

**ANNEX II + III: TECHNICAL SPECIFICATIONS + TECHNICAL OFFER**

PUBLICATION REFERENCE: ZSOFT/4.3/142 (MTender ID ocds-b3wdp1-MD-1614664790953)					01.04.2021	
Contract title : Calculatoare de birou și mijloace periferice (conform regulilor PRAG-2016)						
Item Number	Type of Equipment	Specifications Required	Specifications Offered	Notes, remarks, ref to documentation	Evaluation Committee's notes	
1						
Personal Computers (PC)						
	Personal Computers (PC)	According to the specifications	<p><b><u>HP EliteDesk 800 G6 Desktop Mini Business PC / 8WY20AV</u></b></p> <p>Type: Desktop-Mini</p> <p>Processor: Intel® Core™ i5 10500 (3.1 GHz, 12 MB cache, 6 cores); Supports Intel® vPro™ Technology</p> <p>Chipset: Intel® Q470 PCH-H- vPro™</p> <p>Memory: 8GB (1x8GB) DDR4 2666 SODIMM; 2x SODIMM slots; up to 64GB of memory</p> <p>Storage: 2x 256GB M.2 2280 PCIe NVMe Three Layer Cell SSD (Maximum Sequential Read - up to 2700MB/s, Maximum Sequential Write - up to 1000MB/s) in RAID Level 1 (pre-installed on the factory)</p> <p>Slots: 1x M.2 PCIe x1 2230 (for WLAN); 2x M.2 PCIe x4 2280/2230 Combo (for storage)</p> <p>Network controller: Intel® I219-LM Gigabit Network Connection LOM; Intel® Wi-Fi 6 AX201 + BT5.1</p> <p>Graphics: UHD Graphics 630; support up to 3x monitors with resolution 1920x1080@60Hz</p> <p>Ports: 3x USB Type-A SuperSpeed 5 Gbps; 3x USB Type-A SuperSpeed 10 Gbps; USB Type-C SuperSpeed 10 Gbps; 2x DisplayPort™ 1.4; HDMI 2.0; RJ45; Combo Audio Jack with CTIA and OMTP headset Support</p> <p>Multimedia: HD Stereo Codec - Realtek ALC3205-CG; Internal Speaker Amplifier - 2W; Internal Speaker</p> <p>Accessories: HP Quick Release 2</p> <p>Security: TPM 2.0 (FW: 7.85) endpoint security controller; Support for chassis cable lock devices; USB enable/disable (via BIOS); Removable media write/boot control; Power-on and Setup password (via BIOS); HP Client Security Suite Gen6; HP Power On Authentication; HP Privacy Settings; HP Secure Erase; Absolute Persistence Module; Pre-boot Authentication; HP Sure Sense3; HP Sure Click3; HP Sure Start Gen6; HP Sure Run Gen3; HP Sure Recover Gen3</p> <p>Manageability Features: HP Driver Packs; HP System Software Manager (SSM) (download); HP BIOS Config Utility (BCU) (download); HP Client Catalog (download); HP Image Assistant Gen (download); HP Manageability Integration Kit for Microsoft System Center Configuration Management Gen4; Ivanti Management Suite (download); HP Cloud Recovery; HP Client Management Script Library (download)</p> <p>External Power supply: 90W EPS, active PFC, 89% average efficiency</p> <p>OS: Microsoft Windows 10 Pro 64-bit</p> <p>Monitor: HP P24h G4</p> <p>Display Size 23.8-in; Display Panel Type IPS; 3-sided Micro-Edge Bezel; Native Resolution 1920x1080@60 Hz; Interfaces VGA, HDMI 1.4, DisplayPort 1.2; Brightness 250 cd/m<sup>2</sup>; Static Contrast Ratio 1000:1; Dynamic Contrast Ratio 8,000,000:1; Flicker Free; 178° HVA/VVA; Color Gamut Coverage NTSC 72%; Factory Color Calibrated; Tilt -5° to +23°; Swivel 360°; Pivot Clockwise 90°; Height Adjustment Range 100 mm; VESA Mounting support: Security Lock Ready; Integrated stereo speakers 2W per channel;</p> <p>Input