



PAMBANSANG PUNONGHIMPILAN TANOD BAYBAYIN NG PILIPINAS

(National Headquarters Philippine Coast Guard)

Bids and Awards Committee

139 25th Street, Port Area, 1018 Manila

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SUPPLEMENTAL BID/BULLETIN NO. 08-2024

This Supplemental/Bid Bulletin No. 08-2024 is issued to all prospective bidders regarding the clarifications for the Rehabilitation of the Existing NHQ-PCG PBX System ROM Analog PBX System to IP-Based VoIP PBX System via Sip Trunks and Re-wiring of ICT Infrastructure and Equipment, with details as follows:

	ITEM DESCRIPTION	CLARIFICATIONS	RESPONSE
Subscription			
	High-Speed Broadband Satellite Internet Service for Fix Location with LAN Ethernet Adapter for NHQ-PCG Antenna: Electronic Phased Array Field of View: 110° Orientation: Software-assisted Assisted Manual Orienting Environmental Rating: IP67 Type 4 Operating Temperature: -30°C to 50°C (-22°F to 122°F) Wind Speed: Operational: 96 kph+ (60 mph+) Snow Melt Capability: Up to 40 mm / hour (1.5 in / hour) Power Consumption: Average: 75 - 100 W Environmental Rating: IP66 Operating Temperature: -30°C to 50°C (-22 to 122°F) Weight: 1.5kg (3lbs) Grounding: Dedicated Earth Terminal Power Specifications: 100-240V - 6.3A 50 - 60 Hz Mounting: Included Mount	The specs is leaning toward starlink. What bandwidth/speed of the internet?	Any brand will do, so long that it meets and compliant to the specifications and supports the interconnectivity. Bandwidth/Speed: 150-300 Mbps

Applied Threat Intelligence System Capable of detecting and mitigating threats as follows:	Refer to the question on the next requirement (Bundle License UTP) below. Please advise if this is a subscription via a license?	Yes, it is a subscription-based cybersecurity solution that has a bundled appliance.
<ul style="list-style-type: none"> • Webshells/Corporate Espionage • Shadowpad APT IPs • Remcos RAT Traffic • HotRAT Download Site • QuasarRAT • Other Misc RATs and Trojans • Zegost Malware • Proxy Abuse • ApatWeb PUP and Scareware Campaign • Suspicious Domains 		
Bundle License Unified Threat Protection (UTP) IPS, Advanced Malware Protection, Application Control, URL, DNS & Video Filtering, Antispam Service, and comprehensive support and maintenance service	Refer to Section VI. Schedule of Requirements page 24 A. subscription Item #2 a. Bundle License Unified Threat Protection (UTP) (IPS, Advanced Malware Protection, Application Control, URL, DNS & Video Filtering, Antispam Service, and FortiCare Premium) Please confirm if this is a license subscription only?	Yes, it is the license requirement for the firewall.
Hardware Components		
1. IP Network System		

<p>Network Security Firewall 16x Hardware Accelerated GE RJ45 ports (including 2 x MGMT port) 8 x GE SFP Slots, 4 x 10GE SFP+ Slots, SPU NP7 and CP9 hardware</p>	<p>Can you provide others specifications of the firewall not only the hardware interface specifications? Like Firewall Throughput, NGFW Throughput, Threat Protection Throughput and other specs of firewall.</p>	<p>Here's a breakdown of its key specifications beyond hardware interfaces:</p> <p>Performance</p> <ul style="list-style-type: none">• Firewall Throughput: 105 million packets per second (Mbps). This indicates the device's ability to process a high volume of network traffic, ensuring smooth operation even under heavy load.• Firewall (UDP 1518) Throughput: 79.5 Gbps. This measures the maximum data transfer rate for UDP traffic, showcasing the device's capacity to handle demanding network applications.• IPsec VPN Throughput: 12 Gbps. This signifies the ability to securely connect remote networks using IPsec VPN, enabling efficient and secure communication.• NGFW Throughput: 10 Gbps. This metric reflects the device's performance when handling next-generation firewall
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			features, such as deep packet inspection and application control.
	Load Balancer <ul style="list-style-type: none"> Gigabit Ethernet ports (1-WAN, 1-LAN, 1- MGMT, 1-Heartbeat Interface) Supported Bandwidth: 1.5 Gbps 	Please advise if this is a license subscription only? If not, please provide detailed hardware specifications.	This appliance will serve as backup for firewall for multiple WAN management.
	Layer 3 24Port Switch with 8 x SFP + Slots Module <ul style="list-style-type: none"> Total 10/100/1000 or Multigigabit copper ports: 24 POE+ Default AC power supply: 715W AC Available PoE power: 445W With StackWise-480 With StackPower Default power supply: PWR-C1-715WAC- P/2 Switching capacity: 208 Gbps on 24-port Gigabit Ethernet model Stacking bandwidth: 480 Gbps Total number of MAC addresses: 32,000 Jumbo frames: 9198 bytes Total routed ports per 9300 Series stack: 208 		
	<ul style="list-style-type: none"> Wireless bandwidth per switch: Up to 48 Gbps on 24-port Gigabit Ethernet model Forwarding rate: 154.76 Mpps Dimensions (H x W x D): 1.73 x 17.5 x 17.5 Inches Weight: 16.33 Pounds Mean time between failures (hours): 299,000 Safety certifications: UL 60950-1, CAN/CSA-C222.2 No. 60950-1, EN 60950-1, IEC 60950-1, IEC 60950-1, IEEE 802.3 		

<p>Layer 2 Switch PoE 48P with 2 SFP + Slots Module</p> <ul style="list-style-type: none"> • Total 10/100/1000 or Multigigabit copper ports: 24 POE+ • Default AC power supply: 715W AC Available • PoE power: 445W • With StackWise-480 • With StackPower • Default power supply: PWR-C1-715WAC- P/2 • Switching capacity: 208 Gbps on 48-port Gigabit Ethernet model • Stacking bandwidth: 480 Gbps • Total number of MAC addresses: 32,000 • Jumbo frames: 9198 bytes • Total routed ports per 9300 Series stack: 208 • Wireless bandwidth per switch: Up to 48 Gbps on 48-port Gigabit Ethernet model • Forwarding rate: 154.76 Mpps • Dimensions (H x W x D): 1.73 x 17.5 x 17.5 Inches • Weight: 16.33 Pounds • Mean time between failures (hours): 299,000 • Safety certifications: UL 60950-1, CAN/CSA-C222.2 No. 60950-1, EN 60950-1, IEC 60950-1, IEC 60950-1, IEEE 802.3 		
<p>24-port POE switch</p> <ul style="list-style-type: none"> • Designed to provide power and data connectivity to devices such as IP cameras, 		
<p>VoIP phones, and wireless access points over a single Ethernet cable.</p> <ul style="list-style-type: none"> • Features: PoE+ support, gigabit Ethernet ports, power budget allocation per port, and smart management capabilities for monitoring and control. 		

<p>L3 to L2 Uplink SFP-10G-LRM</p> <ul style="list-style-type: none"> Multi-mode transceiver module designed for both 10GBASE-LRM and 1000BASE-LX/LH data links over multi-mode fiber. Transceiver module operates at a wavelength of 1310 nm and supports link lengths of up to 220m on standard multi-mode fiber. Compatible with various switches and routers that have SFP+ slots. Data transfer rates of up to 10 Gbps, LC duplex connector type, and support for both 10 Gigabit Ethernet and 1 Gigabit Ethernet. 		
2. VoIP System		
<p>Enterprise Grade IP PBX with 1-Port Quad Primary Rate Interface (PRI) Module and built-in redundancy</p> <p>Hardware:</p> <ul style="list-style-type: none"> Processor: <ul style="list-style-type: none"> at least 3.4 GHz at least 4 Cores at least 4 Threads Cache (3.46 GHz) RAM: 8GB Storage 2x hot-swappable: 500GB SSD RAID1: Dual hard drive for increased system reliability Fan: 3 redundant fans Echo Cancellation Module: Voice enhancement & echo cancellation (optional) USB: 4 external, USB 2.0 Self-provisioning Proprietary Softphone for Mac, Windows, Android and iOS using a non-email-address format Username and Password <p><u>Software:</u></p> <ul style="list-style-type: none"> Management Interface: Complete PBX 5 (64-bit) Linux version : CentOS 7 	<p>This specs is leaning toward XORCOM</p>	<p>Any brand will do, so long that it meets and compliant to the specifications and supports the interconnectivity.</p>

