Republic of the Philippines
Office of the Solicitor General
134 Amorsolo St. Legaspi Village, Makati City

Technical Working Group for
Information and Communications Technology

TERMS OF REFERENCE

Supply and Delivery of Wi-Fi Enabled Voice over IP (VOIP) Phones

Background:

The Office of the Solicitor General (OSG) functions as the government's primary law office, tasked with representing the government, its agencies, and instrumentalities in many legal issues. Effective and efficient communication is essential to the OSG's activities, particularly due to its responsibility in collaborating with other governmental departments, courts, and other organizations.

The OSG is modernizing its infrastructure to improve efficiency and facilitate communication across its offices, making the use of Voice over IP (VoIP) technology a crucial element of its digital transformation strategy. VoIP technology provides a cost-efficient and adaptable alternative by facilitating telephony services via the internet, hence diminishing dependence on conventional telephone lines. The incorporation of Wi-Fi-enabled VoIP phones specifically fulfills the demand for enhanced mobility and flexibility in the workplace, enabling personnel to utilize communication services without being confined to a physical network.

Objective:

The primary objective of this project is to enhance the OSG's communication capabilities by adding new Wi-Fi-enabled VoIP phones to its existing infrastructure. These additional units will allow staff members to communicate more flexibly within the office, breaking free from the limitations of traditional wired phones. By utilizing VoIP technology, the OSG aims to improve connectivity, streamline internal communication, and support real-time collaboration across its departments, all while reducing costs associated with legacy telephone systems.

The project also seeks to future-proof the OSG's communication infrastructure by enabling scalability and adaptability. With the introduction of these Wi-Fi-enabled devices, the OSG will be better equipped to support remote and hybrid work setups, ensuring seamless communication regardless of location. Ultimately, the goal is to create a more efficient, mobile, and responsive work environment that enhances both productivity and service delivery within the OSG.

Terms:

1. *Scope.* - Supply and Delivery of Wi-Fi Enabled Voice over IP (VOIP) Phones.

2. *ABC.* - The Approved Budget for the Contract (ABC) is **One Million and Four Hundred Thousand Pesos (₱1,400,000.00)**, inclusive of all government taxes, charges, and other standard fees.

ICT EQUIPMENT			
ITEM	**QTY**	**UNIT COST**	**TOTAL**
Supply and Delivery of Wi-Fi Enabled Voice over IP (VOIP) Phones	**56**	25,000	1,400,000
		TOTAL	**₱ 1,400,000.00**

3. *Payment.* - The supplier shall be paid in full, subject to deduction of applicable taxes, upon the issuance by the OSG of the corresponding Certificate of Acceptance. All bid prices shall be considered as fixed prices, and therefore not subject to price escalation during contract implementation.

4. *Delivery.* - Delivery shall be within sixty (60) calendar days upon receipt of the Notice to Proceed. Delays in delivery shall be subject to a penalty equivalent to 1/10 of 1% of the cost of undelivered item/s for every day of delay.

5. *Qualifications of the Supplier*:

   a. The Bidder shall have an SLCC that is at least one (1) contract similar to the Project the value of which, adjusted to current prices using the PSA's Consumer Price Index, must be equivalent to at least fifty percent (50%) of the ABC, completed within 5 years before the deadline for the submission and receipt of bids.

      For this purpose, a similar contract shall refer to the procurement ICT equipment.

   b. The bidder must present a Client Satisfaction Rating/ Certification for at least three (3) contracts with government agencies and/or private corporations with whom the bidder has previous or ongoing contract/s similar to this project.

   c. The bidder shall submit a valid and current Certificate of Distributorship/Dealership/Resellership of the product being offered, issued by the principal or manufacturer of the product (if the bidder is not the manufacturer). If not issued by the manufacturer, they must also submit a certification/document linking the bidder to the manufacturer.

d. The Bidder must provide warranty and maintenance services as provided under the Support Service Requirement.

e. The bidder must attach a brochure of the brand being offered.

f. The bidder must have a main office or satellite office within Regions III, IV and NCR.

g. The bidder shall submit documents relevant to the project, such as but not limited to the following:

- Valid DTI or SEC Registration;
- Valid and Current Mayor's Permit/Municipal License;
- Valid and Current Business Permit;
- Tax Clearance Certificate as finally reviewed and approved by BIR;
- Statement of contracts completed which are similar in nature to the contract to be bid.
- Net Financial Contracting Capacity (NFCC) Computation

6. Applicable provisions of the Government Procurement Reform Act (RA No. 9184) and its Revised Implementing Rules and Regulations (RIRR) shall form part of the Terms of Reference (TOR).