devices: HP Wired Desktop 320K Keyboard (Eng/Rus, Factory engraved, quiet typing); HP USB 1000dpi Laser Mouse</p> <p>Warranty: 5 Years NBD on-site official manufacturer warranty (DMR service for desktop)/UE334E+U7935E</p>	<p><a href="https://www.hp.com/us-en/shop/pdp/hp-elitedesk-800-g6-desktop-mini-pc-customizable-8wy24av-mb">https://www.hp.com/us-en/shop/pdp/hp-elitedesk-800-g6-desktop-mini-pc-customizable-8wy24av-mb</a></p> <p><a href="https://www.hp.com/us-en/shop/pdp/hp-p24h-q4-fhd-monitor">https://www.hp.com/us-en/shop/pdp/hp-p24h-q4-fhd-monitor</a></p>		
2						
Server						
	Server		<p><b><u>HPE ProLiant DL380 Gen10 Server / 868703-B21</u></b></p> <p>Type: Rack 2U</p> <p>Processor: 2x Intel® Xeon™ Gold 6140 (2.3 GHz, 24,75 MB cache, 18 cores, 140W TDP)</p> <p>Chipset: Intel® C621</p>	<p><a href="https://h20195.www2.hpe.com/v2/getdocument.aspx?docname=a00008180enw">https://h20195.www2.hpe.com/v2/getdocument.aspx?docname=a00008180enw</a></p>		



		According to the specifications	<p>Memory: 512GB (16x HPE 32GB Dual Rank x4 DDR4-2666 CAS-19-19-19 RDIMM); 24x Memory slots</p> <p>Storage: 2x 960GB M.2 2280 PCIe NVMe SSD (Read Intensive); 10x 2.4TB SAS 12G 10K SFF SC 512e DS; support installation up to 30x SFF HDD/SSD</p> <p>Storage controller: HPE Smart Array P816i-a SR Gen10 (SAS/SATA 12G; 16x internal connection; 4GB FBWC; RAID 0/1/5/6/10/50/60 and FIPS 140-2 Level 1 support; HPE 96W Smart Storage Battery)</p> <p>Slots: 4x PCIe 3.0 x8 (Full-height, full-length slot); 2x PCIe 3.0 x16 (Full-height, full-length slot); 1x PCIe 3.0 x8 and 2x PCIe 3.0 x16 will be free for future upgrade</p> <p>Network controller: HP Ethernet 1Gb 4-port 366FLR Adapter; HPE 10GbE 2p SFP+ QL41401 Adapter (incl. 2x transceivers)</p> <p>HBA: 2x HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host</p> <p>Management: HPE iLO 5 ASIC system management chipset (32 MB Flash, 4 Gbit DDR 3 with ECC protection); HPE iLO Remote Management 1Gbit Network Port + Front iLO Service Port; HPE iLO Advanced</p> <p>Fans: 6 standard fans (N+1 redundancy)</p> <p>Rail Kit: Easy Install Rail Kit with Cable Management Arm</p> <p>Warranty: 5 Years NBD on-site official manufacturer warranty/H7J32A5#WAH</p>		
<b>3</b>					
<b>Color Printer</b>					
	Color Printer	According to the specifications	<p><b><u>HP Color LaserJet Enterprise M553dn / B5L25A</u></b></p> <p>Type: Color Laser Printer</p> <p>Print Speed (Color): 38 ppm (A4)</p> <p>First page out: As fast as 6 sec Black; As fast as 7 sec Color</p> <p>Print resolution: 1200x1200 dpi Native hardware resolution; HP ImageREt 3600; Pantone Calibrated</p> <p>Standard print languages: HP PCL 6; HP PCL 5c; HP postscript level 3 emulation, native PDF printing (v 1.7)</p> <p>Print margins: 2 mm absolute/5 mm assured image per each side of document (A4)</p> <p>Duty cycle (monthly): up to 80000 pages</p> <p>Standard connectivity: Hi-Speed USB 2.0 port; built-in Fast Ethernet 10/100/1000Base-TX network port</p> <p>Memory: 1 GB (Standard); maximum 2 GB; 4 GB non-volatile storage with encryption (AES 128 or AES 256); HDD supported (optional)</p> <p>Paper handling: 100-sheet multipurpose tray, 550-sheet input tray 