

TERMS OF REFERENCE

Provision of Information Technology (IT) Services

I. Background:

UNHCR (the UN Refugee Agency) is a global humanitarian organization dedicated to saving lives, protecting rights, and building a better future for refugees, other forcibly displaced persons, and stateless people.

Following the legislative changes adopted on 16 December 2022, which resulted in the establishment of the Ministry of Interior of the Republic of Armenia, comprising the Police, Rescue Service, and Migration and Citizenship Service (MCS), the Police Passport and Visa Department was integrated into the MCS, becoming its headquarters.

MCS is the competent authority for refugee status and statelessness determination, processing of naturalization applications, recognition of Armenian nationality, issuing identity and travel documents to refugees, stateless persons, and nationals of Armenia, as well as managing refugee and other population data.

Data protection and secure information management form the foundation of safeguarding individual rights, ensuring privacy, and fostering trust in the handling of sensitive information. Robust data protection measures are essential in facilitating the smooth functioning of governmental and humanitarian services. Establishing secure protocols for data management not only protects personal information but also upholds fundamental rights and contributes to the realization of durable solutions.

The aim of the assignment is to (i) facilitate smooth restructuring and uninterrupted services of the newly established MCS, ensuring effective communication within its structures; (ii) contribute to the development of a robust and secure network within the MCS; and (iii) enhance the capacities of the MCS for effective data management and to ensure protection of personal data of forcibly displaced people and stateless persons.

UNHCR is inviting eligible and qualified entities registered with the Government of Armenia to submit a quotation for the provision of IT Services. The services will be implemented in close coordination with and under the direct supervision of the MCS.

Throughout the provision of the service and even after its completion, the entity and the engaged expert(s) must maintain the confidentiality of the information received during the service implementation.

II. Scope of Work:

1. Installation of the network infrastructure in accordance with the network map (Annex 1) and using the products provided by UNHCR, as listed in Annex 2, to be conducted by MTCNA (MikroTik Certified Network Associate) certified specialists.
2. Fluke testing to ensure network functionality and performance.
3. Configuration of systems for optimal performance and reporting.

4. Provision of training for MSC staff on “How to manage the network”.
5. Provision of detailed documentation, including Structure of the network, Configurations, IP addresses, logins, and passwords.

III. Duration:

The contract period will span 3 months from the signing date.

IV. Deliverables and Timelines:

The Contractor shall submit for review and approval the following reports:

Report	Description of the Report	Deadline for Submission
<i>Report 1</i>	<i>Detailed map and detailed description of the network (including hardware and software passwords and configurations)</i>	<i>2,5 months after the contract is signed</i>
<i>Report 2</i>	<i>Signed handover of the implemented activities (including results of the network testing).</i>	<i>3 months after the contract is signed</i>

All the Reports shall be submitted in English language and presented for review within two working days upon the deadline for submission of the Report.

Timeline of installation and testing activities:

<i>Installation of ducts</i>	<i>Completed installation of ducts</i>	<i>0.5 month</i>
<i>Cabling</i>	<i>Cabling and socket installation</i>	<i>0.5 month</i>
<i>Installing</i>	<i>Installation of the rack, patch panel installation, hardware devices installation</i>	<i>0.5 month</i>
<i>Assembly</i>	<i>Assembly and communication testing of passive devices</i>	<i>0.5 month</i>
<i>Devices configuration</i>	<i>Configuration of devices</i>	<i>0.5 month</i>
<i>Testing and reporting</i>	<i>Testing and reporting</i>	<i>0.5 month</i>

V. Required Experience

The successful candidate should meet the following criteria:

1. Experience working with state organizations, with a minimum of 2 projects.
2. Official company experience exceeding 7 years.
3. Certification for Network specialists involved in the project (min MikroTik Certified Network Associate certificate).
4. References on at least 10 successfully completed projects, provided by the governing bodies of the relevant organizations.
5. A minimum of 20 signed contracts for IT and network infrastructure maintenance throughout its operational tenure.

VI. Acceptance and Payments

The deliverables as described under Section IV of this Terms of Reference shall be verified by the MCS and UNHCR. Upon approval of the deliverables by the MCS and UNHCR, the Contractor shall issue an invoice to UNHCR. The standard payment term of UNHCR is net 30 days upon satisfactory performance of services and acceptance thereof by UNHCR. The final payment will be made after the final testing of the system by the MCS.

