

STATEMENT OF WORK

BACKGROUND:

INL Ukraine has supported the Training Center of Prosecutors of Ukraine's (OPG TC) initiative to transform the old soviet-style Academy of Prosecutors of Ukraine into a modern training venue.

Currently, there is a need to procure server and network equipment for the OPG TC.

REQUIREMENTS:

A vendor shall supply, install, and setup server and network equipment with the specifications bellow. The equipment must be new, high-quality, and officially imported to Ukraine. All devices must be compatible with standard Ukrainian voltage (220-230 volts), support 50Hz current frequency and have C (European) or F (Schuko) plug type. All proposed items must be brand name or equal.

Final destination services (cost of shipping, custom clearance, necessary licenses, local delivery, local temporary warehousing services if required, uploading/downloading at final destination) are vendor's responsibility and should be included to the contract price.

Shipping address:

POC Olha Zadorozhna, ZadorozhnaOV@state.gov, cell +380634601427
INL Section
US Embassy Kyiv
4 Igor Sikorsky Street
04112 Kyiv, Ukraine

Actual delivery address (final destination):

Training Center of Prosecutors of Ukraine
81B Yuriiia Illienka Str.
Kyiv, Ukraine

WARRANTY: Standard manufacturer or seller warranty is required for all equipment. Service centers for the proposed equipment must be available on the territory of Ukraine.

VAT: This is a technical assistance project and is VAT and customs fee exempt. The supporting documentation will be provided to the awardee of the order upon request.

DELIVERY AND DEADLINE: The requested items must be delivered to the OPG TC (final destination) at 81B Yuriiia Illienka Str. within 60 days from the contract award, and installed and set up within 10 days after the delivery.

SERVER EQUIPMENT

CLIN 001: DELL POWERVAULT ME4012 STORAGE ARRAY, BRAND NAME OR EQUAL Quantity: 1

Item	Characteristic	Qty
Processor	Intel® Broadwell-DE 2,2 GHz dual-core processor	1
OS	Microsoft® Windows® 2019 standard	1
Number of simultaneous connections	CAL	100
Compartments	ME4012: 2/264	--
Ability to increase capacity	ME412: 2U form-factor, 12 compartments for 3,5" storage drives (SAS 12 Gbit/s)	
HDD	4TB 7.2K RPM NLSAS 12Gbps 512n 3.5in Hot-plug Hard Drive	7
SSD	1.92TB SSD SAS Read Intensive 12Gbps 512e 2.5in with 3.5in HYB CARR, 1 DWPD	5
SAS cables	2x12Gb HD Mini-SAS to HD Mini-SAS 2M Cable	2
Filler	Hard Drive Filler 3.5in, Single Blank	2
Rack Rails	Rack Rails 2U	1
Power Cords	C13 to C14, PDU Style, 12 AMP, 13 Feet (4m) Power Cord	2
Bezel	ME Series 2U Bezel	1
Power Supply	Power Supply, 580W, Redundant, Flex	2

CLIN 002: DELL POWEREDGE R740XD2 RACK SERVER, BRAND NAME OR EQUAL Quantity: 1

Item	Characteristic	Qty
Rack	Server Dell EMC R640 (10x2,5" SFF), H730P, 2xPS 750W, iDRAC9Ent	1
Processor	Dell EMC Intel Xeon Gold 5217 3.0G, 8C/16T, 11M Cache, HT (115W) 338-BSDT	1
Extra processor	Intel® Xeon® Gold 5217 3.0G, 8C/16T, 10.4GT/s, 11M Cache, Turbo, HT (115W) DDR4-2666	
RAM	64GB RDIMM, 3200MT/s, Dual Rank	2
RAID	C45, Unconfig RAID on Rear (Matching Type/Speed/Capacity) + Unconfig RAID (Mixed Allowed) dual PERC	1
RAID/Internal Storage Controllers	Dual Controller, PERC H740P Mini, + PERC H330 Low Profile	1
NLSAS	8TB 7.2K RPM SAS 12Gbps 512e 3.5in Hot-plug Hard Drive	5
SATA	1TB 7.2K RPM SATA 6Gbps 512n 3.5in Hot-plug Hard Drive	12