2; Optional supported 550-sheet media input tray 3, 550-sheet media input tray 4, 550-sheet media input tray 5</p> <p>Media type: Paper (plain, light, bond, recycled, mid-weight, heavy, mid-weight glossy, heavy glossy, extra heavy, extra heavy glossy, cardstock, card glossy) colour transparency, labels, letterhead, envelope, preprinted, prepunched, coloured, rough, opaquefilm, user-defined</p> <p>Media weight: 60 to 220 g/m<sup>2</sup> (plain paper), 105 to 220 g/m<sup>2</sup> (glossy paper)</p> <p>Media sizes: A4, A5, A6, custom sizes</p> <p>Control panel: 4-line dimmable colour LCD</p> <p>Supplies: supported the following cartridges - HP 508A/X series with up to ~12,500 ISO yield for black and up to ~9,500 ISO yield for yellow/magenta/cyan</p> <p>Warranty: 3 Years NBD on-site official manufacturer warranty</p>	<a href="https://www8.hp.com/ru/ru/printers/product-details/6791162">https://www8.hp.com/ru/ru/printers/product-details/6791162</a>	
<b>4</b>					
<b>Scanner for PC</b>					
	Scanner for PC	According to the specifications	<p><b><u>HP ScanJet Pro 2500 f1 Flatbed Scanner / L2747A</u></b></p> <p>Type: Desktop Flatbed/ADF scanner</p> <p>Scan Speed: up to 20 ppm/40 ipm (b&amp;w, gray and color, 300 dpi)</p> <p>Scan Technology: CMOS CIS</p> <p>Scan Resolution (hardware): up to 600 x 600 dpi (color and mono, ADF); up to 1200 x 1200 dpi (color and mono, flatbed);</p> <p>Bit depth / Grayscale levels: 24-bit / 256</p> <p>Media Sizes: Letter; Legal; Executive; A4; A5; A6; B5; B5 (JIS)</p> <p>Recommended daily duty cycle: 1500 pages (ADF)</p> <p>Memory: 64 MB</p> <p>Duplex ADF scanning: Yes</p> <p>ADF Capacity: 50 sheets</p> <p>Scanner Advanced Features: Auto exposure, Auto threshold, Auto detect color, Background smooth/removal, Auto detect size, Straighten content, Enhance content, Auto orient, Multi-color dropout, Edge erase, Delete blank page, Merge pages, Hole fill, Document separation (single page)</p> <p>Scan File Format: PDF, JPEG, PNG, BMP, TIFF, TXT(Text), RTF (Rich Text) and searchable PDF</p> <p>Warranty: 3 Years NBD on-site official manufacturer warranty</p>	<a href="https://www8.hp.com/h20195/v2/getpdf.aspx/c04782783.pdf">https://www8.hp.com/h20195/v2/getpdf.aspx/c04782783.pdf</a>	



5	Router	<p><b>Router</b></p> <p><b><u>HPE FlexNetwork MSR2003 AC Router / JG411A</u></b></p> <p>Type: Modular Router, Rack 1U</p> <p>Slots: 3x SIC slots or 1x DSIC slot + 1x SIC slot</p> <p>Interfaces: 2x RJ-45 1000BASE-T ports; USB 2.0 Port for 3G/4G (LTE) modem and USB disk; CON/AUX port and USB console port; 4x RJ-45 1000BASE-T ports via HPE FlexNetwork MSR 4-port Gig-T Switch SIC Module</p> <p>Memory and processor: RISC @ 800 MHz, 256 MB flash capacity, 1 GB DDR3 SDRAM</p> <p>Throughput: up to 1 Mpps (64-byte packets)</p> <p>Protocols: IPv4, IPv6, static routes, RIP and RIPv2, (OSPF, BGP, BGP Router Reflector, Intermediate System-to-Intermediate System (IS-IS), Multicast Internet Group Management Protocol Version 3 (IGMPv3), Protocol Independent Multicast sparse mode (PIM SM), PIM Source Specific Multicast (SSM), RSVP, CDP, ACL, DHCP, DNS, RADIUS, MPLS, Layer 2 and Layer 3 VPN, IP sec, Bidirectional Forwarding