	Device name and technical specification	pcs m	qty.
1	Computer socket RJ-45, category 5e, unshielded, single, external, Dual IDC, white	pcs	400
2	Cable Box: Material :Plastic, Height: 30 mm, Width: 30 mm, Length: 2000 mm, Color:Pure white	m.	1000
3	Twisted pair cable: unshielded U/UTP, category 5e, 4 pairs (0.48 mm), solid, internal, PVC ng(A)-LS, gray, 305 m	m.	17000
4	Rack: 9U 45debt Wallmount	pcs	9
5	Rack: 24U (600*800)	pcs	1
6	Patch panel: 19" (1U), 24 RJ-45 ports, category 5e, Dual IDC,, black	pcs	20
7	Cable organizer: 75mm, 19" 1U	pcs	20
8	48 Port Gig - POE switch: /POE+/4 Port SFP+/Total non-blocking throughput88 Gbps Switching capacity:176 Gbps/Forwarding rate130.944 Mpps Layer 2 featuresIGMP snooping/STP / RSTP with priorities and port-level disable/Port isolation Storm control/Voice VLAN/Port mirroring/LACP port aggregation/Multicast / broadcast rate limiting MAC address blocking/Flow control/802.1X control/Jumbo frames/Proprietary loop protection DHCP snooping / guarding/Egress rate limit/LLDP-MED/Port restricted by MAC/Device isolation with ACLs Layer 3 featuresDHCP for locally-managed networks/DHCP relay/Inter-VLAN routing between networks on same switch/Static routing between local networks/Network isolation with ACLs, Controller base (Network Controller software)	pcs	9
9	Patch Cord: Cat.5e (100% Fluke Component Tested), LSZH, 0.5 m.	pcs	400
10	UPS:1.5KVA / 900W line interactive, tower, 2x 12v 9A battery, 4x Schuko	pcs	9
11	Socket block PDU: for 19" cabinets, horizontal, 9 Schuko sockets, power cable 2.5m (3x1.5mm2) with Schuko plug 16A, 250V, 482.6x44.4x44.4mm (WxDxH), black	pcs	2
12	UPS:3KW Online Rackmount (With internal snmp madule or external moule for monitoring) + Railkit	pcs	1
13	Fiber optic ODF: 48 Port 2U Optical Fiber Terminal, LC Pigtail, Box 19 Inch, Rackmount, multimode OM3 Frame LC/UPC 96 core	pcs	1
14	Fiber optic ODF: 8 port Wall Mount Fiber Enclosure with Spool OM3 Multimode LC-UPC Kit 16 core	pcs	9
15	Fiber optic cable: indoor (OM3), 12 core, multimod, LSZH	m.	800
16	Optical/Fiber Transceiverr SFP+: 10G, SFP+, Multimode, LC, 850nm, 300m, DDM Compatible	pcs	38
17	Patch cord: LC -LC, OM3, 50/125um, MM, 2m, Duplex, Fiber Optic Patch Cable	pcs	40
18	Switch Aggregation: 32 Port 1/10Gig SFP+ /28 Port 1/10/25Gig SFP28 Total non-blocking throughput380 Gbps Switching capacity760 Gbps/Forwarding rate565.44 Mpps/Layer 2 features IGMP snooping STP / RSTP with priorities and port-level disable/Port isolation/Storm control/Voice VLAN Port mirroring/LACP port aggregation Multicast / broadcast rate limiting/MAC address blocking/Flow control 802.1X control/Jumbo frames/Proprietary loop protection/DHCP snooping / guarding Egress rate limit/LLDP-MED/Port restricted by MAC Device isolation with ACLs/Layer 3 featuresDHCP for locally-managed networks DHCP relay/Inter-VLAN routing between networks on same switch/Static routing between local networks	pcs	1