<ul style="list-style-type: none"> · Framework: Asterisk 18 · Asterisk 18: Intrusion protection software, firewall protection · High availability: supported <p><u>Telephony:</u></p> <ul style="list-style-type: none"> · Maximum number of concurrent calls: 880 (SIP only); 750 (PRI + FXS) · Maximum number of built in analog ports: 32 (additional ports with external Astribank units) · Number of E1 / T1 ports: 4 (up to 120 concurrent PRI/R2/CAS calls) · Max. telephony modules supported internally: 4 (additional ports are supported by adding Astribanks) · Maximum number of telephony ports supported internally: 144 (4xE1 PRI/R2/CAS + 24 analog ports) · Supported telephony modules: 8 ports FXS, 8 ports FXO, Up to 4 ports PRI/R2/CAS, Up to 8 ports BRI ISDN · Weight: 7 Kg 15.4 lbs May vary, depending on configuration · 7 Kg 15.4 lbs May vary, depending on configuration: 19" 2U industry standard rack-mountable chassis · Dimensions: 44 x 44 x 9 cm (17.3 x 17.3 x 3.5") 		
<p><u>Power:</u></p> <ul style="list-style-type: none"> · Power supply: Two internal, redundant, hot-swappable units · Voltage: Switching, auto adjust 100/240 Volts, 50/60 Hz · Power consumption: 230 Watts (maximum) · Built in grounding connection: supported <p><u>Network:</u></p> <ul style="list-style-type: none"> · Ethernet port – standard: 10/100/1000 Mb/s (x2) <p><u>Capacities:</u></p> <ul style="list-style-type: none"> · Max. Signaling: 250 · Max. Registered Users: 1,500 · Max. RTP/SRTP Sessions: 200 	<p>This specs is leaning towards AudiCodes SBC. Can the functionality of SBC be implemented in the IP PABX to make the solution more cheaper but with quality and easy to manage.</p>	<p>We need a separate appliance to secure the VoIP communication and for security purposes.</p>

<p><u>Telephony Interfaces:</u></p> <ul style="list-style-type: none"> • Digital: Single E1/T1 interface • Digital PSTN Protocols: Various ISDN PRI protocols such as EuroISDN, North American NI-2, LucentTM 4/5ESS, NortelTM DMS- 100 and others. Different CAS protocols, including MFC R2, E&M immediate start, E&M delay dial/start and others. <p><u>Network Interfaces:</u></p> <ul style="list-style-type: none"> • Ethernet: 4 GE interfaces configured in 1+1 redundancy or as individual ports <p><u>Security:</u></p> <ul style="list-style-type: none"> • Access Control: DoS/DDoS line rate protection, bandwidth throttling, dynamic blacklisting (Intrusion Detection System) • VoIP Firewall: RTP pinhole management, rogue RTP detection and prevention, SIP message policy, advanced RTP latching • Encryption/Authentication: TLS, SRTP, HTTPS, SSH, client/server SIP Digest authentication, RADIUS Digest • Privacy: Automatic topology hiding, user privacy • Traffic Separation: VLAN/physical interface separation for multiple media, control and OAMP interfaces 	<p>This specs is leaning towards AudiCodes SBC. Can the functionality of SBC be implemented in the IP PABX to make the solution more cheaper but with quality and easy to manage.</p>	<p>We need a separate appliance to secure the VoIP communication and for security purposes.</p>
<p><u>Interoperability:</u></p> <ul style="list-style-type: none"> • SIP B2BUA: Full SIP transparency, mature and broadly deployed SIP stack, stateful proxy mode • SIP Interworking: 3xx redirect, REFER, PRACK, session timer, early media, call hold, delayed offer • Registration and Authentication SBC users: User registration restriction control, registration and authentication on behalf of users, SIP authentication server for • Transport Mediation: Mediation between SIP over UDP/TCP/TLS, IPv4/IPv6, RTP/SRTP (SDES) 	<p>This specs is leaning towards AudiCodes SBC. Can the functionality of SBC be implemented in the IP PABX to make the solution more cheaper but with quality and easy to manage.</p>	<p>We need a separate appliance to secure the VoIP communication and for security purposes.</p>

<ul style="list-style-type: none"> · Header Manipulation: Add/modify/delete SIP headers and message body using simple WireShark-like language with powerful capabilities such as variables and utility functions · Number Manipulations: Ingress and egress digit manipulation · SIP Interworking: 3xx redirect, REFER, PRACK, session timer, early media, call hold, delayed offer · Signal Conversion: DTMF/RFC 2833/SIP, T.38 fax, T.38 V3, V.34, packet-time conversion · NAT: Local and far-end NAT traversal for support of remote workers <u>Voice Quality and SLA:</u> <ul style="list-style-type: none"> · Call Admission Control: Limit number and rate of concurrent sessions and registers per peer for inbound and outbound directions · Packet Marking: 802.1p/Q VLAN tagging, DiffServ, TOS · Standalone Survivability: Maintains local calls in the event of WAN failure. Outbound calls can use PSTN fallback (including E911). · Voice Monitoring and Enhancement: Transrating, RTCP-XR, acoustic echo cancellation, replacing voice profile due to impairment detection, fixed and dynamic voice gain control, packet loss concealment, dynamic programmable jitter buffer, silence suppression/comfort noise generation, RTP redundancy, broken connection detection · Direct Media: Hair-pinning (no media anchoring) of local calls to avoid unnecessary media delays and bandwidth consumption · High Availability: SBC high availability with two-box redundancy, active calls preserved · Test Agent: Ability to remotely verify connectivity, voice quality and SIP 	<p>This specs is leaning towards AudiCodes SBC.</p> <p>Can the functionality of SBC be implemented in the IP PABX to make the solution more cheaper but with quality and easy to manage.</p> <p>This specs is leaning towards AudiCodes SBC.</p> <p>Can the functionality of SBC be implemented in the IP PABX to make the solution more cheaper but with quality and easy to manage.</p>	<p>We need a separate appliance to secure the VoIP communication and for security purposes.</p> <p>We need a separate appliance to secure the VoIP communication and for security purposes.</p>
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<p>message flow between SIP UAs</p> <p><u>SIP Call Handling:</u></p>		
<ul style="list-style-type: none"> · Criteria: Incoming SIP trunk, DID ranges, host names, any SIP headers, codecs, QoE, bandwidth · Querying External Databases: Destinations based on customized queries of ENUM, LDAP, HTTP server (REST API) · Available Destinations: Configured SIP peers, registered users, IP address, request URI · Advanced Features: Alternative destinations, load balancing, LCR, call forking, E911 emergency call detection and prioritization · SBC Media Types: Audio\Video\Fax\Text\Message Session Relay Protocol (MSRP)\Binary Floor Control Protocol (BFCP) · SIPREC: IETF standard SIP recording interface, supporting both audio and video SBC sessions <p><u>Management:</u></p> <ul style="list-style-type: none"> · OAM&P: Browser-based GUI, CLI, SNMP, INI Configuration file, REST API, One Voice Operations Center (OVOC) <p><u>Physical/Environmental:</u></p> <ul style="list-style-type: none"> · Dimensions: 43.7 (1U) x 310 x 210 mm (HxWxD) · Weight: 4.4 lb (2.0kg) 	<p>This specs is leaning towards AudiCodes SBC.</p> <p>Can the functionality of SBC be implemented in the IP PABX to make the solution more cheaper but with quality and easy to manage.</p>	<p>We need a separate appliance to secure the VoIP communication and for security purposes.</p>

<ul style="list-style-type: none"> · Mounting: Desktop or 19" rack mount · Power: 100-240V, 50-60 Hz, 0.8A · Environmental: Operational: 0 to 40°C (41 to 104°F); Storage: -25 to 70°C (-13 to 185°F) 		
FXO Gateway Module (2 X 8 ports)		
Additional 1GB Ethernet Port		
1TB Upgrade		
Rapid Recovery USB		
Session Border Controller		
<ul style="list-style-type: none"> · Controls the signaling and media streams involved in setting up, conducting, and tearing down communication sessions. · Security Features: encryption, access control, and protection against denial-of- service attacks to secure communication sessions. · Interoperability: facilitate communication between different networks, protocols, and devices, ensuring seamless interoperability. · Quality of Service (QoS): prioritize and manage network traffic to ensure the quality of communication sessions, particularly in VoIP and video conferencing applications. · Media Handling: handle media transcoding, packet inspection, and manipulation to ensure compatibility between different endpoints. · Session Management: manage session initiation, termination, and routing, ensuring smooth communication flow. · Scalability: scalable to accommodate varying levels of traffic and communication sessions. · Redundancy and Failover: support redundancy and failover mechanisms to ensure high availability and reliability. 	What is the function of SBC?	Session Border Controller is an essential appliance and components in modern VoIP networks, providing security, interoperability, QoS, and efficient session routing. This acts as gatekeepers, ensuring secure, reliable, and high-quality communication across diverse networks and devices.