SSD	Dell EMC 960GB SSD SAS RI 12Gbps 512e 2.5in	9
Network Interface Card	Dell EMC Intel X710 Dual Port 10GbE Direct Attach SFP+ Adapter	1
Extra Network Interface Card	QLogic FastLinQ 41262 Dual Port 10/25GbE SFP28 Adapter, PCIe Low Profile	1
Extra Network Interface Card	Broadcom 57416 Dual Port 10GbE BASE-T Adapter, PCIe Low Profile	1
OS	Dell Windows Server 2019 Standard ROK	1
VMware ESXi	VMware ESXi 7.0 U2 Embedded Image (License Not Included)	1
LAN cables	Dell Networking, Cable, SFP+ to SFP+, 10GbE, Copper Twinax Direct Attach Cable, 5 Meter	5
Power Cords	C13 to C14, PDU Style, 12 AMP, 13 Feet (4m) Power Cord, North America	3
Server equipment	Keyboard	1
	Optical Mouse, USB, Black	1
	8X DVD-ROM, USB, External	1

CLIN 003: APC SMART-UPS SRT 1500VA LI-ION (SRTL1500RMXLI), BRAND NAME OR EQUAL.

Quantity: 1

□type	Online Uninterruptible Power Supply	
Mounting Mode	Rack mount	
Maximum configurable power in VA	1500	
rated power in W	1500	
output frequency	50/60 Hz +/- 3 Hz sync to mains	
Output voltage	220 240 V	V
Battery Type	Li-Ion (Lithium-Ion)	
Wave type	Sine wave	
Battery transition time, ms:	0	
Battery life with maximum load, min:	21,3	
Additional filter	RJ45	
Battery recharge time, h	6	
Interface ports	RJ-45 Serial , Smart-Slot , USB	

CLIN 004: APC SMART-UPS SRT 1000VA LI-ION (SRTL1000RMXLI), BRAND NAME OR EQUAL

Quantity: 1

□type	Online Uninterruptible Power Supply	
Mounting Mode	Rack mount	
Maximum configurable power in VA	1000	
Max Configurable Power (Watts)	900	
output frequency	50/60 Hz +/- 3 Hz sync to mains	
Output voltage	220	V

	240 V
Battery Type	Li-Ion (Lithium-Ion)
Wave type	Sine wave
Battery transition time, ms:	0
Battery life with maximum load, min:	31,6
Additional filter	RJ45
Battery recharge time, h	6
PC communication interface	RJ-45 Serial , Smart-Slot , USB

CLIN 005: APC NETSHELTER SX 42U 750MM WIDE X 1070MM DEEP ENCLOSURE WITH SIDES BLACK (AR3150), BRAND NAME OR EQUAL

Quantity: 1

Mounting Mode	Rack-mountable
Rack Height	42U
Rack Width	19"
Maximum height	78.39inches (1991MM, 199.1CM)
Maximum width	29.53inches (750MM, 75.0CM)
Maximum depth	42.13inches (1070MM, 107.0CM)
Net weight	343.83lbs. (155.96KG)
Color	Black
Maximum mounting depth	36.02inches (915.0MM, 91.49CM)
Minimum mounting depth	10.31inches (262.0MM, 26.19CM)
Front door	16.0 gauge
Vertical posts	16.0 gauge
Rear Door	16.0 gauge
Roof	18.0 gauge
Side Panels	18.0 gauge
Units per Pallet	1.0
Load capacity (static load)	3749.99lbs. (1700.97KG)
Load capacity (dynamic load)	2249.99lbs. (1020.58KG)
Protection Class	IP20

CLIN 006: APC NETSHELTER 13U WALLMOUNT RACK CABINET VENTED DOOR DOUBLE HINGED SERVER DEPTH (AR100HD), BRAND NAME OR EQUAL

Quantity: 1

Mounting Mode	Rack-mountable
Rack Height	13U
Rack Width	19"
Maximum height	26.1inches (663MM, 66.3CM)
Maximum width	22.99inches (584MM, 58.4CM)
Maximum depth	24.84inches (631MM, 63.1CM)
Net weight	94.2lbs. (42.73KG)
Color	Black
Maximum installation depth	915.0MM, 91.49cm