Detection</p> <p>Security: IPSec VPN; Enhanced stateful firewall; Zone based firewall; TACACS+; ADP; IPS; Auto Discover VPN; Unicast Reverse Path Forwarding; ACL; SSHv2; Attack Detection and Protection</p> <p>Traffic management: Nested QoS; Traffic policing; Congestion management; Weighted random early detection (WRED)/random early detection (RED)</p> <p>Cryptographic Algorithms: DES, 3DES, and AES 128/192/256 encryption, MD5 and SHA-1 authentication</p> <p>Warranty: 1 Year NBD on-site official manufacturer warranty</p>	<a href="https://h20195.www2.hpe.com/v2/getpdf.aspx/c04123120.pdf">https://h20195.www2.hpe.com/v2/getpdf.aspx/c04123120.pdf</a>	
6	Switch	<p><b>Switch</b></p> <p><b><u>Aruba 6100 24G 4SFP+ Switch / JL678A</u></b></p> <p>Type: Managed Switch, Rack 1U</p> <p>Interfaces: 24x ports 10/100/1000BASE-T Ports; 4x 1G/10G SFP ports; 1x USB-C Console Port; 1x USB Type-A Host port</p> <p>Memory and processor: Dual Core ARM Cortex A9 @ 1016 Mhz; 4 GB DDR3, 16 GB eMMC</p> <p>Switching Capacity: 128 Gbps</p> <p>Throughput Capacity: 95.2 Mpps (64-byte packets)</p> <p>Protocols&amp;Services: Layer 2 Switching (VLAN support and tagging support for IEEE 802.1Q; RPVST+; MVRP; BPDU; IGMP; DHCP client); Layer 3 Services (ARP; DNS; internal loopback testing; VLAN basis); Layer 3 Routing (Dual stack static IPv4 and IPv6 routing; IGMP Snooping; Multicast Listener Discover; IP multicast snooping; IPv6 ACL/QoS; IPv6 static routing); Resiliency and availability (UDLD; LACP); Quality of Service (Strict priority queuing; Traffic prioritization; Class of Service)</p> <p>Security: integrated TPM; ACL; RADIUS; TACACS+; Control Plane Policing; Web based authentication; Concurrent IEEE 802.1X, Web, and MAC authentication; STP BPDU port protection; Dynamic IP lockdown; STP root guard; SSL encryption</p> <p>Management: Built-in programmable REST API interface; Industry-standard CLI with a hierarchical structure; monitoring and accounting with no impact on network performance; network statistics and information for capacity planning and real-time network monitoring purposes; Management interface control; Management security for restricts access to critical configuration commands, multiple privilege levels with password protection and local and remote syslog capabilities allow logging of all access; SNMPv1/v2c/v3 support; Remote monitoring with standard SNMP to monitor essential network functions (supports events, alarms, history, and statistics groups as well as a private alarm extension group); TFTP and SFTP support; trivial FTP (TFTP) for bidirectional transfers over a TCP/ IP network; Secure File Transfer Protocol (SFTP) with use SSH tunnel for additional security; Network Time Protocol; Link Layer Discovery Protocol; Dual flash images for independent primary and secondary operating system files for backup; Unidirectional link detection (UDLD) monitors; Smart Power down mode of switch</p> <p>Warranty: Lifetime NBD on-site official manufacturer warranty</p>	<a href="https://www.arubanetworks.com/assets/ds/DS_6100Series.pdf">https://www.arubanetworks.com/assets/ds/DS_6100Series.pdf</a>	

Signature and stamp:

Igor Iasko, Director General