<ul style="list-style-type: none"> Monitoring and Reporting: provide tools for monitoring network performance, analyzing traffic patterns, and generating reports for troubleshooting and optimization. 		
<p>WiFi/PoE phone with PSU</p> <p>Features</p> <ul style="list-style-type: none"> 2.4-inch 320x240 pixel color screen Support audio codec G.722 and Opus, HD audio on speakerphone and handset Support 6-way audio conference Support EHS wireless headset Built-in 2.4GHz& 5GHz Wi-Fi, realizing more flexible connectivity Two installation methods of desktop stand and wall mountable <p><u>Functions:</u></p> <ul style="list-style-type: none"> Local Phonebook (1000 entries) 	<p>This specs is leaning toward Fanvil. Fanvil is a CHINA brand.</p>	<p>The product might be assembled and manufactured in multiple locations and it is difficult to pinpoint a single country of origin due to complex supply chain however, the egress and ingress of traffic will be monitored through applied threat intelligence system and Firewall that can detect, control and resolved any adversary.</p>

<ul style="list-style-type: none"> • Remote Phonebook (XML/LDAP, 1000 entries) • Call logs (In/Out/Missed, 600 entries) • Blocked List/Allowed List • Screen saver • Voice Message Waiting Indication (VMWI) • Programmable DSS/Soft keys • Network Time Synchronization • Support Poly wireless headset (Through Poly APD-80 EHS Cable) • Support Jabra wireless headset (Through EHS20 EHS Cable) • Support Recording (Through Server) • Action URL / Active URI • uaCSTA • Wideband ADC/DAC 16KHz Sampling • Narrowband Codec: G.711a/u, G.723.1, G.726, G.729A/B, iLBC • Wideband Codec: G.722, Opus • Full-duplex Acoustic Echo Cancellation (AEC) • Voice Activity Detection (VAD) / Comfort Noise Generation (CNG) / Background Noise Estimation (BNE) / Noise Reduction (NR) / Automatic Gain Control (AGC) • Packet Loss Concealment (PLC) 	<p>This specs is leaning toward Fanvil. Fanvil is a CHINA brand.</p>	<p>The product might be assembled and manufactured in multiple locations and it is difficult to pinpoint a single country of origin due to complex supply chain however, the egress and ingress of traffic will be monitored through applied threat intelligence system and Firewall that can detect, control and mitigate any adversary.</p>
<ul style="list-style-type: none"> • Dynamic Adaptive Jitter Buffer • DTMF: In-band, Out-of-Band (RFC2833/ SIP INFO) • VQM voice quality monitoring <p><u>Physical Specifications:</u></p> <ul style="list-style-type: none"> • LCD: 2.4-inch (320x240) Color Screen • Keypad: 36 keys, including • 4 Soft-keys • 9 Function keys (Hold/Transfer/Voice/message/Conference /Phonebook/MWI/Headset/Redial/Hands-free) • 3 Line keys (With LED Indicator Light) • 4 Navigation keys • 1 OK key • 12 Standard Phone Digits keys • 3 Volume Control keys (Up/Down/Mute (Microphone)) 	<p>This specs is leaning toward Fanvil. Fanvil is a CHINA brand.</p>	<p>The product might be assembled and manufactured in multiple locations and it is difficult to pinpoint a single country of origin due to complex supply chain however, the egress and ingress of traffic will be monitored through applied threat intelligence system and Firewall that can detect, control</p>

			and mitigate any adversary.
<ul style="list-style-type: none">Handset (RJ9) x1Standard RJ9 Handset Wire x11.5M CAT.5E Ethernet Cable x1Desktop stand x1Status Indicator Light x1 (Red)RJ9 Port x2: Handset x1, Headset x1RJ45 Port x2: Network x1, PC x1 (Bridged to Network)Security Slot x1DC Power Input: DC5V / 1APower Consumption (Adapter): 1.218~2.39WPower Consumption (PoE): 2.12~3.49WWorking Temperature: 0~45°CWorking Humidity: 10~95%Installation: Desktop Stand, Wall mountable (optional)Color: BlackN.W/CTN: 8.98kgG.W/CTN: 9.69kgDevice Dimensions: Desktop Stand (45°): 169x201.1x177.4 mm, Desktop Stand (50°): 169x191.9x185.8 mm, Wall mountable: 169x120.1x213.7 mmGift Box Dimensions: 250x220x55mmOuter CTN Dimensions: 460x300x270mm (10 PCS)HD VoicePoE Enabled2.4-inch color screenHandset / Hands-free / Headset mode	<p>This specs is leaning toward Fanvil.</p> <p>Fanvil is a CHINA brand.</p>	<p>The product might be assembled and manufactured in multiple locations and it is difficult to pinpoint a single country of origin due to complex supply chain however, the egress and ingress of traffic will be monitored through applied threat intelligence system and Firewall that can detect, control and mitigate any adversary.</p>	

