

ICT Specifications for the Wash Project – Aden and Mukalla

No.	Item Description	Quantity				Quantity Delivery point LOT 1 and LOT 2		Total Quantity
		WC - Aden	C.F - Aden	WC - Mukalla	C.F- Mukalla	Aden- LOT1	Mukalla-LOT2	
1	Desktop PC	30	50	38	38	80	76	156
2	Laptop	8	10	2	9	18	11	29
3	Multifunction Printer (photo copier)	10	0	11	10	10	21	31
4	PC Printer Epson	0	1	2	16	1	18	19
5	Aden Net Modem	8	0	0	0	8	0	8
6	Bills printer	8	0	0	2	8	2	10
7	UPS Electricity Storage for Desktop PCs	0	40	38	38	40	76	116
8	UPS Electricity storage connected printer & Modem (500VA Smart-UPS with SmartConnect, Pure Sinewave UPS Battery Backup, Line Interactive, 120V)	0	0	2	2	0	4	4
9	HARD DISK 1 TB	3	13	8	8	16	16	32
10	FORTIGATE 60E FIREWALL TO VPN CONNECTION	8	0	0	0	8	0	8
11	Money counting machine	8	0	0	0	8	0	8
12	Finger print device	7	0	4	4	7	8	15
13	HR System ERP	1	1	1	0	2	1	3
14	Digital Camera	0	2	1	0	2	1	3
15	Internet Network	0	12	0	0	12	0	12
16	flash driver 64 giga (SanDisk Ultra Dual 64GB USB 3.0 OTG Pen Drive)	0	40	40	40	40	80	120

17	anti viroous (11 users)	0	11	0	0	11	0	11
18	Electric stockiest (6 outlet-Surge Protectors)	0	20	12	15	20	27	47
19	Computer dock station with full options	0	20	0	20	20	20	40
20	Server	0	1	0	0	1	0	1
21	Large paper shredder Cross-Cut, 21.7-Gallon Capacity Continuous Operation Shredder)	0	1	0	0	1	0	1
22	Carrying Case for Camera	0	1	0	0	1	0	1
23	Tripod for Camera	0	1	0	0	1	0	1
24	Data show Projector	0	2	0	1	2	1	3
25	Employee Time Monitoring Program (3 copies)	0	0	1	0	0	1	1
26	Document archiving software	0	0	1	0	0	1	1
27	Power Banks 150 watt	0	0	0	10	0	10	10

	LOT 1 Aden	LOT 2 Mukalla
Delivery Time		
Delivery Location as mentioned on the ITB docs	Location A / Location B	Location A / Location B
Warranty	Required	Required
After sale services must be Physical by company or their authorized agent.	Required	Required
Spare parts availability and Maintenance	Required	Required

NOTE: Supplier can submit their quotation per LOT or for both

ICT Specifications :

Desktop PC

PC Desktop specifications	
Category	Description
Processor	Intel core i5@2.7 GHz
Memory	8GB RAM
Hard drive	At least 1TB SATA hard disk
Ethernet	10/100/1000 Mbps (Gigabit)
CD/DVD drive	Dual Layer DVD+/-RW Drive
Monitor	At least 20" LCD display, with Energy Star rating
Video card/VRAM	2GB video RAM - External (INVIDA-AMD RADEOM)
Ports	"
Operating system	N/A

Item#1 Description	Quantity				Quantity & Delivery point		Total Quantity
	WC - Aden	C.F - Aden	WC - Mukalla	C.F- Mukalla	Aden	Mukalla	
Desktop PC	30	50	38	38	80	76	156

LAPTOPs:

