

Technical Specifications and Cost Estima

Project Name :

Strengthening Public Finances and Financial Markets (FFM) in Iraq - Phase II

Project P.N. :

25.2071.6-001.00 / G-018140-001

Tender Name :

Procurement of IT Equipment for AMU/ C/T

No.	LOTs	Item	Specifications	Quantity	
				amount	unit
1		All-in-One PC	Device Type: All-in-One (AIO) desktop computer, with integrated display and computing components Processor (CPU): Modern 64-bit multi-core processor providing performance equivalent to or better than the originally specified processor, demonstrated through recognized, independently verifiable benchmark results Graphics: Integrated graphics processor capable of supporting Full HD resolution, multimedia applications, and standard office productivity software Memory (RAM): Minimum 16 GB DDR5 RAM or equivalent or better technology Storage: Minimum 1 TB solid-state drive (SSD), M.2 interface or equivalent Display Size: Minimum 27-inch diagonal display Display Resolution: Minimum Full HD (1920 × 1080 pixels) Brightness: Minimum 250 cd/m² (nits) Touchscreen: Integrated touchscreen functionality with multi-touch support Camera: Integrated HD webcam (minimum 720p) with physical privacy shutter, retractable mechanism, or equivalent privacy protection Microphone: Integrated dual-array microphones or equivalent audio capture system Speakers: Built-in stereo speakers suitable for video conferencing and multimedia playback Wireless Connectivity: Wi-Fi 6 (IEEE 802.11ax) or newer Bluetooth: Bluetooth 5.3 or newer Wired Network: Minimum one RJ-45 Ethernet port USB ports: Minimum four USB ports, including at least one USB Type-C port and two USB ports supporting data transfer speeds of 5 Gbps or higher USB Type-A: Minimum two USB Type-A ports supporting USB 3.2 or higher, and two additional USB Type-A ports supporting USB 2.0 or higher Video Output: Minimum one HDMI output or equivalent digital video output Keyboard and Mouse: Wireless keyboard and mouse set, compatible with the supplied computer; Bluetooth or equivalent wireless technology Operating System: Pre-installed, genuine, licensed 64-bit operating system compatible with standard office productivity, networking, security, and peripheral applications. Microsoft Windows 11 Warranty: Minimum 12-month manufacturer or authorized supplier warranty covering hardware defects Reference model: HP Z7- CR1000e or equivalent	34	Unit
2	Lot 1	Microsoft Office License	Software Type: Professional office productivity software suite, latest commercially available stable version License Type: Perpetual, standalone license with a one-time purchase fee, allowing indefinite use without recurring subscription payments Core Applications: Word processing, spreadsheet management, presentation creation, and email management, with functionality equivalent to professional office productivity suites Compatibility: Full compatibility with commonly used office document formats, including DOCX, XLSX, PPTX, and PDF Installation: Locally installed desktop applications with offline functionality Updates and Security: Security updates and technical support in accordance with the software provider's lifecycle policy License Authenticity: Genuine, legally acquired software license with valid activation credentials and proof of licensing License Validity: Lifetime usage rights for the purchased software version, without mandatory annual renewal Preferable: Pro Plus Microsoft Office License	34	Unit
3		Offline UPS	Equipment Type: Uninterruptible Power Supply (UPS), line-interactive or online technology, suitable for protecting office IT equipment against power interruptions and voltage fluctuations Power Capacity: Minimum 2000 VA / 1200 W rated output capacity Input Voltage: Compatible with nominal 220–240 VAC, power supply Input Frequency: 50/60 Hz, automatic frequency detection Output Voltage: Nominal 220–240 VAC, with voltage regulation within ±10% under specified operating conditions Transfer Time: Maximum 10 milliseconds when switching from mains to battery operation Battery Type: Rechargeable, sealed, maintenance-free battery technology or equivalent Battery Backup Time: Minimum 10 minutes at 50% of the UPS rated active power output (600 W) Status Indicators: LED indicators, LCD display, or equivalent visual interface showing operating status, battery condition, and fault notifications Audible Alarms: Audible warning signals for low battery, overload, and power failure Electrical Protection: Integrated short-circuit, overload, and surge protection Automatic Voltage Regulation: Automatic voltage regulation or equivalent functionality to compensate for input voltage fluctuations without unnecessary battery use Output Connections: Sufficient protected power outlets to connect the intended IT equipment; compatible with applicable local electrical standards Warranty: minimum 12-month warranty for the UPS unit and 6-month warranty for batteries	50	Unit