<p>IP Phone with Video (for CPCG, DCO, DCA, CS, MDAC, Conference Room, Function Hall)</p> <p><u>Features:</u></p> <ul style="list-style-type: none"> · 20 SIP lines, hotspot · Support an external USB camera (optional). · 112 one-touch DSS keys on 7" capacity color touch screen · HD audio with Harman speaker · Built-in Bluetooth 4.2 and 2.4G/5G Wi-Fi · Support video codec H.264 · Dual Gigabit ports, integrated PoE · Stand with 2 adjustable angles of 40 and 50 degrees 	<p>This specs is leaning toward Fanvil. Fanvil is a CHINA brand.</p>	<p>The product might be assembled and manufactured in multiple locations and it is difficult to pinpoint a single country of origin due to complex supply chain however, the egress and ingress of traffic will be monitored through applied threat intelligence system and Firewall that can detect, control and mitigate any adversary.</p>
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<p><u>Phone Functions:</u></p> <ul style="list-style-type: none"> • Local Phonebook (2000 entries) • Remote Phonebook (XML/LDAP, 2000 entries) • Intelligent Search for Contacts and Call Log • Call logs (In/out/missed, 1000 entries) • Blocked list/Allowed list • Screen saver • Voice Message Waiting Indication (VMWI) • Programmable DSS/Soft keys • Network Time Synchronization • Built-in Bluetooth 4.2: Support Bluetooth headset/ Bluetooth of Mobile Device • Built-in Wi-Fi • 2.4GHz, 802.11 b/g/n • 2.4GHz, 802.11 b/g/n • Miracast • Support Recording • Action URL / Active URI • UaCSTA • Audio/Video Recording • SIP Hotspot • Group Broadcasting • Action Plan • Group listening • Support Poly wireless headset (Through Plantronics APD-80 EHS Cable) • Support Jabra wireless headset (Through EHS20 EHS Cable) • Call out / Answer / Reject • Mute / Unmute (Microphone) • Call Hold / Resume • Call Waiting • Intercom • Caller ID Display • Speed Dial • Anonymous Call (Hide Caller ID) • Call Forwarding (Always/Busy/No Answer) • Call Transfer (Attended/Unattended) • Call Parking/Pick-up (Depending on server) • Redial • Do-Not-Disturb • Auto-Answering 	<p>This specs is leaning toward Fanvil. Fanvil is a CHINA brand.</p>	<p>The product might be assembled and manufactured in multiple locations and it is difficult to pinpoint a single country of origin due to complex supply chain however, the egress and ingress of traffic will be monitored through applied threat intelligence system and Firewall that can detect, control and mitigate any adversary.</p>
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<ul style="list-style-type: none"> • Voice Message (On server) • Hot Line • Hotdesking • BLF • 3-way video conference, 10-way voice conference • Video decoding: H.264 • Video call resolution: QVGA/CIF/VGA/4CIF/720P/1080P • Image format: JPEG/PNG/BMP • Video format: MP4 • Bandwidth selection: 64kbps~4Mbps • Frame rate selection: 5~30fps • Video from remote site can be displayed in full screen • Optional CM60 USB Camera • 2 Mega Pixel • Plug and Play • Flexible Placement and Angle Adjustment • Video Preview <p><u>Physical Specifications:</u></p> <ul style="list-style-type: none"> • Color: Black • LCD x1: 7 inch (1024x600) color touch screen • Keypad: 26 keys, including • 5 Function keys (Hold, MWI, Mute, Headset, Redial) • 4 Navigation keys • 1 OK key • 1 Return key • 12 Standard Phone Digits keys • 2 Volume Control keys, Up/Down • 1 Hands-free key • HD Handset (RJ9) x1 • Standard RJ9 Handset Wire x1 • 1.5M CAT5 Ethernet Cable x1 • Back Rack x1 • RJ9 Port x2: Handset x1, Headset x1 • RJ45 Port x2: Network x1, PC x1 (Bridged to Network) • USB2.0 Port x1: Standard A, Connect with Flash Driver • Safety keyhole x1 • Power: 5V/2A or PoE 	<p>This specs is leaning toward Fanvil. Fanvil is a CHINA brand.</p>	<p>The product might be assembled and manufactured in multiple locations and it is difficult to pinpoint a single country of origin due to complex supply chain however, the egress and ingress of traffic will be monitored through applied threat intelligence system and Firewall that can detect, control and mitigate any adversary.</p>
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<ul style="list-style-type: none"> Power Consumption (PoE): 1.596~11.86W Power Consumption (Adapter): 0.907~9.38W Working Temperature: 0~45°C Working Humidity: 10~95% Qty/CTN: 10pcs N.W/CTN: 21.1kg G.W/CTN: 22.22kg Device Dimensions: Desktop Stand (Angles 1): 268x185x189mm, Desktop Stand (Angles 2): 268x201x168mm 	<p>This specs is leaning toward Fanvil.</p> <p>Fanvil is a CHINA brand.</p>	<p>The product might be assembled and manufactured in multiple locations and it is difficult to pinpoint a single country of origin due to complex supply chain however, the egress and ingress of traffic will be monitored through applied threat intelligence system and Firewall that can detect, control and mitigate any adversary.</p>
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<p>IP Console – Operator</p> <p><u>Features:</u></p> <ul style="list-style-type: none"> · 20 SIP lines, 3-way conference, hotspot · HD audio on speakerphone and handset · Movable type Directional External Gooseneck Microphone · 4.3” main color display, 2x3.5” side color displays for DSS keys · Built-in Bluetooth · Wi-Fi connectivity(Via Wi-Fi dongle) · Up to 106 DSS keys(42 tri-colored physical keys) · Video Codec H.264 support for receiving video calls · Dual Gigabit ports, integrated PoE · Stand with 2 adjustable angles of 40 and 50 degrees · Video call resolution: QCIF / QVGA / CIF / VGA / 4CIF / 720P / 1080P <p><u>Physical Specifications:</u></p> <ul style="list-style-type: none"> · Main LCD x1: 4.3 inch (480x272) color-screen LCD · DSS Key-mapping LCD x2: 3.5 inch (320x480) color-screen LCD <p><u>Keypad: 77 keys, including:</u></p> <ul style="list-style-type: none"> · 4 Soft-keys · 6 Function keys (Hold, Call forward, Phonebook, MWI,'Headset, Redial) · 4 Navigation keys · 1 OK key 	<p>This specs is leaning toward Fanvil.</p> <p>Fanvil is a CHINA brand.</p>	<p>The product might be assembled and manufactured in multiple locations and it is difficult to pinpoint a single country of origin due to complex supply chain however, the egress and ingress of traffic will be monitored through applied threat intelligence system and Firewall that can detect, control and mitigate any adversary.</p>
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<ul style="list-style-type: none"> • 1 Return key • 12 Standard Phone Digits keys • 3 Volume Control keys, Up/Down/Mute(Microphone) • 1 Hands-free key • 42 DSS Keys with tri-color LED • 3 Page-Switch (PS) key • HD Handset (RJ9) x1 • Standard RJ9 Handset Wire x1 • 1.5M CAT5 Ethernet Cable x1 • Gooseneck Microphone x1 • Directional microphone • Frequency response: 20Hz~20KHz • SNR: ≥60 dB.1kHz at 1 Pa • Back Rack x1 • Gooseneck MIC Port x1: Gooseneck Microphone x1 • RJ9 Port x2: Handset x1, Headset x1 • RJ45 Port x2: Network x1, PC x1 (Bridged to Network) • USB2.0 Port x1: Standard A, Connect with Wi-Fi USB dongle or Flash Driver • DC Power Input: 5V/2A • Power Consumption (PoE): 2.9~7.9W • Power Consumption (Adapter): 2.54~6.4W • Working Temperature: 0~45°C • Working Humidity: 10~95% • installation: Desktop Stand • Color: Dark gray • Qty/CTN: 10 PCS • N.W/CTN: 18.77kg • G.W/CTN: 19.9kg <p><u>Device Dimensions:</u></p> <ul style="list-style-type: none"> • Desktop Stand (Angles 1): 309 x 214 x 187mm • Desktop Stand (Angles 2): 309 x 226 x 167mm • Gift Box Dimensions: 323 x 301 x 71mm • Outer CTN Dimensions: 624 x 383 x 348mm <p><u>Phone Functions:</u></p> <ul style="list-style-type: none"> • Local Phonebook (2000 entries) 	<p>This specs is leaning toward Fanvil. Fanvil is a CHINA brand.</p>	<p>The product might be assembled and manufactured in multiple locations and it is difficult to pinpoint a single country of origin due to complex supply chain however, the egress and ingress of traffic will be monitored through applied threat intelligence system and Firewall that can detect, control and mitigate any adversary.</p>
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<ul style="list-style-type: none"> · Remote Phonebook (XML/LDAP, 2000 entries) · Call logs (In/out/missed, 1000 entries) · Blocked /Allowed List · Screen saver · Voice Message Waiting Indication (VMWI) · Programmable DSS/Soft keys · Network Time Synchronization · Built-in Bluetooth 2.1: Support Bluetooth headset · Support Wi-Fi Dongle · Support Poly wireless headset · Support Jabra wireless headset (Through EHS20 EHS Cable) · Support Recording (Through Flash Drive or Server Recording) · Action URL / Active URI · uaCSTA · Call out / Answer / Reject · Mute / Unmute (Microphone) · Call Hold / Resume · Call Waiting · Intercom · Caller ID Display · Speed Dial · Anonymous Call (Hide Caller ID) · Call Forwarding (Always/Busy/No Answer) · Call Transfer (Attended/Unattended) · Call Parking/Pick-up (Depending on server) · Redial · Do-Not-Disturb · Auto-Answering · Voice Message (On server) · 3-way Audio Conference · Hot Line · Hot desking 	<p>This specs is leaning toward Fanvil. Fanvil is a CHINA brand.</p>	<p>The product might be assembled and manufactured in multiple locations and it is difficult to pinpoint a single country of origin due to complex supply chain however, the egress and ingress of traffic will be monitored through applied threat intelligence system and Firewall that can detect, control and mitigate any adversary.</p>
<p>Conference Phone with PSU <u>Phone features and Functions:</u></p> <ul style="list-style-type: none"> · 1 SIP account 	<p>This specs is leaning toward Yealink. Yealink is CHINA brand.</p>	<p>The product might be assembled and manufactured in multiple locations and it is difficult to pinpoint a single country of origin due to complex</p>

		supply chain however, the egress and ingress of traffic will be monitored through applied threat intelligence system and Firewall that can detect, control and mitigate any adversary.
<ul style="list-style-type: none"> • Call hold, mute, DND, call recording, hotline • 10-way conference call • Analog PSTN calls via CPN10 • Redial, call waiting, emergency call • Call forward, call transfer, call return, dial plan • Ring tone selection/import/delete • Set date time manually or automatically • Volume adjustment • Pairing via Bluetooth • Create meeting directly • Join meeting seamlessly • Active Speaker • Optimal HD audio • Noise Proof Technology • Smart Noise Filtering • 13ft (4m) high-quality voice pickup range • Maximum 20ft (6m) voice pickup range • Apply to medium to large conference room • Built-in 12-microphone array, 360-degree voice pick up • Built-in 1-microphone array, decrease noise • Loudspeaker • Frequency: 100-20,000 Hz • Volume: 94 dB at 0.5-m peak volume • 56mm diameter and 5w speaker 	<p>This specs is leaning toward Yealink.</p> <p>Yealink is CHINA brand.</p>	<p>The product might be assembled and manufactured in multiple locations and it is difficult to pinpoint a single country of origin due to complex supply chain however, the egress and ingress of traffic will be monitored through applied threat intelligence system and Firewall that can detect, control and mitigate any adversary.</p>