Minimum installation depth	262.0MM, 26.19cm
Front door	16.0 gauge
Vertical posts	16.0 gauge
Rear Door	13.0 gauge
Roof	18.0 gauge
Side Panels	18.0 gauge
Units per Pallet	1.0
Weight capacity (static load)	200.0lbs. (90.72KG)
Protection Class	IP20

**CLIN 007: RACK PDU, SWITCHED, 1U, 12A/208V, 10A/230V, (8)C13, (AP7920B),
BRAND NAME OR EQUAL**

Quantity: 2

Mounting Mode	Rack-mountable
Rack Height	1U
Nominal Output Voltage	208V, 230V
Nominal Input Voltage	200V, 208V, 230V
Cord Length	6.5ft (2meters)
Input frequency	50/60 Hz
Acceptable Input Voltage	200 - 240VAC
Maximum Input Current	15A
Maximum Height	1.73inches (44MM, 4.4CM)
Maximum Width	17.52inches (445MM, 44.5CM)
Maximum Depth	4.25inches (108MM, 10.8CM)
Color	Black

**CLIN 008: APC RACK PDU, METERED, ZERO U, 10A, 230V, (16) C13, (AP7850B),
BRAND NAME OR EQUAL**

Quantity: 1

Mounting Mode	Rack-mountable
Maximum Total Current Draw	10
Overload Protection	No
Input frequency	47 - 63 Hz
Acceptable Input Voltage	200 - 250VAC
Number of Power Cords	1
Load Capacity	2300VA
Maximum Line Current	10A
Maximum Height	49.02inches (1245MM, 124.5CM)
Maximum Width	2.2inches (56MM, 5.6CM)
Maximum Depth	1.73inches (44MM, 4.4CM)
Color	Black

**CLIN 009: APC NETSHELTER SX 42U 600MM WIDE RECESSED RAIL KIT (AR7503),
BRAND NAME OR EQUAL**

Quantity: 1

Enables users to mount equipment with different depths in a 42U, 600 mm wide enclosure.

Maximum Height	39.57inches (1005MM, 100.5CM)
Maximum Width	2.87inches (73MM, 7.3CM)
Maximum Depth	2.32inches (59MM, 5.9CM)
Color	Black

CLIN 010: APC FIXED 1U SHELF 250LBS/114KG BLACK (AR8122BLK), BRAND NAME OR EQUAL**Quantity: 2**

Fixed shelf to enable the mounting of tower units, monitors, and other equipment into the rack environment.

Unit	1U
Maximum Height	1.73inches (44MM, 4.4CM)
Maximum Width	18.5inches (470MM, 47.0CM)
Maximum Depth	25.98inches (660MM, 66.0CM)
Net Weight	18.03lbs. (8.18KG)
Color	Black
Maximum Mounting Depth	32.5inches (826.0MM, 82.55CM)
Minimum Mounting Depth	26.5inches (673.0MM, 67.31CM)
Weight Capacity (static load)	250.0lbs. (113.4KG)

CLIN 011: APC FIXED 2U SHELF 50LBS/22.7KG BLACK (AR8105BLK), BRAND NAME OR EQUAL**Quantity: 3**

Cantilever fixed shelf to enable the mounting of a monitor or other equipment into the rack environment.

Unit	2U
Maximum Height	15.98inches (406MM, 40.6CM)
Color	Black
Maximum Mounting Depth	16.0inches (406.0MM, 40.64CM)
Minimum Mounting Depth	16.0inches (406.0MM, 40.64CM)
Weight Capacity (static load)	50.0lbs. (22.68KG)

CLIN 012: APC NETSHELTER CABLE MANAGEMENT, MOUNTING RAIL BRUSH STRIPS, FOR NETSHELTER SX 750 MM WIDE, BLACK, 76 X 114 X 13 MM (AR7706), BRAND NAME OR EQUAL**Quantity: 1**

This Horizontal Cable Organizer promotes proper airflow while allowing cables to be passed from the front to the rear of the rack. Features plastic fingers at 1U.

Maximum Height	4.49inches (114MM, 11.4CM)
Maximum Width	2.99inches (76MM, 7.6CM)
Maximum Depth	0.51inches (13MM, 1.3CM)

Shipping Depth	9.49inches (241MM, 24.1CM)
Color	Black

CLIN 013: M6 HARDWARE KIT (AR8100), BRAND NAME OR EQUAL

Quantity: 10 sets

M6 hardware for mounting equipment in enclosure with square hole mounting rails. Qty. 32 sets of M6 cage nuts, nylon washers and slot/phillips screws.