4	Lot 2	Network Switch	Model and Type: Managed Gigabit Ethernet network switch, supporting Layer 2 switching and basic Layer 3 routing functionalities Downlink Ports: Minimum 24 × 10/100/1000 Mbps RJ-45 Gigabit Ethernet ports with auto-negotiation Uplink Ports: Minimum 4 × 1 Gigabit Ethernet SFP slots supporting compatible fiber-optic transceivers Processor and Memory: Processor and memory resources sufficient to support all specified switching, routing, management, and security functionalities at the required performance levels Packet Buffer: Minimum 1.5 MB packet buffer memory or equivalent buffering capability Jumbo Frames: Support for Ethernet jumbo frames of at least 9,000 bytes Switching Capacity: Minimum 52 Gbps switching capacity Forwarding Rate: Minimum 38 Mpps packet forwarding rate Physical Design: Compact, rack-mountable design compatible with standard 19-inch network racks; maximum 1U rack height Layer 2 Functionality: Support for IEEE 802.1Q VLAN tagging, IEEE 802.1D/802.1w Spanning Tree Protocol or equivalent, link aggregation, and Quality of Service (QoS) Layer 3 Functionality: Support for static IPv4 and IPv6 routing Management Interface: Support for secure web-based management through a graphical user interface and remote network administration through standard management protocols Network Monitoring: Support for network monitoring and diagnostics through industry-standard protocols such as SNMP or equivalent Energy Efficiency: Compliance with IEEE 802.3az Energy Efficient Ethernet or equivalent energy-saving technology Warranty: Minimum 12-month manufacturer or authorized supplier warranty covering hardware defects 24T-4G Managed or equivalent Reference model: Cisco Catalyst C1300	6	Unit
5		Mesh Wireless Access Point	Equipment Type: Enterprise-grade wireless access point (AP), suitable for indoor or outdoor deployment, as applicable Wireless Standard: IEEE 802.11be (Wi-Fi 7) or newer, with backward compatibility with earlier Wi-Fi standards Frequency Bands: Minimum dual-band operation supporting 2.4 GHz and 5 GHz; 6 GHz support optional Spatial Streams / MIMO: Minimum 2 × MIMO on each supported frequency band, with multi-user MIMO capability Wireless Data Rate: Aggregate theoretical wireless data rate of at least 4.5 Gbps across supported frequency bands Channel Bandwidth: Support for wide-channel operation in accordance with the applicable Wi-Fi standard and local regulatory requirements Antenna System: Integrated or external antenna system providing suitable coverage and signal quality for the intended installation environment Transmission Power: Adjustable transmission power sufficient to provide the required wireless coverage, within applicable regulatory limits Network Interface: Minimum one 2.5 Gigabit Ethernet (2.5 GbE) RJ-45 port Power Supply: Power over Ethernet (PoE), compatible with IEEE 802.3at or an equivalent standardized PoE solution Power Consumption: Compatible with the available PoE power budget; manufacturer to specify maximum power consumption Environmental Protection: Minimum IPX6 water-ingress protection rating for outdoor installation, including any required mounting accessories Operating Temperature: Suitable for operation within a minimum temperature range of -20°C to +55°C Network Security: Support for WPA2 and WPA3 wireless security protocols or newer equivalent standards Network Management: Support for centralized or standalone configuration, monitoring, and firmware management Network Segmentation: Support for multiple SSIDs and VLAN-based network segmentation Warranty: inimum 12-month manufacturer or authorized supplier warranty	6	Unit
