



Republic of the Philippines
Department of Health
CENTRAL OFFICE BIDS AND AWARDS COMMITTEE

BID BULLETIN NO. 1

07 April 2021

**PROCUREMENT OF SERVICE PROVIDER FOR THE RENEWAL OF EXISTING
CENTRALIZED WIRELESS LAN LICENSE SUBSCRIPTION FOR DOH CENTRAL OFFICE
IB No. 2021-152**

This Bid Bulletin is being issued to respond to the letter of clarification submitted by Microdata Systems and Management, Inc. and to amend or modify the posted Bidding Documents in the DOH and PhilGEPS websites for the Procurement of Service Provider for the Renewal of Existing Centralized Wireless LAN License Subscription for DOH Central Office under IB No. 2021-152. This Bid Bulletin will form an integral part of the bidding document for the above-mentioned procurement project.

1. Response to Letter of Clarification from Microdata Systems and Management, Inc.:

Particulars	Discussion, Comment & Suggestion	Response of End-user and COBAC-B
For the item II.B.3 on page, The controller supports Command Line Interface (CLI) Centralized Management.	Since the requirement is cloud based, no wireless controller to be deployed thus no need to support Command Line Interface (CLI)	The specifications under II.B.3 is deleted. Refer to the attached revised Terms of Reference and Technical Specifications form.

2. Changes in the Technical Specifications

Particular	From	To
II. Scope of Work; A. General Requirement	1. Renewal of existing Meraki Cloud Based Centralized Wireless LAN License (78 licenses) for DOH Central Office for one (1) year	1. Renewal of existing Meraki Cloud Based Centralized Wireless LAN License (78 licenses) for DOH Central Office for one (1) year, including existing Access Points & POE Switches

The revised Terms of Reference and Technical Specifications are attached for prospective bidders' reference and use.

All other provisions of the Bidding Document which are not affected shall remain in force and in effect.

For guidance and information of all concerned.

(Sgd)

GERARDO V. BAYUGO, MD, MPH, CESO I

Undersecretary of Health

Chairperson, COBAC-B

Terms of Reference

Title: Renewal of Existing Centralized Wireless LAN license subscription for DOH Central Office

Type of Service: Contract of Service

Client: Knowledge Management and Information Technology Service (KMITS)- Information Technology Infrastructure & Security Service (ITISD)

I. ABC: PHP 3,000,000.00

Delivery Schedule: Thirty (30) calendar days upon receipt of the Notice to Proceed (NTP) until December 31, 2021

II. Scope of Work:

The Contractor shall undertake the following:

A. General Requirements

- 1. Renewal of existing Meraki Cloud Based Centralized Wireless LAN License (78 licenses) for DOH Central Office for one (1) year, including existing Access Points & POE Switches.**
2. Re-Assess the existing DOH Wired LAN (10 Gig) and re-survey of DOH campus wide area to determine if additional WAPs are needed at optimal locations to minimize channel interference while maximizing the range.
3. Restructuring of the DOH Centralized Design that will cater **DATA and VOICE** that will seamlessly integrate with DOH existing wired network. The design and methodologies will include but not limited to the following:
 - a. Radio Frequency (RF) Design
 - b. Robust security to prevent all possible WLAN threats
 - i)** Authentication
 - ii)** Authorization
 - iii)** Encryption
 - iv)** RF security
 - c. Scalability and Extensibility (for future expansion requirements)
 - d. Power requirements and backup
 - e. Fast, Secure Roaming
 - f. Min/Max users supported and Number of sites supported
 - g. Load Balancing
 - h. Management and Monitoring
 - i. Standards conformance/requirements