1 Set Qty	32 M6 cage nuts
Maximum Height	0.98inches (25MM, 2.5CM)
Number of Power Cords	1
Maximum Width	0.51inches (13MM, 1.3CM)
Maximum Depth	0.51inches (13MM, 1.3CM)
Color	Black

CLIN 014: RETROFIT KIT FOR DELL® 2450/2400 SERVERS (AR8004), BRAND NAME OR EQUAL

Quantity: 3 sets

Accessories to aid in the installation of rack mount IT equipment and to secure racks into position within an enclosure.

Item	Qty
Right Slide Assembly	1
Left Slide Assembly	1
Right Server Adapter Plate Assembly	1
Left Server Adapter Plate Assembly	1
10-32 × 5/8" Phillips Pan Head Screw	4
Flat Washer	4
10-32 Caged Nuts	2

CLIN 015: NETSHELTER SX BOLT-DOWN KIT (AR7701), BRAND NAME OR EQUAL

Quantity: 2 sets

Bolt-down brackets for NetShelter SX enclosures. Meets UBC Zone-4 Seismic anchoring requirements.

Maximum Height	2.87inches (73MM, 7.3CM)
Maximum Width	2.76inches (70MM, 7.0CM)
Maximum Depth	2.44inches (62MM, 6.2CM)
Color	Black

CLIN 016: NETSHELTER ZERO U ACCESSORY MOUNTING BRACKET (AR7711), BRAND NAME OR EQUAL

Quantity: 1

Provides mounting options for Rack PDUs and other small accessories.

Maximum Height	3.31inches (84MM, 8.4CM)
Maximum Width	4.45inches (113MM, 11.3CM)

Maximum Depth	2.09inches (53MM, 5.3CM)
Color	Black

CLIN 017: APC 2X1X16 IP KVM WITH APC 17" RACK LCD AND USB VM SERVER MODULE BUNDLE (KVM-BN001), BRAND NAME OR EQUAL

Quantity: 1

Essential hardware used to access multiple servers at-the-rack or remotely.

Maximum Hight	5.24inches (133MM, 13.3CM)
Maximum Width	49.61inches (1260MM, 126.0CM)
Maximum Depth	40.08inches (1018MM, 101.8CM)
Color	Black

CLIN 018: POWER CORD KIT (6 EA), LOCKING, C13 TO C14, 1.8M, BLUE (AP8706S-WWX591), BRAND NAME OR EQUAL

Quantity: 3 kits

Essential hardware used to access multiple servers at-the-rack or remotely.

Cord Length	6ft (1.8meters)
Maximum Total Current Draw	10
Maximum Input Current	10A
Maximum Line Current	10A
Maximum Height	9.45inches (240MM, 24.0CM)
Maximum Width	2.95inches (75MM, 7.5CM)
Maximum Depth	2.17inches (55MM, 5.5CM)
Color	Blue

PASSIVE NETWORK EQUIPMENT

CLIN 019: CORNING 1U 19" HD PATCH PANEL, 48-MODSFUTURECOMS500, IDC, CAT6A BLACK (CAXASV-04808-C002), BRAND NAME OR EQUAL

Quantity: 3

Category	Category 6a
Color	Black
Number of Ports	48
Rack Units	1
Termination	Idc
Wiring	T568B
UNSPSC Code	43223309

CLIN 020: MINI-COM 24-PORT PATCH PANELS, METAL, SHIELDED (CP24BLY), BRAND NAME OR EQUAL

Quantity: 5

The Mini-Com All Metal Shielded Patch Panel accepts up to 24 Mini-Com Shielded Jack Modules in 1 RU.