<ul style="list-style-type: none"> • Full-duplex speakerphone with AEC • Echo cancellation tail length is up to 320ms • Background noise suppression • Codecs: G722, G722.1C, G726, G.729, G.729A, • G723, iLBC, PCMU (G.711A), PCMA (G.711μ) • DTMF: In-band, Out-of-band (RFC 2833) and SIP INFO • VAD, CNG, PLC, AJB, AGC • Busy Lamp Field (BLF) • Multicast paging • Intercom • Anonymous call • Anonymous call rejection • Voice mail 	<p>This specs is leaning toward Yealink. Yealink is CHINA brand.</p>	<p>The product might be assembled and manufactured in multiple locations and it is difficult to pinpoint a single country of origin due to complex supply chain however, the egress and ingress of traffic will be monitored through applied threat intelligence system and Firewall that can detect, control and mitigate any adversary.</p>
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<ul style="list-style-type: none"> • Distinctive ringtone • Call pickup <p><u>Network and Security:</u></p> <ul style="list-style-type: none"> • SIP v1 (RFC2543), v2 (RFC3261) • SIP server redundancy supported • IPv4/IPv6 • NAT traversal: STUN mode • Proxy mode and peer-to-peer SIP link mode • IP assignment: static/DHCP • HTTP/HTTPS web server • Time and date synchronization using SNTP • UDP/TCP/DNS-SRV (RFC 3263) • QoS: 802.1p/Q tagging (VLAN), Layer 3 ToS, DSCP • SRTP for voice encryption • Transport Layer Security (TLS1.3) • HTTPS certificate manager • AES encryption for configuration file (AES256) <p><u>Display:</u></p> <ul style="list-style-type: none"> • 5" 720x1280 capacitive touch screen • Volume key • Home button <p><u>Interface:</u></p> <ul style="list-style-type: none"> • 1 x RJ45 10/100M Ethernet port • Built-in Wi-Fi (2.4GHz/5GHz, 802.11a/b/g/n) • Built-in Bluetooth 4.2 	<p>This specs is leaning toward Yealink.</p> <p>Yealink is CHINA brand.</p>	<p>The product might be assembled and manufactured in multiple locations and it is difficult to pinpoint a single country of origin due to complex supply chain however, the egress and ingress of traffic will be monitored through applied threat intelligence system and Firewall that can detect, control and mitigate any adversary.</p>
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<ul style="list-style-type: none"> • Power over Ethernet (IEEE 802.3at), class 4 • 1 x USB 2.0 Type-A device port • 1 x USB 2.0 Type-C device port • 1 x Security slot <p><u>Directory:</u></p> <ul style="list-style-type: none"> • Local phonebook up to 1000 entries • XML/LDAP remote phonebook • Intelligent search method • Phonebook search/import/export • Call history: dialed/received/missed/forwarded 	<p>This specs is leaning toward Yealink. Yealink is CHINA brand.</p>	<p>The product might be assembled and manufactured in multiple locations and it is difficult to pinpoint a single country of origin due to complex supply chain however, the egress and ingress of traffic will be monitored through applied threat intelligence system and Firewall that can detect, control and mitigate any adversary.</p>
<ul style="list-style-type: none"> • Block list <p><u>Management:</u></p> <ul style="list-style-type: none"> • Configuration: browser/phone/auto-provision/Yea- link Device Management Platform • Auto provision via FTP/TFTP/HTTP/HTTPS for mass deploy • Auto-provision with PnP • Zero-sp-touch, TR-069 • Reset to factory, reboot • Package tracing export, system log <p><u>Physical features:</u></p> <ul style="list-style-type: none"> • Color: Black • External PoE adapter (Optional) • Power consumption (PoE): 7.3W-20W • Dimension (W*D*H): 328mm*322mm*62mm • Operating humidity: 10~90% • Operating temperature: -10 to +45°C (+14 to 113°F) • Storage temperature: -30 to +70°C (-22 to +158°F) 	<p>This specs is leaning toward Yealink. Yealink is CHINA brand.</p>	<p>The product might be assembled and manufactured in multiple locations and it is difficult to pinpoint a single country of origin due to complex supply chain however, the egress and ingress of traffic will be monitored through applied threat intelligence system and Firewall that can detect, control and mitigate any adversary.</p>

<p>LTE Gateway 8 Ports</p> <p><u>Interface:</u></p> <ul style="list-style-type: none"> · 8 GSM or 3G or 4G Channels · 1 10/100 Mbps Ethernet Interface · 2 10/100 Mbps Ethernet Interfaces <p><u>Mobile Features:</u></p> <ul style="list-style-type: none"> · GSM Frequency: 850/900/1800/1900MHz · WCDMA Frequency: 850/1900MHz, 850/2100MHz, 900/2100MHz · 4G LTE Band: depends on the module type · VoLTE if the Carrier Supports · SMS Sending and Receiving · Send Bulk SMS · SMS Center · Gain Adjustment · USSD · PIN Modify · Carrier Selection: Auto/Manual 	<p>This specs is leaning toward Yeastar Yeastar is CHINA brand.</p>	<p>The product might be assembled and manufactured in multiple locations and it is difficult to pinpoint a single country of origin due to complex supply chain however, the egress and ingress of traffic will be monitored through applied threat intelligence system and Firewall that can detect, control and mitigate any adversary.</p>
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<ul style="list-style-type: none"> • Talk Time Alarm • Caller ID/CLIR • Open API for SMS and USSD <p><u>Network & Management:</u></p> <ul style="list-style-type: none"> • Network Protocol: FTP, TFTP, HTTP, SSH • NAT Traversal: Static NAT, STUN • Static Route • OpenVPN • Firewall • VLAN • QoS/ToS • DDNS • Configure Backup/Restore • Firmware Upgrade by HTTP/TFTP • Web based Configuration <p><u>System Features:</u></p> <ul style="list-style-type: none"> • Mobile Ports Groups • VoIP Trunk Group • Incoming /Outgoing Routing rules • Call Blocklist • Hotline • AutoCLIP • Call Duration Limitation • Call Transfer • Call Back • Call Detail Record (CDR) • Call Status Display • NTP • IP Blocklist • Network Attack Alert • Packet Capture • System Logs <p><u>Voice Processing:</u></p> <ul style="list-style-type: none"> • Protocol: SIP, IAX2 • Transport: UDP, TCP, TLS, SRTP • Voice Codec: G.711 (alaw/ulaw), G.722, G.726, G.729A, GSM, ADPCM, Speex • Echo Cancellation: ITU-T G.168 LEC • DTMF Mode: RFC2833, SIP INFO, In-band • SIP Server for IP Phones Included 		
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	<ul style="list-style-type: none"> · SIP Response Code Switch · Call Progress Tone Generation · 1 Stage/2 Stage Dial 		
3. Wireless Link System			
	<p>P2MP Wireless Access Point Backhaul Radio</p> <ul style="list-style-type: none"> · Used to establish wireless connections between a central wireless access point and multiple remote access points or clients. · Frequency Bands: operate in various frequency bands such as 2.4 GHz, and 5 GHz for backhaul communication. · Throughput: ranging from tens to hundreds of Mbps or Gbps. · Antenna Configuration: support integrated or external antennas for directional or omnidirectional coverage. · Security Features: incorporate encryption, authentication, and other security mechanisms to ensure data privacy and integrity. · Scalability: able to scale the network by adding more remote access points while maintaining performance is an important aspect of these radios. · Management and Monitoring: centralized management and monitoring capabilities allow for easy configuration, troubleshooting, and maintenance of the network. 	<p>1) Location / Geolocation where radio will be installed?</p> <p>2) What applications will be running on the backhaul radio?</p> <p>3) what is the expected wireless link throughput of the radio UL/DL?</p>	<p>This item will be discussed on the one-time onsite inspection/survey. The ICT Infrastructure layout will be provided through SBB.</p>
	<p>P2MP Wireless Subscriber Radio</p> <ul style="list-style-type: none"> · Used to establish wireless connections from P2MP Wireless Access Point Backhaul Radio to P2MP Wireless Subscriber Radio or clients. 	<p>1) Location / Geolocation where radio will be installed?</p> <p>2) What applications will be running on the backhaul radio?</p> <p>3) what is the expected wireless link throughput of the radio UL/DL?</p>	<p>This item will be discussed on the one-time onsite inspection/survey. The ICT Infrastructure layout will be provided through SBB.</p>

<p>WIFI 6 POE Indoor Access point</p> <ul style="list-style-type: none"> · Supports the latest Wi-Fi 6 (802.11ax) standard · Can be powered through PoE, allowing for both data connectivity and power supply over a single Ethernet cable. · Utilizes MIMO technology to improve wireless performance by transmitting multiple data streams simultaneously. 	<p>Can we request for the floor plan for the structured cabling/Access Points locations.</p>	<p>This item will be discussed on the one-time onsite inspection/survey. The ICT Infrastructure layout will be provided through SBB.</p>
<ul style="list-style-type: none"> · Supports beamforming technology to focus Wi-Fi signals towards connected devices, enhancing signal strength and coverage. · Operates on both 2.4 GHz and 5 GHz bands for increased flexibility and reduced interference · Offers high data transfer speeds suitable for bandwidth-intensive applications, with speeds potentially reaching multiple Gbps. · Allows for the creation of multiple Service Set Identifiers (SSIDs) to segregate wireless networks for different purposes or user groups. · Includes encryption, authentication, and other security protocols to protect the wireless network from unauthorized access and cyber threats. 		