- j. Wireless intrusion detection and prevention system (WIDS/WIPS)
 - k. Identity-Based Firewall and Application Visibility & Control
 - l. Other quality of service requirement.
4. Conduct RF spectrum analysis to provide a the most complete view of the wireless environment with the ability to detect interferences, vulnerabilities, attacks and devices that cause havoc on all channels and network's security or performance.
 5. Re-access DOH existing Wired Network (10 Gig) to the and WLAN infrastructure;
 6. Conduct vulnerability assessment on all WLAN equipment, devices and software to verify that all WLAN equipment, devices and software are not leaking any information about DOH enterprise private network, and to ensure that all the equipment will not be used by hackers and malicious externa and /internal users. The vulnerability assessment will also determine;
 - a. how to prevent external hackers from getting access to DOH enterprise network,
 - b. how to allow only authorized users into the network,
 - c. how to prevent those inside the network from executing deliberate or inadvertent attacks
 - d. how to monitor the network to identify rogue WLANs,
 - e. how to detect intruders and impending threats, and enforce WLAN security policy.
 7. Conduct vulnerability assessment on the following but not limited to;
 - a. RF Design
 - b. Wireless Access Points Distribution
 - c. WLAN software's
 - d. and other devices and software used to make the wireless solution work
 8. Provide administrative, management and monitoring tools that will monitor inherent wireless network vulnerabilities;
 9. Submit administrative and system WLAN policy, WLAN security policy that includes strong mechanisms of authentication and encryption to validate user compliance and WLAN best practices
 10. Prepare hardened system and turnover of administrative rights and all documentation pertaining to current DOH WLAN;
 11. Conduct a comprehensive Administrators training for at least 5 staff on the operation of the systems and equipment. The training should include but not limited to:
 - a. RF and Wireless LAN Fundamentals
 - b. RF and Wireless LAN Design, Deployment and Administration
 - c. Installation, Configuration, Operation, Administration and Maintenance of major DOH WLAN equipment
 - d. Installation, Configuration, Operation and Administration of the DOH WLAN Software
 - e. Installation, Configuration, Operation and Administration on Security of the DOH WLAN infrastructure
 12. Conduct other works and provide materials that may have been omitted here but are necessary to put the system in operation and to complete the works to commission and implement the system within the required period.

B . Technical Requirements

The contractor may improve or add to the conceptual design, quantity of the component/s and specification(s) given by the DOH to attain functionality, stability, integrity, connectivity, interoperability and security of the proposed solution and to meet the project objectives, concept of operation and industry standards given proper justification and explanation of the necessity of the improvements recommended.

Wireless Access Point

Re- access optimal location of Wireless Access Points (WAPs) in all buildings and offices to achieve total performance desired throughout.

Wireless LAN Security

WLAN security design and implementation must secure all DOH DATA and Voice that passes thru Radio Frequency.