Technical Specifications:

ITEM	SPECIFICATIONS	STATEMENT OF COMPLIANCE
Specific Requirements for VOIP Phones		
Warranty and After-sales Requirements	- Immediate replacement of the equipment and/or its parts	
	- The winning Bidder shall replace a factory defective unit with a new unit within 30 days upon delivery of the item.	
	- In case of outside repair within the **one-year** warranty period, the winning Bidder shall provide a service unit to the OSG.	
	- For the two immediately preceding items, the Bidder must submit Proof of Warranty as part of the technical component.	

	Specifications	Statement of Compliance
User Interface		
	Must have at least a 5" color IPS LCD, 800 x 480 native resolution, and 9:16 aspect ratio	
	Must have at least a light status indicator, RGB with color mixing	
	Can handle multiple calls using 12-line keys supporting up to 48 lines, features, and contacts and up to 34 SIP lines with pagination	
	Must have at least two high-speed GigE PoE Ethernet ports for the LAN connection to an IP phone with a passthrough connection to your PC	
	Must be capable of reducing noise and distractions via AI and a virtual audio fence that blocks sounds from outside.	
	Must have at least Unicode UTF 8-character support	
	Must have at least an adjustable desk stand (2 positions)	
Wireless Technology		
	Must have at least Integrated Bluetooth 5.0	
	Wi-Fi network connectivity: 2.4-2.4835GHz (802.11b, 802.11g, 802.11n HT-20) 5.15-5.825GHz (802.11a, 802.11n,HT-20, 802.11n HT-40)	
	Near Field Communication (NFC)	
IO Ports		

	Must have at least 1 USB 2.0 Type-C(for media, storage applications, headset, expansion module)	
	2 RJ-45 (10/100/1000BASE-TX Mbps)	
Audio Features		
	HD Voice	
	Must have an acoustic fence technology or similar that eliminates background noise when using a handset or wired headset and noise AI technology or similar that removes most background noise when using the speakerphone.	
	TIA-920 wideband audio, type 1 compliant (IEEE 1329 full duplex)	
	Adaptive jitter buffers	
	Bass frequency enhancing design	
	Voice activity detection	
	Comfort noise generation	
	Individual volume settings with visual feedback for each audio path	
	Low delay audio packet transmission	
	DTMF tone generation (RFC2833 and in-band)	
Audio Codecs		
	Must have at least G.711 (A-law and μ-law), G.722, G.729AB, ILBC, OPUS, G.722.1	
Management software		
	Must have at least Zero Touch Provisioning	
	Must have a cloud-based management tool that simplifies monitoring, configuring, and updating VoIP devices remotely, ensuring streamlined management and consistent performance across devices.	
	SDP Session Description Protocol	
Security Management		
	802.1X Authentication and EAPOL Media encryption via SRTP	
	Digest authentication	
	Encrypted configuration files	
	HTTPS secure provisioning	
	Password login	
	Support for signed software executables	
	Support for URL syntax with password	
	Transport Layer Security (TLS)	
	Wi-Fi encryption: WEP, WPA-Personal, WPA2-Personal, WPA2-Enterprise with 802.1X (EAP-TLS, PEAP-MSCHAPv2)	
	SRTP media encryption using AES 256 bits	
Open Application Platform		
	Computer Audio Connector app installed on PC (Windows only) which enables	