WIFI 6 POE Outdoor Access point	Can we request for the floor plan for the structured cabling/Access Points locations.	
<ul style="list-style-type: none"> · Built to withstand outdoor conditions, these access points are typically weatherproof and designed to operate in various climates. · Supports the latest Wi-Fi 6 (802.11ax) standard, offering improved speed, capacity, and performance for outdoor wireless networks. · Can be powered through PoE, enabling easy installation and flexibility in power source placement. · Operates on both 2.4 GHz and 5 GHz bands, providing flexibility and reduced interference in outdoor Wi-Fi deployments. · Utilizes beamforming technology to focus wireless signals towards connected devices, enhancing signal strength and coverage. · Support mesh networking capabilities, allowing for easy deployment and extension of the wireless network. · Capable of robust security protocols, encryption, and authentication mechanisms to secure the outdoor wireless network from unauthorized access and cyber threats. 		
4. Auxiliary Equipment		
Data Cabinet (42U) w/ 2 PDU and patch panels (Data Center)		

<ul style="list-style-type: none"> · The data cabinet is 42U in height, providing ample space for mounting servers, switches, and other network devices. · Two (2) PDUs are included for power distribution to the equipment mounted in the cabinet, ensuring reliable power supply. · Adequate ventilation and cooling mechanisms are essential to maintain optimal operating temperatures for the equipment housed within the cabinet. · The cabinet is designed to support the weight of network equipment and accessories mounted inside, with a specified weight capacity. · The cabinet design allows for easy access to the equipment for maintenance, troubleshooting, and upgrades. 	<p>How many outlet ports per PDU? Horizontal or vertical PDU?</p>	<p>This item will be discussed on the one-time onsite inspection/survey. The ICT Infrastructure layout will be provided through SBB.</p>
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<p>Data Cabinet (24U) w/ PDU and patch panels (outdoor cabinet)</p> <ul style="list-style-type: none"> • The data cabinet is 24U in height, offering a compact yet spacious solution for mounting servers, switches, and other networking devices. • A PDU is included for efficient power distribution to the equipment within the cabinet, ensuring reliable power supply and management. • Adequate ventilation and cooling mechanisms are essential to maintain optimal operating temperatures for the equipment housed within the cabinet. • The cabinet is incorporated with locking doors and side panels to enhance security and prevent unauthorized access to the network equipment. • The cabinet is designed to support the weight of networking equipment and accessories installed inside, with a specified weight capacity for safe usage. • The cabinet design allows for easy access to the equipment for maintenance, upgrades, and troubleshooting purposes, ensuring convenient management. 	<p>Where will the outdoor cabinet be located?</p>	<p>This item will be discussed on the one-time onsite inspection/survey. The ICT Infrastructure layout will be provided through SBB.</p>
<p>Data Cabinet (12U) w/ PDU and patch panels (outdoor cabinet)</p>		

<ul style="list-style-type: none"> • The data cabinet is 12U in height, offering a compact yet spacious solution for mounting servers, switches, and other networking devices. • A PDU is included for efficient power distribution to the equipment within the cabinet, ensuring reliable power supply and management. • Adequate ventilation and cooling mechanisms are essential to maintain optimal operating temperatures for the equipment housed within the cabinet. • The cabinet is incorporate with locking doors and side panels to enhance security and prevent unauthorized access to the network equipment. • The cabinet is designed to support the weight of networking equipment and accessories installed inside, with a specified weight capacity for safe usage. • The cabinet design allows for easy access to the equipment for maintenance, upgrades, and troubleshooting purposes, ensuring convenient management. 		
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<p>5kVA Uninterruptible Power Supply (Data Center)</p> <ul style="list-style-type: none"> · Has a capacity of 5,000 volt-amperes, providing power backup to connected devices during outages or fluctuations. · Supports a wide input voltage range to handle fluctuations and provide consistent power output within specified limits. · Delivers a regulated output voltage to protect connected equipment from power spikes, sags, and other electrical disturbances. · Includes internal batteries to provide backup power during outages, allowing for a seamless transition to battery power without interruption. · Offers high efficiency to minimize energy wastage and reduce operating costs over time. · Provides monitoring capabilities for battery status, load levels, and system alerts, along 		
<p>with management options for remote monitoring and control.</p> <ul style="list-style-type: none"> · Support scalability options such as additional battery packs or parallel configurations for increased backup time or redundancy. 		

<p>3kVA Uninterruptible Power Supply (outdoor cabinet)</p> <ul style="list-style-type: none"> · Has a capacity of 3,000 volt-amperes, offering backup power to connected devices when the main power source fails. · Supports a wide input voltage range to handle fluctuations and provide consistent power output within specified limits. · Delivers a regulated output voltage to protect connected equipment from power spikes, sags, and other electrical disturbances. · Includes internal batteries to provide backup power during outages, allowing for a seamless transition to battery power without interruption. · Offers high efficiency to minimize energy wastage and reduce operating costs over time. · Provides monitoring capabilities for battery status, load levels, and system alerts, along with management options for remote monitoring and control. · Support scalability options such as additional battery packs or parallel configurations for increased backup time or redundancy. 		
<p>IP-based Biometric-Magnetic Door Access</p> <ul style="list-style-type: none"> · Utilizes biometric technology for fingerprint recognition for secure and accurate user identification. · Employs magnetic door locks for physical access control, ensuring reliable locking mechanisms for enhanced security. · Connects to the network via an IP interface, allowing for remote access control, monitoring, and management of the door access system. 	<p>how many biometric data? how many locations for the biometric reader?</p>	<p>This item will be discussed on the one-time onsite inspection/survey.</p>
<p>Fiber Optic Cable Armored Multi-Mode</p>		

<ul style="list-style-type: none"> • Multi-mode fiber suitable for short to medium-distance transmission. • Core sizes of 50/125µm or 62.5/125µm to support different network requirements. • The armored cables must have a protective layer typically made of steel, aluminum, or kevlar to shield the fibers from physical damage. • The outer jacket is usually made of PVC, LSZH (Low Smoke Zero Halogen), or other materials for durability and safety. • Compatible with common connector types like LC, SC, ST, or MTP for easy connectivity. • Supports high bandwidth transmission for data-intensive applications. • Armored cables provide enhanced resistance to environmental factors like moisture, rodents, and mechanical stress. • Suitable for indoor or outdoor installations, industrial environments, and areas prone to physical damage or interference. 	<p>How many cores are needed?</p> <p>How many cores to be terminated?</p> <p>how many runs?</p> <p>preferred connector type for fiber panel?</p>	<p>Fiber Option: at least 6 cores, Fiber Patch Panel: at least 4, SFP: at least 6, Conduit: at least 200</p>
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<p>Cat6 LAN Cable Enclosed in Electrical PVC Conduit Pipe</p> <ul style="list-style-type: none"> · The Cat6 Ethernet cable, designed for high- speed data transmission within a local area network (LAN). · Enclosed with Electrical-grade PVC (Polyvinyl Chloride) conduit pipe, providing insulation and protection for the LAN cable. · The conduit size is suitable based on the number of cables and installation requirements to accommodate the Cat6 cable. · The LAN cable jacket is made of PVC for flexibility and protection against environmental factors. · The Cat6 cables support Gigabit Ethernet speeds and provide improved performance and reliability compared to lower categories. · Has a Copper conductors within the Cat6 cable for efficient data transmission. 	<p>Request for the floor plan layout and locations for termination/drop of structured cabling? Location of IDF per floor per building.</p>	<p>This item will be discussed on the one-time onsite inspection/survey. The ICT Infrastructure layout will be provided through SBB.</p>
<p>ITEM DESCRIPTION</p>		
<ul style="list-style-type: none"> · The cable has feature twisted pairs with additional shielding to minimize electromagnetic interference and crosstalk. · The Cat6 LAN cable is enclosed within the PVC conduit pipe for added physical protection and easy installation in various environments. 		
<p>Cabling:</p> <ul style="list-style-type: none"> · Priority 1 - PVC Pipe · Priority 2 – Plastic Molding 	<p>Request for structured cabling details for the wifi, ip pabx, p2mp and others. Please provide detailed plan per building.</p>	