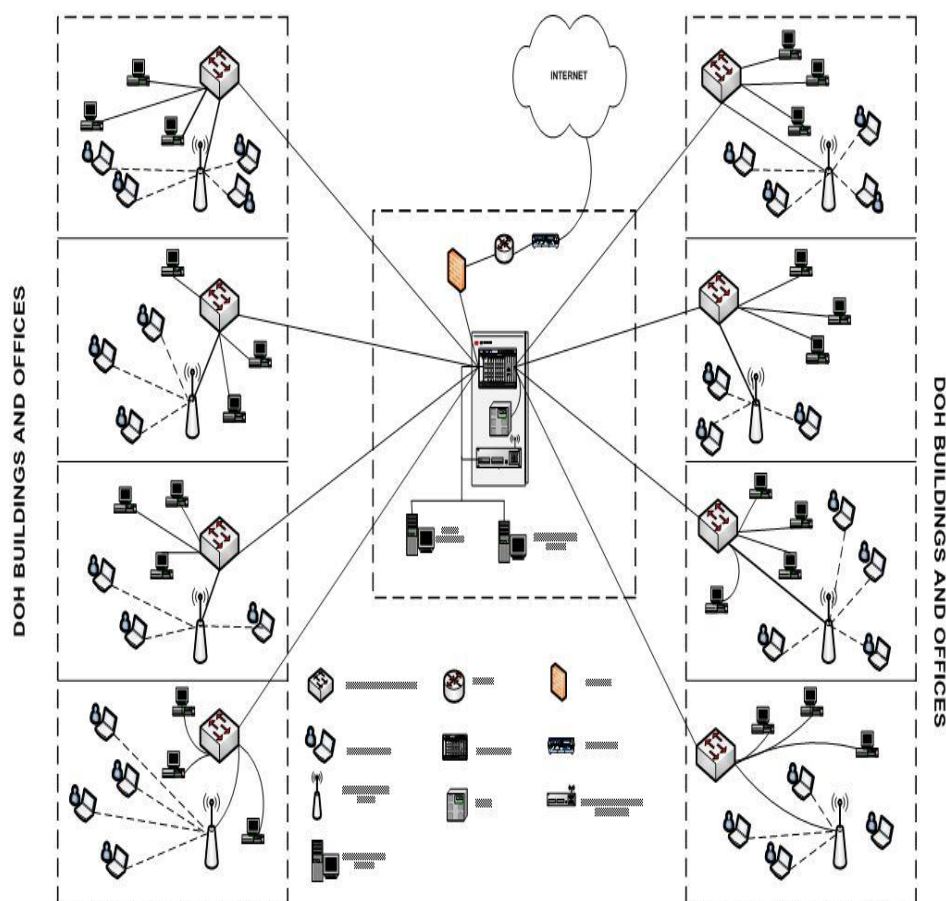
Wireless Management

Wireless Management must have and support the following but not limited to;

1. The WLAN solution must support RF management
 - a. RF management including Access Points and POE switches via cloud.
 - b. RF management includes correcting failed access points, channel interference and unbalance loads
2. The WLAN solution must support DHCP configuration and management.
3. The controller supports Web-based centralized management
4. Software Release Management
 - Software or firmware can be upgraded on all access points automatically or by group
5. Client Management and control
6. Management of statistics and events
7. Auto discovery (Plug-and-Play)
8. Reporting

Wireless LAN Design

DOH WIRELESS LAN SETUP



III. Coverage

1. Building Coverage

The centralized Wireless LAN (WLAN) solution will cater to fifteen (15) buildings of the DOH at the San Lazaro Compound in the following offices :

Bldg	Floor	Office
1*	1 st	Office of Secretary Admin, Malasakit Program Office (Complaint's Division)
	2 nd	Office of Secretary Proper
2*	1 st	Financial Management Service
	2 nd	Administrative & Finance Management Team (Usec & Asec) Health Facility Infrastructure Development Team, Commission on Audit
3*	1 st	Bureau of International Health Cooperation, World Health Organization
	2 nd	Bureau of Local Health System Development, and Health Policy Development & Planning Bureau; Health Policy & Systems Development Team (Usec)
4*	1 st	Health Facility Development Bureau
	2 nd	Health Regulation Team (Usec)
	3 rd	Health Facility Enhancement Program
5	1 st	Malasakit Program Office

6*	1 st	Procurement Service (PS)
	2 nd	
	3 rd	
9*	1 st	Field Implementation & Coordination Team – Hospitals and NCR (Asec) DOH Library & DOH Records and Archives
	2 nd	Knowledge Management and Information Technology Service, DOH Data Center, ICT training Center
12*	1 st	Health Emergency Management Bureau, National TB Program, Philippine National AIDS Council, Field Implementation & Coordination Team – Luzon (Asec), DOH Coop Office
	2 nd	Logistic Management Division, Procurement and Supply Chain Management Team
	3 rd	Legal Service, Public Health Sector Team (Asec), Health Regulation Team (Asec)
12a*	1 st	Personnel Division
	2 nd & 3 rd	Health Human Resource Development Bureau (HHRDB)
14a *	1 st	Field Implementation Coordinating Team (Usec)
	2 nd	Family Health Office
	3 rd	Infectious Disease Office
14b	1 st	Public Health Sector Team (Usec); Disease Prevention & Control Bureau; Medical Infirmary (MEDI)
	2 nd	Environmental and Occupational Health Office
	3 rd	Degenerative Disease Office
15	1 st	Health Facilities and Services Regulatory Bureau
	2 nd	
17	1 st	DOH Convention Hall
	1 st	Internal Audit Service (IAS)
18	1 st	DOH Canteen
	2 nd	Health Promotion Bureau
19*	1 st	Office of Chief of Staff (Usec & Asec), Health Policy & Systems Development Team (Asec), General Services Division – AS, Materials Management Division – AS;
	2 nd	Epidemiology Bureau
	3 rd	
	4 th	Dangerous Drugs Abuse Prevention Treatment Program
*- Priority Buildings		
2. System coverage <ul style="list-style-type: none"> a. No outdoor coverage b. Contained in side building c. Contained only at DOH (San Lazaro Compound) d. Wireless signal must not be automatically broadcast over WLAN infrastructure 		
3.Users <ul style="list-style-type: none"> • 2, 500 personnel & consultants and average guests per day of 500 		
4.Coverage radius <ul style="list-style-type: none"> • 100' to 200' depending on building or as necessary 		
5.Connection to DOH network backbone <ul style="list-style-type: none"> • All WAP's connected to DOH core switch 		