	selecting your phone for PC audio in/out to use the phones handset, optional headset and handsfree speakerphone with PC applications	
	Supports Apps SDK and API for third- party business and personal applications	
	Bundled with UC Software:	
	Corporate Directory Access using LDAP Visual Conference Management	
Supported Network Protocols		
	DHCP VLAN discovery	
	LLDP-MED for VLAN discovery	
	FTP/TFTP/HTTP/HTTPS server-based central provisioning	
	Hardware diagnostics	
	Manual or dynamic host configuration protocol (DHCP) network setup	
	Network address translation support for static configuration and Keep-Alive	
	QoS Support — IEEE 802.1p/Q tagging (VLAN), Layer 3 TOS, and DHCP	
	Status and statistics reporting	
	Syslog Event Logging	
	Conforms to IEEE802.3-2005 (Clause 40) for physical media attachment	
	Conforms to IEEE802.3-2002 (Clause 28) for link partner auto-negotiation	
	Time and date synchronization using SNTP	
	RTCP and RTP support	
	IPv4	
	IPv6	
	Provisioning and call server redundancy support	
	DNS-SRV	
	UDP	
	SIP protocol support	
	IETF SIP (RFC3261 and companion RFCs)	
Headset ports		
	Must have at least 1 RJ-9	
	Must have at least 1 Electronic Hook Switch (EHS) port for optionalAPP-51 adapter	
Headset and handset compatibility		
	Bluetooth headset compatibility	
	Compatible with commercially available TTY adapter equipment	
	Compliant with ADA Section 508 Subpart B 1194.23 (all)	
	Hearing aid compatibility to ITU-TP.370 and TIA504A standards	
	Hearing aid compatible (HAC) handset for magnetic coupling to hearing aids	
	USB Type-C headset support	
Telephony and call handling features:		
	4 context-sensitive soft keys	

	4-way navigation key cluster with center Select key	
	Corporate Directory Access using LDAP	
	Busy Lamp Field (BLF)	
	Call timer and call waiting	
	Call transfer, hold, divert (forward), park, pickup	
	Called, calling, connected party information	
	Calling Party Identification (RFC8225 classifications — Trusted, Unknown, SPAM)	
	Distinctive incoming call treatment/call waiting	
	Do not disturb function	
	Electronic hook switch capable	
	Enhanced Feature Keys make powerful feature shortcuts online key appearances or soft keys	
	Headset select key (illuminated when selected)	
	Hold and transfer keys	
	Home and back feature keys	
	Local three-way audio conferencing	
	Local configurable digit map/dial plan	
	Mute key (illuminated when muted)	
	One-touch speed dial, redial	
	Pagination key for additional lines/contacts	
	Remote missed call notification	
	Reverse number lookup via LDAP	
	Shared call/bridged line appearance	
	Speakerphone select key (illuminated when selected)	
	Supports SDK and API for third- party business and personal application	
	Visual Conference Management	
	Voicemail key	
	Volume +/- control keys	
	Flexible line appearance (one or more-line keys can be assigned for each line extension)	
Power		
	Built-in auto sensing IEEE 802.3af Power over Ethernet Class 2, 5.0 W (Max)	
	External Universal AC/DC Adapter (optional) 5VDC @ 3A (15W)	
	ENERGY STAR® rated	
Product Inclusion		
	Setup sheet	
	Network (LAN) cable-CAT-5E	
	Desk stand	
	Console	
	Handset	

	Handset cord	
	Power Supply with power cord	
	Antimicrobial protection	
Warranty Period	One (1) Year Warranty	
Delivery	Within thirty(30) days upon receipt of Notice to Proceed	
Installation	Must include Installation, configuration, and setup	
	Must include product training and demonstration on deployment, configuration, administration, maintenance, and basic troubleshooting	
Support Service Requirements		
	The bidder must provide the following:	
	* Unlimited corrective maintenance/ repair services within the warranty period	
	* Eight (8) hours by five (5) days (Monday to Friday, 8:00 AM - 5:00 PM) technical support and must meet the following response and resolution time:	
	> Within one (1) hour for phone or email support	
	> Next business day on-site support	
	> For onsite support, the winning bidder must attend to and repair the defective unit within two (2) business days	
	> In case of outside repair within the 1-year warranty period, the winning bidder shall provide a service unit to the OSG within three (3) days upon pull out of the unit. The repaired hardware or replacement for the pulled-out hardware/unit must be delivered within fifteen (15) calendar days from the issuance of the service unit.	
	The bidder must provide full documentation for the Activity Plan on the installation of patches and upgrades and Root Cause Analysis of incidents encountered.	
	The bidder must provide onsite support for the installation and deployment of software patches and version upgrades.	
	The bidder must provide a procedure for support and problem escalation.	
	* Submission of Activity/Service Report within 5 calendar days after rendering service	
	The bidder must conduct system health checks every quarter with the following scope:	
	· System/Application patches, fixes, security patches, and alerts	

	· System/Application profile	
	· Resource utilization	
	· Log analysis	
	· Formal reports on the output of conducted health checks within 5 days	
Other Warranty and After Sales Requirements	* Immediate replacement of the equipment and/or its parts.	

Technical Working Group for ICT Equipment

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