<p>5.1 Other Terms and Conditions:</p>		
<p>Warranty All items shall have a warranty of at least eighteen (18) months upon acceptance.</p>	<p>Including the structured cabling for the warranty?</p>	<p>Yes</p>

5.2 Requirement/if awarded the contract:		
Delivery Period: One Hundred Eighty (180) Calendar Days from receipt of the Notice to Proceed (NTP)		
Delivery Place: National Headquarters Philippine Coast Guard, 139 25th Street, Port Area 1018 Manila		
Pre-Delivery Inspection – To be checked by at least Two (2) TIAC Members and One (1) SAO Farola Representative		
Period for Correction of Latent or Patent Defects: a. Minor Defects: Within Thirty (30) Calendar Days from the Delivery Period; Or b. Major Defects: Within Sixty (60) Calendar days from the Delivery Period.		
The Service Provider warrants the confidentiality and security of all processed data and information on the system and shall be held liable in case of breach thereof.		
The Service Provider shall provide 24/7 technical support service for the entire warranty period at no additional cost: ❖ Technical personnel: at least two (2) dedicated technical personnel with complete contact details		
❖ Phone Support: Provide a toll-free number for customers to call anytime. Live Chat: Integrate live chat support on your website and mobile app. ❖ Email Support: Offer email support for non-urgent issues, ensuring a quick response time. ❖ Social Media: Monitor and respond to customer queries on social media platforms. ❖ Self-Service Portal: Develop a robust self-service portal with FAQs, troubleshooting guides, and video tutorials.		
The Service Provider must assign one (1) Project Manager and at least two (2) technical systems analysts to be in contact with the PCG from the time of the installation until acceptance of the Technical team of the		

PCG of the project, to assist in the support, integration, set-up, and maintenance of the platform.		
The Service Provider must dedicate on-call technical personnel to provide support for any issues encountered within the system for the entire duration of the warranty.		
Acceptance Parameters – Only items that conform with the technical specifications shall be accepted.		
5.3 Bidder's Qualification • The bidder must be supported by relevant certifications provided by locally/internationally recognized organizations such as, but not limited to: TESDA, DICT, DTI, Microsoft, International Standardization Organization (ISO), and other open-source certifications. For purposes of this requirements, bidders are required to submit the following as part of the First (1 st) Bid Envelope (Eligibility Documents and Technical Component of the Bid) on the deadline for the Submission and Receipt of Bids: I. ISO 9001:2015 – Quality Management System II. Valid and current NTC VoIP VAS Certificate.	Relative to 5.7 Other requirements to be submitted by the Bidder during the Bid Opening, can we align this to NTC Value-Added Services (VAS) Certificate?	Not granted
The bidder must have a portfolio of not less than two (2) previously developed VoIP and Structured Cabling Systems.		
5.4 Timeline Within three (3) working days from receipt of NTP - Conduct of kick-off meeting Within ten (10) working days from receipt of NTP		
- Presentation of Working Design of the System - Reconciliation of Technical Concerns and Issues Within forty-five (45) calendar days after the conduct of the Presentation of the working design or earlier as the case may be. - Conducted comprehensive training and familiarization with the components of		

<p>the system. (as specified in item 14) Within one hundred fifty (150) calendar days upon receipt of NTP. - The TWG, TIAC, and End-User may conduct a joint inspection as to the quantity, quality, functionality, and readiness of the equipment if the said matters are in compliance with the submitted technical data sheet of the winning bidder/supplier.</p>		
<p>As part of the pre-acceptance activity, the Service Provider will host a meeting to present a progress report before the TWG, TIAC, and end- user for proper evaluation regarding the status and potential date of completion of the said project, if the Service Provider complies with the checklist provided by the TWG, such as but not limited to, working system, functionality, and performance of the project.</p>		
<p>After the pre-acceptance activity, the TWG, TIAC, and end-user will declare whether the service provider complies with the said checklist.</p>		
<p>5.5 Security Support The Supplier warrants to provide comprehensive cybersecurity measures and controls and ensure the Confidentiality, Integrity, and Availability of the cloud infrastructure, the software (system), and the data and shall render monthly reports of the security log that happens during the system's operation.</p>		
<p>The Supplier shall present the system's source code and shall subject the same to a thorough review by representatives of CGWCEISC prior to the system's deployment.</p>		
<p>5.7 Other requirements to be submitted by the Bidder during the Bid Opening To submit a certificate of authorized distributorship of Applied Threat Intelligence System.</p>	<p>Can we relax the requirement to certified individual for security. Any certification under security/firewall domain.</p>	<p>Not granted</p>

Site Inspection Certificate One-time site inspection to be conducted on November 5, 2024, 9:00 AM.		
To submit a certificate of authorized distributorship of Broadband Satellite Internet Service.	The specs of the broadband satellite internet is leaning toward Starlink. Starlink is available to purchase via online. No need for authorized distributorship.	Not granted
To submit a certificate of authorized distributorship of Network Security Firewall	Distributor is not allowed to sell directly to consumer and must direct to a reseller. Requesting to change the certificate requirement to authorized reseller.	Not granted
To submit ISO 9001:2015 - Quality Management System Certificate to demonstrate their commitment to data security to minimized risk of breaches or vulnerabilities, reliability and performance of IT products and customer satisfaction to ensure that products are well-documented, easy to use and supported effectively.		
To submit NTC Value-Added Services (VAS) Certificate		
The bidder must submit a certificate of at least five (5) Certified Network Engineers –		
To submit proof of track record of installing and managing VoIP service for at least five (5) continuous years such as but not limited to proof of delivery and certificate of completion/acceptance of the project–		

<p>The bidder must submit a certificate of at least two (2) Certified Product Engineers for the Applied Threat Intelligence Solution. –</p>	<p>Can we relax the requirement to certified individual for security. Any certification under security/firewall domain.</p>	<p>Can not be relax but it can be reduced as follows:</p> <p>From: The bidder must submit a certificate of at least two (2) Certified Product Engineers for the Applied Threat Intelligence Solution.</p> <p>To: The bidder must submit a certificate of at least one (1) Certified Product Engineers for the Applied Threat Intelligence Solution.</p>
<p>5.8 Scope of Work The supplier shall rehabilitate all hardware equipment (radio communication equipment and radio-determination equipment, computer, installation materials, VoIP system, electronic equipment), shall be commercial-of-the-shelf (cots) and be readily available to the Philippine market for the sustainability of spares.</p>		
<p>The cost of delivery of equipment and materials to its final destination (incoterms 2020 delivered duty paid) shall be borne by the supplier.</p>		
<p>The PCG shall have the right to reject and return the unit and cancel the corresponding Contract if the unit delivered is defective, incomplete, or non-compliant with the specification herein specified, or for any other reason advantageous to the Republic of the Philippines.</p>		

<p>To be connected to existing trunk lines and analog SIP phones.</p>	<p>What brand and model for analog SIP phones? Advise if not obsolete? If obsolete cannot be integrated to the proposed telephony system</p>	<p>The existing analog SIP phones is Avaya, the existing and remaining Avaya phones will be integrated using FXO gateway modules. FXO gateway modules are essential for bridging the gap between analog and digital communication systems, enabling businesses to seamlessly integrate legacy equipment into modern VoIP networks. They provide cost-effective solutions for transitioning to VoIP, enhancing communication flexibility, and ensuring reliable connectivity. Brand/Model: IP Office 500V2, AVA-1608-1(B)</p>
<p>To be capable of accommodating LTE calls</p>		
<p>The VoIP system must be compatible to initiate and receive calls via IP phone with video and WiFi/PoE phone among NHQ-PCG and its remote offices.</p>		
<p>The VoIP system must be equipped with a rapid recovery tool.</p>		
<p>The VoIP system shall have no downtime in wireless link connections among NHQ-PCG and its remote offices.</p>		
<p>The Bidder shall submit a Price Schedule, wherein each of the equipment/components under the Technical Specifications shall have a bid price/offer.</p>		