IV. Capacity
a. Scalable and Upgradable
b. Support secure and fast roaming in different subnets, segments, & VLANs
c. Interference free from non-WIFI sources and private or individual WIFI APs if any
d. Frequency must not interfere with any hospitals equipment
V. Density Requirements
a. Use of Multimedia – Bldgs. 1, 9, & 18
b. Training requiring internet access – Bldgs. 9 & 12
c. Streaming of data, voice and video- Building 1,9,3,4,15, 18
d. With unique wireless address space management
e. With extra address capacity using Class A or B IP Address per wireless subnet with short lease time of 15 minutes
VI. Security
1. Isolation by building via subnet and VLAN <ul style="list-style-type: none"> a. Support separation of DOH enterprise users (wired and wireless) and guest users b. VPN termination within switch
2. Centralized authentication system supporting database synchronization and ability to authenticate individual user <ul style="list-style-type: none"> a. Supports RADIUS, Active Directory and other authentication server. b. Supports wide range and robust authentication mechanism. c. Supports different type of encryptions (data and voice) d. Supports 802.11i, standard specifying increased security mechanisms for wireless networks e. Supports WPA in both enterprise and pre-shared, WEP with static and dynamic keys and other stronger authentication/encryption mechanism
3. Wireless Switching or equivalent technology that allows central coordination and APs frequency and power levels control <ul style="list-style-type: none"> a. WLAN controller is an enterprise-class switch and scalable which will connect, controls, manage and intelligently integrates wireless Access Points (WAPs) and RF Monitors into the wired LAN. b. WLAN controller is capable of monitoring Switch and control the wireless network to reconfigure access point parameters as needed to maintain high service levels c. High-performance packet processing provides value-added wireless services such as load balancing, rate limiting, self-healing, calibration, authentication, mobility, security, firewalls, encryption, intrusion detection and mitigation, centralized monitoring and configuration
VII. Deployment
1. Support WLAN industry standards <ul style="list-style-type: none"> a. Support standard tunneling protocols allowing connection to DOH wired system

<ul style="list-style-type: none"> b. WLAN controller must support 802.11ac c. WAP must support 802.11ac with and must be controllable d. WLAN controller and WAPs must support Power-over-Ethernet standard 802.3af e. WLAN controller and WAPs must supports 802.11e and Quality of Service (QoS) f. The WLAN solution must support 802.11i, standard specifying increased security mechanisms for wireless networks g. Both WLAN Controller and WAP must support Traffic Forwarding
2. 802.11ac with backward compatibility to n/a/b/g standard with a frequency of 5 GHZ supporting simultaneous 802.11a and 802.11n. 2.4 GHz supporting simultaneous 802.11b, 802.11g and 802.11n
3. With visibility monitoring system for system administrator
4. Customized password for DOH Guest users <ul style="list-style-type: none"> a. Guest users can use the DOH Free WiFi without any username or password needed (one-time registration only) b. Guest users can only use the DOH Free WiFi for one (1) hour only renewable everyday c. Guest users Access right must be limited (Separate Network and <u>MUST NOT ABLE TO ACCESS</u> the DOH LAN Network)
5. Guidelines for employees' access <ul style="list-style-type: none"> a. Written administrative and system WLAN policy b. Written WLAN security policy that includes strong mechanisms (authentication and encryption) to validate user compliance and WLAN best practices
6. Coverage <ul style="list-style-type: none"> a. Will give all employees, guest users and administrators a single WLAN which they could transmit data and voice without huge operational expense and management complexity. b. Serves as the main backup of DOH wired LAN. c. Also covers all areas in DOH where cabling is impossible to do and where wireless capable desktop and laptop is available.

VIII. Warranty Requirement

1. One (1) year warranty is required on all delivered goods and make or workmanship and shall take effect immediately after final acceptance of system by DOH.
2. The winning bidder should warrant that should there be announced improvements on the proposed product and/or any of its components, after date of submission of proposals and before date of implementation, such improved product(s) or its components should be delivered to and installed at the DOH by the winning bidder without affecting the submitted bid price proposal.
3. If announced improvement is made within six (6) months after installed product has already been accepted for DOH use, the winning bidder must install the product or its components no additional cost to DOH.
4. During the warranty period, DOH shall be entitled to all applicable upgrades.