Number of Ports	24
Rack Units	1
UNSPSC Code	43223309

CLIN 021: PAN-NET JACK MODULE CATEGORY 6, RJ45, 8-POSITION, 8-WIRE UNIVERSAL MODULE, BULK PACKAGED. ARCTIC WHITE (CJ688TGAW-24), BRAND NAME OR EQUAL

Quantity: 400

Product Type	Jack Module
Performance Level	Category 6
Connector Type	Jack Module
Termination Style	TG Style
Body Material	ABS
Contact Material	Plated Phosphor Bronze
Module Type	Mini-Com
Wiring Scheme	T568A/T568B
Shield Type	Unshielded (UTP)
RoHS Compliant	Yes
Overall Depth (mm)	38.1
Overall Height (mm)	18
Overall Length (mm)	38.1
Overall Width (mm)	15.7

CLIN 022: PAN-NET ADAPTER (CFPFS2SAW), BRAND NAME OR EQUAL

Quantity: 100

The Mini-Com 45mm x 45mm Faceplate Adapter accepts two Mini-Com Modules. The adapter mounts to standard 45mm x 45mm openings. It should include a frame and a half-size sloped, shuttered insert to improve bend radius and protect modules from dust and debris.

Product Type	Adapter
Number of Ports	2
Region	EMEA
Module Type	Mini-Com
Sub Brand	Pan-Net
Material	ABS
Color	Arctic White
Identification Type	Adhesive Label
Outlet Orientation	Sloped Shuttered
Overall Width (mm)	44.95
Overall Depth (mm)	31.8
Overall Height (mm)	44.95
Standards Met	RoHS Compliant

**CLIN 023: PAN-NET FACEPLATE FRAME (FAF80AW), BRAND NAME OR EQUAL
Quantity: 100**

80mm x 80mm faceplate frame accepts 45mm x 45mm or 22.5mm x 45mm adapters which snap in and out of faceplate frame. Two-piece frame includes screw-mount base and snap-on faceplate that conceals screws. Base is compatible with standard DIN openings.

Product Type	Faceplate Frame
Material	ABS
Color	Arctic White
Module Type	Mini-Com
Identification Type	NA
Overall Width (In.)	3.15
Overall Width (mm)	80.01
Overall Depth (In.)	0.43
Overall Depth (mm)	10.92
Overall Height (In.)	3.15
Overall Height (mm)	80.01
Number of Ports	2
Series Type	NA
Mount Method	Screw Mount
Gang Opening Type	NA
Standards Met	RoHS Compliant

CLIN 024: ASSMANN WALL MOUNT CABINET 19" 12U SOHO (DN-1912-U-S), BRAND NAME OR EQUAL

Quantity: 2

Type	Cabinet Rack
Style	Enclosed, Bottom, Front, Sides, Top

Number of Units	12U
Dimensions Overall	- 15.750" L x 20.470" W x 22.880" H (400.05mm x 519.94mm x 581.15mm)
Door	Glass
Features	Cable Entry Systems, Wall Mount
Mounting Rails	One Pair
Ventilation	Top
Material	Metal, Steel
Color	Gray
Shipping Info	Shipped from Digi-Key

CLIN 025: CONTEG ATTACHMENT SET (M5X15MM). 100PCS (DP-MO-100), BRAND NAME OR EQUAL

Quantity: 4

The mounting kit is used to mount the equipment to the vertical extrusions.

Package shall include: 100× mounting kit (1× screw, 1× floating nut, 1× washer)

CLIN 026: KRONE 6417 2 055-01 UNIVERSAL PUNCH DOWN INSERTION TOOL WITH SENSOR, SCISSORS, WIRE HOOK AND BLADE, BRAND NAME OR EQUAL

Quantity: 1

ACTIVE NETWORK EQUIPMENT

CLIN 027: CISCO CATALYST 9130 WIFI 6 ACCESS POINT (C9130AXI-EWC-E), BRAND NAME OR EQUAL

Quantity: 15

Description	Cisco Embedded Wireless Controller on Catalyst Access Points: Indoor environments, with internal antennas, E regulatory domain.
Minimum software requirement	Cisco IOS XE Software Release 16.12.2 or later
Maximum number of access points	Up to 100
Maximum number of clients	Up to 2000
Maximum number of WLANs	16
Deployment modes	Cisco FlexConnect
Maximum FlexConnect APs per site	100
License	Smart License enabled
Operating system	Cisco IOS XE Software
Management	Cisco DNA Center 1.3.2, integrated WebUI, mobile app, and third party (open standards APIs)
Policy engine	Cisco Identity Services Engine (ISE) 2.2, 2.3, and 2.4
Access points	Cisco Catalyst 9100 Access Points and Aironet 802.11ac Wave 2 access points (operating in client serving mode only)
Regulatory Domain	E regulatory domain: <ul style="list-style-type: none">• 2.412 to 2.4835; 13 channels• 5.150 to 5.350 GHz; 8 channels• 5.470 to 5.725 GHz; 8 channels