19	Access point :Networking interface(1) GbE RJ45 port/Management interfaceEthernet/Bluetooth Max. TX power/2.4 GHz 26 dBm/5 GHz 26 dBm/6 GHz -MIMO 2.4 GHz 4 x 4 /5 GHz 4 x 4 6 GHz -/Throughput rate/2.4 GHz 600 Mbps/5 GHz 2400 Mbps/6 GHz -Antenna gain/2.4 GHz 4 dBi/5 GHz 5.5 dBi/6 GHz -/WiFi standards802.11a/b/g/n/ac/ax Wireless security WPA-PSK, WPA-Enterprise (WPA/WPA2/WPA3/BSSID8 per radio/VLAN802.1Q Advanced QoSPer-user rate limiting/Guest traffic isolationSupported Concurrent clients350+ 802.11a6, 9, 12, 18, 24, 36, 48, 54 Mbps/802.11b 1, 2, 5.5, 11 Mbps/802.11g6, 9, 12, 18, 24, 36, 48, 54 Mbps/802.11n (WiFi 4) 6.5 Mbps to 600 Mbps (MCS0 - MCS31, HT 20/40) 802.11ac (WiFi 5) 6.5 Mbps to 1.7 Gbps (MCS0 - MCS9 NSS1/2/3/4, VHT 20/40/80/160) 802.11ax (WiFi 6) 7.3 Mbps to 2.4 Gbps (MCS0 - MCS11 NSS1/2/3/4, HE 20/40/80/160)	pcs	10
20	Firewall :Hardware Accelerated GE RJ45 Ports 12/Hardware Accelerated GE RJ45 Management/ HA/ DMZ Ports 1 / 2 / 1/Hardware Accelerated GE SFP Slots 4 Hardware Accelerated 10 GE SFP+/GE RJ45 WAN Ports 2/GE RJ45 or SFP Shared Ports * 4 USB Port 1/Console Port 1/UP to 1x 480 GB SSD/Redundant Power Supplies Yes (Default dual non-swappable AC PSU for 1+1 Redundancy)/IPS Throughput 2.6 Gbps/NGFW Throughput 1.6 Gbps Threat Protection Throughput 1 Gbps/IPv4 Firewall Throughput (1518 / 512 / 64 byte, UDP) 20 / 18 / 10 Gbps/Firewall Latency (64 byte, UDP) 4.97 μs Firewall Throughput (Packet per Second) 15 Mpps/Concurrent Sessions (TCP) 1.5 Million New Sessions/Second (TCP) 56/000/Firewall Policies 10/000 IPsec VPN Throughput (512 byte) 11.5 Gbps/Gateway-to-Gateway IPsec VPN Tunnels 2000 Client-to-Gateway IPsec VPN Tunnels 16/000 SSL-VPN Throughput 1 Gbps/Concurrent SSL-VPN Users (Recommended Maximum, Tunnel Mode) 500 SSL Inspection Throughput (IPS, avg. HTTPS) 1 Gbps/SSL Inspection CPS (IPS, avg. HTTPS) 1800 SSL Inspection Concurrent Session (IPS, avg. HTTPS) 135/000/Application Control Throughput (HTTP 64K) 2.2 Gbps/Virtual Domains (Default / Maximum) 10 / 10/High Availability Configurations Active-Active, Active-Passive, Clustering	pcs	1
21	Integrated hardware controller and self-contained application server designed to help monitor and manage WIFI/network devices	pcs	1
22	SFP+ DIRECT Attach Cable 10Gb, 3m	pcs	6
23	Input and output control device (Check-In/Check-Out (CICO)) :Screen Size2.4"/Permission320×240/TypeTFT LCD screen/Audio output1 speaker, 1 beeper/Wired networkTCP/IP, auto 10M/100M Ethernet/WiFi Supported/Network interface1 Wiegand 1/Lock output 1/Exit button 1/Door contact input 1/Login Interfaces 1/Output Interfaces 1 Tamper1 /USB1/Number of cards 3000/Number of fingerprints 3000/Number of events 100000 Authentication Card type EM card/Card reading rangeFrom 0 to 5 cm/Card reading speedless than 1 s/Fingerprint moduleOptical fingerprint module/Fingerprint comparison mode1:1 and 1:N Fingerprint recognition timeless than 1 s/False identification rate (FAR)≤ 0.001% False Refusal Rate (FRR)≤ 0.01%/NutritionDC 12 V / 1 A/Working temperature-10 to +55 °C Operating humidity10 to 90% (no condensation)	pcs	1