5. During the warranty period, the winning supplier must provide maintenance support, consisting of **Preventive and Remedial Services** on all delivered products and/or its components.

Remedial Requirements within One (1) year warranty PERIOD
PERIOD

1. All maintenance and technical support must be available locally. The Winning bidder must have experienced and trained technicians or engineers under its direct employment and supervision in rendering the required maintenance
2. The winning bidder must provide the following maintenance support consisting of Remedial Maintenance services on all hardware and software components of the proposal onsite;
 - a. Upon receipt of notice, either through phone, electronic communication, or in writing, the service contractor must address the issue through a step -by- step instruction through phone and in writing to the concerned DOH-KMITS. If the problem persists, the service contractor must address the problem onsite.
 - b. Once onsite, the service contractor must repair the malfunctioning equipment, provided equipment has been operated in normal conditions.
 - c. The service contractor must at all times maintain a reasonable supply of replacement and spare parts to effect the remedial services required. The DOH may, at any time during the term of agreement, require the contractor to provide an inventory list of such supply of Replacement and Spare Parts.
 - d. Reinstall corrupted software caused by hardware failure.

A designated DOH representative shall always be present during the performance of the above - mentioned maintenance and remedial services to provide assistance especially in compliance with safety regulations. In the event that safety is compromised, the service contractor must terminate the ongoing work and to resume the same only as soon as the danger to one's safety is terminated.

IX. Warranty Service

1. Warranty includes the following but not limited to:
 - a. Locally available technical support for hardware and software components upon receipt of call;
 - b. 24 x 7 Technical support
 - c. Guaranteed availability of service/backup units for WLAN equipment (AP and POE Switch)
2. The contractor shall provide One (1) year warranty on all existing hardware, equipment and other related peripherals.

X. Expected Deliverables (Outputs):

The expected deliverables (outputs) of this project are the following:

1. One (1) year Wireless Subscription and Support License Certificate

2. A fully operational and secured DOH Cloud-Based Centralized Wireless Infrastructure
3. Vulnerability Assessment results/report (in hardcopy and softcopy) based on SCOPE OF WORK under **A. General Requirement, No. 6**;
4. Wireless LAN policy, security, standard and best practices;
5. Comprehensive training modules which shall be submitted and approved by DOH;
6. Manufacturers' or Main Distributor's Comprehensive Training for DOH Administrators in installing, configuring, administration, management, monitoring and troubleshooting for at least five (5) persons of the proposed wireless LAN infrastructure;
7. Draft Maintenance Agreement after the warranty period.

XI. Project Site:

Fifteen (15) Buildings of the DOH located at San Lazaro Compound, Rizal Avenue, Sta. Cruz, 1003, Manila with project management undertaken by:

Knowledge Management and Information Technology Service, Department of Health
2/F Building 9, San Lazaro Compound, Rizal Avenue, Sta. Cruz, 1003, Manila

XII. Implementation Arrangements Including Roles and Responsibilities:

1. All communications and reports must be addressed to:

ENRIQUE A. TAYAG, MD, PHSAE, FPSMID, CESO III

Director IV, Department of Health

Building 9, San Lazaro Compound, Rizal Avenue,

Sta. Cruz, 1003 Manila

Tel No. 86517800 local 1926,1927

Email: ericTayag4health@yahoo.com

ATTENTION:

ENGR. ROBERT S. MANUEL

Chief, Information Technology and Security Division

Knowledge Management and Information Technology Service

Tel No. 6517800 local 1925,1934

Email: rsmanuel@[doh.gov.ph](mailto:rsmanuel@doh.gov.ph)

2. Within the Project duration, the DOH shall:

- a. Provide a technical working committee to supervise and monitor the project to be headed by:

JOEL R. ARIAS

Information Technology Officer

Information Technology and Security Division (ITISD)

Knowledge Management and Information Technology Service (KMITS)

Tel No. 6517800 local 1925,1934
Email: jrarias@[doh.gov.ph](mailto:jrarias@doh.gov.ph) and joelarias@gmail.com