CLIN 028: CISCO CATALYST 9300 SWITCH (C9300-24UB-A), BRAND NAME OR EQUAL

Quantity: 5

Switching capacity Gbps	208
Forwarding rate with stacking	511.90 Mpps
Total number of IPv4 routes (ARP plus learned routes)	Total number of IPv4 routes (ARP plus learned routes): 64,000
Total number of MAC addresses	Total number of MAC addresses: 64,000
IPv6 routing entries	IPv6 routing entries: 32,000
Multicast routing scale	Multicast routing scale: 16,000
QoS scale entries	QoS scale entries: 18,000
ACL scale entries	ACL scale entries: 18,000
DRAM	DRAM: 16 MB

Flash	Flash: 16 GB
VLAN IDs	VLAN IDs: 4094
Total Switched Virtual Interfaces (SVIs)	Total Switched Virtual Interfaces (SVIs): 4094
Jumbo frames	Jumbo frames: 9198 bytes
Total routed ports per	9300
Series stack:	448
Default AC power supply	1100W AC
Available PoE power	830W
Dimensions (H x W x D)	1.73 x 17.5 x 16.1 / 4.4 x 44.5 x 40.9 (cm)

CLIN 029: CISCO CATALYST 9300 SWITCH (C9300-48UB-A), BRAND NAME OR EQUAL

Quantity: 1

Product Description	Catalyst 9300 higher scale 48-port modular uplinks 1G UPOE, Network Advantage
Total 10/100/1000,Multigigabit copper or SFP Fiber	48 Cisco UPOE
Uplink Configuration	Modular Uplinks
Default AC power supply	1100W AC
Available PoE power	822W
Switching capacity	256 Gbps
Switching capacity with stacking	736 Gbps
Forwarding rate	190.48 Mpps
Forwarding rate with stacking	547.62 Mpps

CLIN 030: CISCO CATALYST 9300 4 X MGIG NETWORK MODULE (C9300-NM-4M), BRAND NAME OR EQUAL

Quantity: 2

Part Number	C9300-NM-4M
Product Description	Catalyst 9300 4 x MGig Network Module
Supported Devices	Cisco Catalyst 9300 Series Switch

CLIN 031: CISCO CATALYST 9300 8 X 10GE NETWORK MODULE (C9300-NM-8X), BRAND NAME OR EQUAL

Quantity: 2

Part Number	C9300-NM-8X
Product Description	Catalyst 9300 8 x 10GE Network Module
Supported Devices	Cisco Catalyst 9300 Series Switch

CLIN 032: CISCO 10GBASE-LRM SFP MODULE (SFP-10G-LRM), BRAND NAME OR EQUAL

Quantity: 16

Product Code	SFP-10G-LRM
Device Type	Plug-in module
Form Factor	SFP+
Data Rate	10.3Gbps
Wavelength	1310nm
Power Budget	3.4dB
Max Reach Distance	220m
Transmit Power	-6.5~0.5dBm
Receive Sensitivity	-12dBm
Voltage	3.3V
Power Consumption	1W
Connector	Dual LC
Fiber Type	MMF
Operation Temperature	0~70° C
DDMI	With
Application	10 Gigabit Ethernet

CLIN 033: CISCO STACKWISE-480 1M STACKING CABLE FOR CISCO CATALYST 3850 SERIES, BRAND NAME OR EQUAL**Quantity: 6**

Model	STACK-T1-1M
Length	3.3 ft (1m)
Compatible With	Cisco Catalyst 3850 Series
Network Cable Type	Stacking cable
Compatibility	PC
Product Line	Cisco StackWise
Model	480

CLIN 034: CISCO DNA SOFTWARE FOR SWITCHING, BRAND NAME OR EQUAL**Quantity: 1**

Software subscription suites manage the demands of new security threats, the evolving Internet of Things (IoT), and mobility integration. Term - 3 years, license type – Advantage.