<p>5.9 Manpower Requirements</p> <p>The team will have at least one (1) project manager, at least five (5) technical team members, and two (2) Product Engineer of the Applied Threat Intelligence Solution.</p>	<p>Can we relax the requirement to certified individual for security. Any certification under security/firewall domain.</p>	<p>Can not be relax but it can be reduced as follows:</p> <p>From: The bidder must submit a certificate of at least two (2) Certified Product Engineers for the Applied Threat Intelligence Solution.</p> <p>To: The bidder must submit a certificate of at least one (1) Certified Product Engineers for the Applied Threat Intelligence Solution.</p>
<p>Project Manager:</p> <p>Provides project management which will include determining the project scope and timeline, and monitoring progress to ensure an accurate outcome while ensuring the deadlines are met.</p> <p>The project manager should be a graduate of finance or business management-related field and should have a background in the implementation of the IPBX system for at least one (1) year.</p>	<p>Can we align the requirement for the project manager since the project focus on delivery of technical above (PABX system, Wifi System, P2MP radio, Structured cabling), As a global standard, the project manager should be graduate with Engineering degree. i.e. ECE (Electronics and Communications Engineer or Electronics Engineer)</p>	<p>Granted, provided that Engineering degree. i.e. ECE (Electronics and Communications Engineer or Electronics Engineer has an experience of Project Manager position.</p>

<p>Technical Team Members Responsible for managing, maintaining the system, and resolving issues with the software. The team will have at least five (5) Certified Network Engineers and at least two (2) Certified Product Engineers for the Applied Threat Intelligence Solution who must have a bachelor's degree in information technology, computer science, or similar courses and experience in rehabilitation or implementation or equivalent in IPBX systems and rewiring of ICT equipment. – ❖ The contractor shall submit the respective Curriculum Vitaes of the required members of the project team who shall be deployed during the implementation of the contract as part of the First (1st) Bid Envelope (Eligibility Documents and Technical Component)–</p>	<p>Can we relax the requirement to certified individual for security. Any certification under security/firewall domain.</p>	<p>Can not be relax but ca be reduced as follows: From: The team will have at least five (5) Certified Network Engineers and at least two (2) Certified Product Engineers for the Applied Threat Intelligence Solution who must have a bachelor's degree in information technology, computer science, or similar courses and experience in rehabilitation or implementation or equivalent in IPBX systems and rewiring of ICT equipment. To: The team will have at least three (3) Certified Network Engineers and at least one (1) Certified Product Engineers for the Applied Threat Intelligence Solution who must have a bachelor's degree in information technology, computer science, or similar courses and experience in rehabilitation or implementation or equivalent in IPBX systems and</p>
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		rewiring of ICT equipment.
5.10 Requirements if Awarded the Contract · Permits and licenses The supplier shall cover the expenses and carry out the		
application of permits for the end-user necessary for the installation of the equipment to include but not limited to: NTC permit (for radio equipment) a. Type approval b. Permit to purchase c. Permit to possess		
All ICT equipment for the project must come from a reputable and established brand existing in the Market.		
The proponent of the rehabilitation of ICT equipment and Systems of the PCG must be authorized to sell the products in the Philippine Market.		
The bidder is to submit a time-bound/schedule of the project.		
Origin: The provider for the rehabilitation of ICT equipment and systems of the PCG must be at least a member of G7 or NATO countries.		
The bidder must have a subject matter expert. They have certified Internetwork Experts and Information System Security Professionals with at least five (5) years of experience in deployment and managing security and network solutions.	Can we relax the requirement to certified individual for security. Any certification under security/firewall domain.	Already addressed on the previous manifestations.
5.11 Training Service Provider, at their expense, shall provide training and seminar packages in the handling, safety, and other related training to the system's operation to the PCG. This shall include incidental activities in the pursuance of the training/seminar which shall be		

conducted face-to-face and to be participated by 20 PCG personnel.			
Activities	Timeline		
High-speed Satellite Internet Service/ISP Training	1 day		
Applied Threat Intelligence System and Unified Threat Protection Training	1 day		
IP Network System Training (Network Security Firewall, Load Balancing, Session Boarder Controller)	1 day		
VoIP System Training (IPPBX, FXO Gateway Module, IP Phones, LTE Gateway)	2 days		
Wireless Link System (Wireless Access Point Backhaul Radio, Wireless Subscriber Radio, WiFi 6 POE Indoor Access Point, WiFi 6 POE Outdoor Access Point)	1 day		
Auxiliary Equipment Training	1 day		
The training shall be conducted within forty-five (45) days from the receipt of the Notice to Proceed (NTP).			
The training must be detailed enough for the technical participants to be able to			

completely operate and maintain the platform. The training must also include troubleshooting, preventive maintenance, and business continuity planning/testing.		
Appropriate training manuals must be provided for each participant. The training manuals must be easy to understand and comprehensive. The training manuals shall be available in both soft and hard copy formats.		
<p>5.12 Non-disclosure</p> <p>The Supplier warrants the security and ensures the confidentiality, integrity, and availability of the system, its source code and all the processed data on the system and shall be held liable in case of breach thereof.</p>		
<p>5.13 Quality and Warranty</p> <p>The winning bidder for the rehabilitation of the IPBX shall maintain the Warranty Agreement for at least eighteen (18) months starting from the date of contract completion.</p>		
Warranty Security shall be covered by Special Bank Guarantee of one percent (1%) of the total contract price, Retention Money of one percent (1%) of the total contract price, or a special bank guarantee of one percent (1%) of the total contract price will be withheld for the eighteen (18) months of the warranty period. However, said amounts can only be released provided that the supplies delivered are free from patent and latent defects and all the conditions imposed under this Contract have been fully met.		
As provided under Section 62.1 of the 2016 revised Implementing Rules and Regulations of Republic Act No. 9184, in order to assure that manufacturing defects shall be corrected by the supplier, manufacturer, or distributor, as the case may be, for a specific time after performance of the contract, a warranty shall be required from the contract awardee for such period of time as may be provided in the IRR, the obligation for which shall be covered by either retention money in the amount equivalent to a percentage of every progress payment, or a special bank		

guarantee equivalent to a percentage of the total contract price, to be provided in the IRR.		
The Supplier's liability shall be as provided by the laws of the Republic of the Philippines.		
<p>5.14 Service Level Agreement</p> <p>The winning bidder will submit a weekly Performance Evaluation Report for the whole system and must attain 99.5% uptime service commitment. The PCG shall have ownership of the data inputted, submitted, generated, or otherwise formed during the contract period.</p>		
In the event that the Service Provider is not able to deliver within the allowable and acceptable period set in the SLA, the PCG shall recoup in the form of service credits of one (1) day for every day of delay or when the system is down. The SLA shall be based on a response time matrix, to be determined by the Service Provider and the PCG, and agreed upon through a written sign-off.		
<p>5.15 Documentation</p> <p>The Service Provider shall provide complete documentation for every deliverable and at every end of each development stage and milestone which will be submitted to the PCG for approval.</p>		
As part of the post-qualification evaluation, the Service Provider will be asked on a predetermined date to present a working solution/system, with the necessary documentation such as systems design specifications and technical architecture design, to the Technical Working Group (TWG) and CGWEIS for proper evaluation.		
5.16 Other requirements to be submitted by the Bidder during Post-Qualification TWG to conduct a site inspection to ascertain the authenticity of the store and supporting documents.		
<p>5.17 Point of Contact</p> <p>The following personnel shall be the authorized and direct contact person of the Project.</p> <p>SUPPLIER: (name of the authorized and direct contact person) Project Manager for the Rehabilitation of the Existing NHQ-PCG PBX System ROM Analog PBX System to IP-</p>		

Based VoIP PBX System via Sip Trunks and Re-wiring of ICT Infrastructure and Equipment		
5.18 Reservation Clause The Philippine Coast Guard (PCG) reserves the right to reject any end all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Section 41 of R.A. 9184 and its IRR, without thereby incurring any liability to the affected bidder or bidders.		

Attached herewith are the project drawing lists (Annex) for your reference.

For information and reference. Thank you.



RADM HOSTILLO ARTURO E CORNELIO PCG
Chairperson, NHQ-PCG BAC

Received by the bidders:

Name: _____

Date: _____