Laptop specifications	
Processor	7th generation Intel® Core™ i7-4712HQ quad core processor
Dimensions	Height: 0.31-0.71" (8-18mm) / Width: 14.65" (372mm) / Depth: 10" (254mm)
Display options	
	•15.6" 4K Ultra HD (3840x2160): Dell UltraSharp™, IGZO2, 10 finger multi-touch, wide view, LED-backlit, Premium Panel Guarantee
	•15.6" FHD(1920x1080): Dell UltraSharp™, 10 finger multi-touch, wide view, LED-backlit, Premium Panel Guarantee
Memory	2 DIMM slots: up to 16GB 1600MHz DDR3L`
Storage Options	Support for two storage devices: one 2.5" drive and one solid state MSATA drive; Dell Fast Response Free Fall Sensor standard
	• Hard Disk Drive (HDD): 500GB up to 1TB 2.5" 5400rpm SATA 6Gb/s
	• Solid State Hybrid Hard Drive (SSHD): 500GB 2.5" SATA 6Gb/s with 8GB solid state storage
	• Solid State Drive (SSD): 1TB 2.5" SATA 6Gb/s
	• Solid State Mini-Card storage device (mSATA): 1TB
Graphics	NVIDIA® Quadro® K1100M with 2GB GDDR5 dedicated memory
Battery	6-cell (61Wh); 6-cell (91Wh)
AC adapter	130W AC adapter
Keyboard / Touchpad	Full size, backlit chiclet keyboard; 1.3mm travel
	Precision touchpad, seamless glass integrated button
Wireless connectivity	Wired: USB3.0 to Ethernet adapter included
	Wireless LAN: Intel® Dual Band Wireless-AC 7260 Plus Bluetooth 4.0
	Dell Wireless 1560 2X2 802.11ac + Bluetooth 4.0

Multimedia	Dual integrated high-quality speakers and dual integrated noise cancelling digital array microphones standard
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• **Waves MaxxAudio® Pro suite of advanced audio enhancement tools**

Webcam	Widescreen HD (720p) webcam with dual array digital microphones
Ports and connectors	Left: HDMI, Thunderbolt 2.0/mini display port, USB 3.0 w/Powershare, headset jack (1), Battery life indicator
	Right: 3-in-1 Card Reader (SD, SDHC, SDXC), USB2.0 with PowerShare, USB3.0 with PowerShare
Operating	
System Options	• Windows® 10 Pro (64-Bit)
Storage	1 TB -SATA HDD

Item #2 Description	Quantity				Quantity & Delivery point		Total Quantity
	Location 1 Aden	Location 2 Aden	Location 1 Mukalla	Location 2 Mukalla	Aden	Mukalla	
Laptop Qty	8	10	2	9	18	11	29

MULTIFUNCTION PRINTERS:

Multifunction Laser Color Printer	
Speed	Up to 30 ppm (Letter) / 28 ppm (A4)
Duty Cycle	Up to 50,000 pages / month
Paper Handling	Main Tray 1: 250 sheets; Custom sizes: 3 x 5 in. to 8.5 x 14 in. / 76 x 127 mm to 216 x 356 mm
	Automatic two-sided printing: Standard
	Paper output: 150 sheets
Print	First-page-out-time: As fast as 8.5 seconds
	Print resolution: 600 x 600 dpi (1200 x 1200 enhanced image quality)
	Processor: 360 MHz
	Memory: 384 MB.
	Connectivity: 10/100 Base-TX Ethernet, USB 2.0
	Print features: Reduce/Enlarge, Toner Saver,
	Print from USB memory drive, Booklet printing
Copy	First-page-out-time: As fast as 10 seconds
	Copy resolution: Up to 600 x 600 dpi (1200 x 1200 interpolated)
	Copy features: Reduce/Enlarge (25 – 400%), Auto background suppression,
	3 level darkness Control, Two-sided (1:2 duplex copy), Manual 2: 2 copying.
Fax	Fax features: Secure fax receive, PC/LAN Fax (send only),
	Fax forward to fax, Junk fax barrier, Searchable address book,
	Auto reduction, Battery backup, Distinctive ring, Broadcast (multi-send)
	fax, Up to 200 group dial/broadcast locations, 200 speed dial locations,
	Delayed fax, Memory receive, Color fax send, Fax reports,

	Up to 300 x 300 dpi, 4 MB (225 pages) , Fax forward to email, Two-sided fax receive
Scan	Scan destinations: Scan to application, Network Scan to PC, Scan to USB memory drive,
	Scan to email , Scan to PC Desktop

Item #3 Description	Quantity				Quantity & Delivery point		Total Quantity
	WC - Aden	C.F - Aden	WC - Mukalla	C.F- Mukalla	Aden	Mukalla	
Multifunction Printer	10	0	11	10	10	21	31