6	Lot 3	Multifunction Printer	Machine Type: A3 monochrome laser or equivalent electrophotographic multifunction printer (MFP) Core Functions: Printing, copying, scanning, and electronic document sending; fax functionality optional Processor: Processor capable of supporting the specified printing, copying, scanning, and network functions without significant performance degradation Control Panel: Colour touchscreen display, minimum 7 inches diagonal, with user-friendly interface Memory and Storage: Minimum 2 GB RAM and 32 GB internal storage (SSD, HDD, eMMC, or equivalent), sufficient for network printing, scanning, job management, and secure printing Network Connectivity: Integrated Ethernet interface supporting 10/100/1000 Mbps; wireless networking supporting IEEE 802.11 b/gn or newer, with direct wireless printing capability USB Connectivity: Minimum two USB host ports and one USB device port, USB 2.0 or higher, or equivalent connectivity supporting the same functions Printing Speed: Minimum 45 pages per minute (ppm) for A4 monochrome printing and 20 ppm for A3 Copying Speed: Minimum 45 copies per minute for A4 monochrome copying and 20 copies per minute for A3 First Copy Output Time: Maximum 6 seconds for A4 monochrome copying under standard operating conditions Warm-Up Time: Maximum 10 seconds from sleep mode; maximum 30 seconds from power-on to ready state Standard Paper Input Capacity: Minimum 1,100 sheets (80 gm), including at least two paper cassettes and one multipurpose tray; at least one cassette must accommodate A3 paper Expandable Paper Capacity: Expandable to at least 2,000 sheets through optional paper feeding units Paper Output Capacity: Minimum 250 sheets Finishing Options: Compatibility with an optional finishing unit supporting automatic stapling Supported Paper Sizes: A3, A4, A5, DL and C5 envelopes, and custom paper sizes through the multipurpose tray Supported Media Types: Plain paper, recycled paper, heavy paper, letterhead, and labels, as supported by the relevant paper feeding mechanism Copy Resolution: Minimum 600 × 600 dpi Scanning Resolution: Minimum optical resolution of 600 × 600 dpi for document scanning Scanning Functions: Support for scanning to email, network folders, USB storage, and other standard electronic destinations Network Scanning Protocols: Support for standard network file transfer protocols, including SMB and/or FTP or equivalent Warranty: Minimum 12-month manufacturer or authorized supplier warranty covering hardware defects Reference Model: Canon ImageRUNNER 2945i or equivalent	4	Unit
7		Color laser multifunction printer	Machine Type: A4 colour laser or equivalent electrophotographic multifunction printer (MFP) Core Functions: Printing, copying, scanning, and faxing Memory: Minimum 1 GB RAM or equivalent memory capacity sufficient to support the required multifunction operations Control Panel: Colour touchscreen display, minimum 4.3 inches diagonal, with user-friendly interface Print Speed: Minimum 25 pages per minute (ppm) for A4 single-sided printing; automatic double-sided printing supported Print Resolution: Minimum 600 × 600 dpi native resolution, with enhanced print quality equivalent to 1200 × 1200 dpi First Print Output Time: Maximum 12 seconds for A4 printing under standard operating conditions Warm-Up Time: Maximum 30 seconds from power-on to ready state Copy Speed: Minimum 25 copies per minute for A4 single-sided copying; automatic double-sided copying supported Copy Resolution: Minimum 600 × 600 dpi First Copy Output Time: Maximum 15 seconds for A4 copying Duplex Functionality: Automatic two-sided printing and copying, including two-sided original to two-sided output Document Feeder: Automatic document feeder with minimum 50-sheet capacity, supporting two-sided scanning; flatbed scanner included Scanning Resolution: Minimum 600 × 600 dpi optical resolution Scanning Speed: Minimum 40 images per minute (ipm) for monochrome and 30 ipm for colour scanning at A4, 300 dpi, using the automatic document feeder Scan Destinations: Support for scanning to email, computer, network folder, and USB storage; cloud scanning supported where available Paper Input Capacity: Minimum 250-sheet standard paper cassette, plus manual feed or multipurpose tray Paper Output Capacity: Minimum 100 sheets Supported Paper Sizes: A4, A5, B5, DL and C5 envelopes, and custom paper sizes through manual feed USB Connectivity: USB 2.0 or higher Wired Network Connectivity: Ethernet interface supporting 10/100/1000 Mbps Wireless Connectivity: Wi-Fi supporting IEEE 802.11n or newer, with direct wireless printing functionality or equivalent Security Features: Secure printing through PIN authentication or equivalent access controls; encrypted network communication through TLS or equivalent Warranty and Support: Minimum 12-month warranty, including availability of local technical service and spare parts in Iraq Model: Canon i-SENSYS MF667Cdw or equivalent Reference	13	Unit