARATION FORM

REPUBLIC OF THE PHILIPPINES) CITY OF ______) S.S.

х-----Х

BID SECURING DECLARATION Invitation to Bid: [Insert Reference number]

To: [Insert name and address of the Procuring Entity]

I/We⁴, the undersigned, declare that:

- 1. I/We understand that, according to your conditions, bids must be supported by a Bid Security, which may be in the form of a Bid-Securing Declaration.
- 2. I/We accept that: (a) I/we will be automatically disqualified from bidding for any contract with any procuring entity for a period of two (2) years upon receipt of your Blacklisting order; and, (b) I/we will pay the applicable fine provided under Section 6 of the Guidelines on the Use of Bid Securing Declaration, within fifteen (15) days from receipt of the written demand by the procuring entity for the commission of acts resulting to the enforcement of the bid securing declaration under Sections 23.1(b), 34.2, 40.1 and 69.1, except 69.1(f), of the IRR of RA 9184; without prejudice to other legal action the government may undertake.
- 3. I/We understand that this Bid Securing Declaration shall cease to be valid on the following circumstances:
 - (a) Upon expiration of the bid validity period, or any extension thereof pursuant to your request;
 - (b) I am/we are declared ineligible or post-disqualified upon receipt of your notice to such effect, and (i) I/we failed to timely file a request for reconsideration or (ii) I/we filed a waiver to avail of said right;

⁴ Select one and delete the other. Adopt the same instruction for similar terms throughout the document.

(c) I am/we are declared the bidder with the Lowest Calculated Responsive Bid, and I/we have furnished the performance security and signed the Contract.

IN WITNESS WHEREOF, I/We have hereunto set my/our hand/s this ____ day of [month] [year] at [place of execution].

[Insert NAME OF BIDDER'S AUTHORIZED REPRESENTATIVE] [Insert Signatory's Legal Capacity] Affiant

SUBSCRIBED AND SWORN to before me this ____ day of [month] [year] at [place of execution], Philippines. Affiant/s is/are personally known to me and was/were identified by me through competent evidence of identity as defined in the 2004 Rules on Notarial Practice (A.M. No. 02-8-13-SC). Affiant/s exhibited to me his/her [insert type of government identification card used], with his/her photograph and signature appearing thereon, with no. _____ and his/her Community Tax Certificate No. _____ issued on _____ at ____.

Witness my hand and seal this ___ day of [month] [year].

NAME OF NOTARY PUBLIC

Serial No. of Comm	nission
Notary Public for	until
Roll of Attorneys I	No
PTR No	[date issued], [place issued]
IBP No	[date issued], [place issued]

Doc. No. ____ Page No. ____ Book No. ____ Series of ____

CHECKLIST OF REQUIREMENTS

	Procurement of ICT Equipment			
	Checklist of Requirements			
	Bid Opening Documentary Requirements	Page in Bid Docs		
I.	ELIGIBILITY AND TECHNICAL COMPONENTS			
(a)	CLASS "A" DOCUMENTS			
1.	PhilGEPS Certificate of Registration and Membership in accordance with Section 8.5.2 of the IRR	56		
2.	 Statement of the prospective Bidder of all its on-going government and private contracts including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid, and Statement of the bidder's SLCC similar to the contract to be bid, in accordance with ITB Clause 5.4, within the relevant period as provided in the BDS. The two (2) statements required shall indicate for each contract the following: (a) Name of the contract; (b) Date of the contract; (c) Contract duration; (d) Owner's name and address; (e) Kinds of Goods; (f) For Statement of On-going Contracts – amount of contract and value of outstanding contracts; (g) For Statement of SLCC – amount of completed contracts, adjusted by the Bidder to current prices using PSG's consumer price index, if necessary, for the purpose of meeting the SLCC requirements; (h) Date of delivery; and (i) End-user's acceptance or official receipt(s) or sales invoice issued for the contract, if completed, which shall be attached to the statements. 	56-57, 149-150		
3.	NFCC computation in accordance with ITB Clause 5.5 or a committed Line of Credit from a universal or commercial bank. (Attach: latest audited financial statements stamped "received" by the BIR which should not be earlier than two (2) years from the date of bid submission).	51, 57		

	<i>CLASE "D" DOCUMENTS</i>			
	CLASS "B" DOCUMENTS			
1.	1. If applicable, the Joint Venture Agreement (JVA) in case the joint venture is already in existence, or duly notarized statements from all the potential joint venture partners in accordance with Section 23.1L(b) of the IRR.			
<i>(b)</i>	TECHNICAL DOCUMENTS			
1.	The Bid Security or Bid Securing Declaration in accordance with ITB Clause 18.	57,79, 157-158		
2.	Conformity with technical specifications, as enumerated and specified in Sections VI and VII of the Bidding Documents.	57, 106-144		
3.	Sworn statement in accordance with Section 25.3 of the IRR of RA 9184 and using the form prescribed in Section VIII. Bidding Forms.	57, 153-155		
4.	Current valid manufacturer's certification (for all IT equipment)	3		
5.	Two (2) customer satisfaction certificate from previous client companies/agencies.	3		
6.	 For laptop computers: 6.1. Current valid manufacturer's certificate stating that the provider is an Authorized Service Partner (ASP) of the brand being offered; 6.2. Certification stating that the brand being offered is included in the latest Top 3 of the Leaders Group of Gartner's List for Global Enterprise Notebook and Desktop. 	3		

II.	FINANCIAL COMPONENTS	
1.	Financial Bid, which includes Bid Prices in the prescribed Bid Form.	57-58, 147-148

III.	POST-QUALIFICATIONDOCUMENTARYREQUIREMENTSDOCUMENTARY	
1.	(a) Latest income and business tax returns.	70
	a.1. Proof of VAT payments for the past six (6) months preceding the date of bid submission.	
2.	Registration Certificate from SEC, DTI or CDA or any proof of such registration whichever may be appropriate under existing laws of the Philippines	67

3.	Mayor's/Business Permit issued by the city or municipality where the principal place of business of the prospective bidder is located, or the equivalent document for Exclusive Economic Zones or Areas.	
	In cases of recently expired Mayor's/Business Permits, it shall be accepted together with the official receipt as proof that the bidder has applied for renewal within the period prescribed by the concerned local government unit, provided that the renewed permit shall be submitted as a post-qualification requirement in accordance with Section 34.2 of this IRR.	67
4.	Tax Clearance per EO No. 398, Series BIR of 2005, as finally reviewed and approved by the BIR.	
5.	Certification stating that it has at least two (2) manufacturer certified engineers for the brand of laptop and desktop computers, including workstations being offered.	3