IMPACT DOT PRINTERS:**Impact dot matrix Printer**

Number of Pins	9 pins
Number of columns	136 columns
Printing Speed	High Speed-Draft: 10 cpi: 1550 chars/s
Connectivity	USB 2.0 Type , External network interface
Paper Handling	Continuous paper front and rear, Paper output front and rear ,
	Continuous Paper (single- and multi-layer), Labels (single- and multi-layer)
Compatible Operating Systems	Windows XP , Windows 7 , Windows 2003 server , Windows 2008 server . All (32-bit, 64-bit).
Memory	256 MB
Ribbon Yield	15000000 characters Black Draft

Item#4 Description	Quantity				Quantity & Delivery point		Total Quantity
	WC - Aden	C.F - Aden	WC - Mukalla	C.F- Mukalla	Aden	Mukalla	
PC Printer Epson or Equivalent	0	1	2	16	1	18	19
Bills printer	8	0	0	2	8	2	10

NETWORK & ACCESS:

Access Switches (Huawei, Cisco, Billion or equivalent)	
24 x RJ-45 10/100/1000Base-T PoE LAN	Interfaces/Ports
Media & Performance	
77.4 Mpps	Forwarding/Filtering Rate:
176 Gbps	Switching Throughput:
I/O Expansions	
5	Number of Expansion Slots:
(4 Total) SFP (mini-GBIC) Uplink	Expansion Slots:
(1 Total) Stacking Module	
Network & Communication	
2	Layer Support:
Management & Protocols	
Yes	Manageable:
• DHCP	Management:
• QoS	
• VLAN	
• SNMP v1, v2, v3	
• Syslog	
• CLI	
• RMON	
• LAN Management Solution	
Memory	
128MB or more	Standard Memory:
DRAM	Memory Technology:
64MB or more	Flash Memory:
Software	
yes	Operating System:
Power Description	

Yes	Power Over Ethernet:
Power Supply	Power Source:
Yes	Redundant Power Supply:
Physical Characteristics	
1U	Compatible Rack Unit:
Rack-mountable	Form Factor:
Stackable	

SERVER SPECS (ITEM NO. 21)

	Required specs
Model	Branded Dell, Lenovo, HP or equivalent
Processor	Gen10 Intel Xeon E-2124 Quad-Core (3.30GHz 8MB)
RAM	16GB RDIMM, 2666MHz UDIMM
RAID	C7, Unconfigured RAID for HDDs or SSDs (Mixed Drive Types Allowed)
HDD	1TB 7.2K RPM x 2 HDD with total 2 TB capacity which supports mirroring RAID technology
Operating System	Windows license server 2016 Enterprise Open 12 call users
Ready Rails™ & Power supply	Platinum 350W (2) Rack Power Cord 2M (C13/C14 12A)
Optical Drive	8X DVD +/-RW drive
Keyboard & Mouse	Keyboard & Mouse (English & Arabic) with metal support
Monitor	21.5 inch Full HD Monitor
Warranty	3 years with anytime support
Media	Media Server 2012 Enterprise

Item#5 description	Quantity				Quantity & Delivery point		Total Quantity
	WC - Aden	C.F - Aden	WC - Mukalla	C.F- Mukalla	Aden	Mukalla	
Aden Net Modem	8	12	0	0	20	0	20
Kaspersky Internet Security anti virous (11 users in 1 package)	0	11	0	0	11	0	11
server	0	1	0	0	1	0	1

FIREWALL:

Fortigate 60E Firewall Specifications	
System Performance - Enterprise Traffic Mix:	General Information
IPS Throughput: 400 Mbps	
NGFW Throughput: 250 Mbps	
Threat Protection Throughput: 200 Mbps	
Firewall Throughput (1518 / 512 / 64 byte UDP packets): 3 / 3 / 3 Gbps	System Performance
Firewall Latency (64 byte UDP packets): 3 μs	
Firewall Throughput (Packets Per Second): 4.5 Mpps	
Concurrent Sessions (TCP): 1.3 Million	
New Sessions/Second (TCP): 30,000	
Firewall Policies: 5,000	
IPsec VPN Throughput (512 byte): 2 Gbps	
Gateway-to-Gateway IPsec VPN Tunnels: 200	
Client-to-Gateway IPsec VPN Tunnels: 500	
SSL-VPN Throughput: 150 Mbps	
Concurrent SSL-VPN Users (Recommended Maximum, Tunnel Mode): 100	
SSL Inspection Throughput (IPS, avg. HTTPS): 135 Mbps	
SSL Inspection CPS (IPS, avg. HTTPS): 135	

SSL Inspection Concurrent Session (IPS, avg. HTTPS): 75,000	
Application Control Throughput (HTTP 64K): 650 Mbps	
CAPWAP Throughput (HTTP 64K): 890 Mbps	
Virtual Domains (Default / Maximum): 10 / 10	
Maximum Number of Switches Supported: 8	
High Availability Configurations: Active / Active, Active / Passive, Clustering	
(2) GE RJ45 WAN	Ports/Connectors
(1) GE RJ45 DMZ	
(7) GE RJ45 Internal	
(1) USB	
(1) Console RJ45	
Power Required: 100–240V AC, 50–60 Hz	Power Notes
Maximum Current: 110 V / 1.5 A, 220 V / 0.75 A	
Power Consumption (Average / Maximum): 11.7 / 14 W	
Networking Protocol: Gigabit Ethernet	Protocols
Remote Management Protocol: HTTP	
Switching Protocol: Ethernet	
Transport Protocol: IPSec	

**Compliant Standards: CB, CE,
C-Tick, CUL, FCC Part 15 B,
UL, VCCI**

Standards

Item#6 description	Quantity				Quantity & Delivery point		Total Quantity
	WC - Aden	C.F - Aden	WC - Mukalla	C.F- Mukalla	Aden	Mukalla	
FORTIGATE 60E FIREWALL TO VPN CONNECTION	8	0	0	0	8	0	8

SYSTEMS:

Item#7 description	Quantity				Quantity & Delivery point		Total Quantity
	WC - Aden	C.F - Aden	WC - Mukalla	C.F- Mukalla	Aden	Mukalla	
HR System ERP Yemen Soft HR System Al-Ameen HR System Fenex HR System SYS HR system Any ERP System that complies with the governmental institutions workflow.	1	1	1	0	2	1	3
Kaspersky Internet Security anti virous (11 users in 1 package)	0	11	0	0	11	0	11
Employee Time Monitoring Program (3 copies) Yemen Soft HR System Al-Ameen HR System Fenex HR System SYS HR system Any ERP System that complies with the governmental institutions workflow.	0	0	1	0	0	1	1
Document archiving software Yemen Soft HR System	0	0	1	0	0	1	1

AI-Ameen HR System						
Fenex HR System						
SYS HR system						
Any ERP System that complies with the governmental institutions workflow.						

Canon EOS 5D Mark IV Full Frame Digital SLR Camera Body or Equivalent	<ul style="list-style-type: none"> • 30.4 MegaPixel full frame CMOS sensor for versatile shooting • Up to 7.0 frames per second continuous shooting speed • 61 point AF system with 41 cross points for expanded vertical coverage • ISO range 100 32000 with 50 102400 expansion • 4K video recording at 30p or 24p and in camera still frame grab of 8.8 MegaPixel images • Touch screen LCD monitor • Spare battery • Spare memory card : large capacity options up to 512GB. Up to 45 - 80 MB/s write speed. • Operating temperature: 0° to 70° C
Camera Tripod DSLR Stand,	<ul style="list-style-type: none"> • 1/4 360 panorama ball head : This camera tripod stand also equips 360°panorama ball head, 1/4 quick release mount, and ball head handle. With your camera or smart phone mounted on it, you can take photo or video at any Angle, eg horizontally, vertically, upward and downward. Also accurate panoramas can be easily orchestrated and recorded • Vlog Blogging Video camera Tripod: With the 1/4 panorama 360 ball head and 360 rotate phone holder, you can use it when do vlog, vlogging, youtube, video, and blogging. This camera phone tripod is compatible with most cameras, such as Canon Nikon Sony Samsung Fuji Olympus Handycam Lumix Rebel and so on • High quality and Convenience: Camera tripod leg made of high quality aluminum alloy tube (4-sections) and fork made of High quality ABS. Center column with spring hook at the bottom to suspend goods for increased stability. This stand (size from 16" To 49") comes with a carry bag

No.	Item# 8 Description	Quantity				Quantity Delivery point		Total Quantity
		WC - Aden	C.F - Aden	WC - Mukalla	C.F- Mukalla	Aden	Mukalla	
	Digital Camera	0	2	1	0	2	1	3
	Carrying Case for Camera	0	1	0	0	1	0	1
	Tripod for Camera	0	1	0	0	1	0	1