MICHAEL G. OLIVEROS

Information Systems Analyst II
Information Technology and Security Division
Knowledge Management and Information Technology Service
Tel Nos.: 6517800 ext. 1934 and 1925
Email: mgoliveros@[doh.gov.ph](mailto:mgoliveros@doh.gov.ph)/ mgoliveros03@gmail.com

- b. Provide a point person on Administrative matters such as access to site, permits and payment etc.
- c. Provide a day-to-day contact person for the duration of the project, namely:

JOEL R. ARIAS

Information Technology Officer
Information Technology and Security Division (ITISD)
Knowledge Management and Information Technology Service (KMITS)
Tel No. 6517800 local 1925,1934
Email: jrarias@[doh.gov.ph](mailto:jrarias@doh.gov.ph) and joelarias@gmail.com

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- d. Facilitate access to information, documents, facilities and others needed by the service provider (SP) to perform services.
- e. Approve the proposed working schedule of the provider.
- f. Provide temporary ID to all personnel involved.
- g. Grant authorized representative access to premises as well as equipment and all facilities located therein to perform the SP's obligations.
- h. Help secure working permit during scheduled visit.
- i. Pay the SP amount due upon submission and receipt of claim supported with the required documents/reports subject to outputs completeness and acceptance by the DOH through ITISD-KMITS

3. Within the Project duration the winning Service Provider (SP) shall:

- a. Provide list of in-house certified engineers/technical support team with company ID, addresses and contact numbers, involved and other activities related to the project.
- b. Protect privacy of DOH and ensure that all confidential information and data on its ICT infrastructure are kept confidential. A Non-Disclosure Agreement shall be signed by the authorized representative of the supplier firm and duly notarized.
- c. Billing and payment procedures shall be in accordance with the following:

- i. The DOH shall receive regularly based on the agreed terms of payment of the service provider (SP) the billing statement from the SP. The statement shall identify the amount involved and the corresponding reports of all preventative maintenance service completed by equipment number and invoice number and necessary documents of proof of maintenance visits and acceptance of work done or any other relevant documents and other activities indicated in the TOR;
- ii. Payment will only be processed and accepted by the KMITs-DOH as indicated Section VII: Expected Deliverables/Outputs of this TOR

XIII. Qualification of the Supplier:

Bidder must attach to his/her proposal an assurance from his/her principal that the items called for will be supplied in full and on time.

1. Extensive knowledge, background and technical experience in a great number of projects covering on premise Wireless LAN Technologies, Cloud based Wireless LAN Technology, Routers and other network technologies.
2. With similar contract on installation, configuration, integration and commissioning of Wireless LAN Technologies (cloud based and on premise), Routers, Switches and other network technologies for the last 5 years
3. Extensive knowledge, background and technical experience in the installation, configuration, interoperability, security and industry standards of on premise Wireless LAN Technologies, Cloud based Wireless LAN Technology, Routers and other network technologies.
4. Should at least have been engaged for five (5) years in various ICT services such as IT project management, wireless equipment configuration, cloud based solutions and other network equipment.
5. Certification from the manufacturer or main authorized distributor in the Philippines that all proposed items will not reach its END-OF-LIFE (products) and END-OF-SUPPORT (services) in 1-year time from the date of award of contract.

BIDDING REQUIREMENTS

No.	Criteria	Required documents for evaluation	When required In the bidding process/envelop
1.	Responsiveness and Compliance to the TOR in general and Scope of Work in particular	<ul style="list-style-type: none"> Complete Proposal as required in the TOR that complies with DOH requirements. Certification from the manufacturer or main authorized distributor in the Philippines that all proposed items will not reach its END-OF-LIFE (products) and END-OF-SUPPORT (services) in one (1) years' time from the date of award of 	Technical Proposal

		contract.	
	Implementation Management	INCLUDED IN the Technical Support PROPOSAL: 1. Proposed implementation, organization Structure and escalation procedure	Technical Proposal
		2. Help Desk Management Proposal & escalation procedures	Post qualification
		3. Project standards and quality assurance program	Post qualification
		4. Proposed Implementation Schedules	Technical Proposal
	Warranty Services	1. Warranty Proposal	Post qualification
		2. Service Level Agreement	Post qualification
2.	Firm's Technology Solution and Related Expertise		
	Related experience	1. Company Profile 2. SEC Registration 3. Statement of similar on-going and completed contracts for the last 2 years	1. Post qualification 2. Technical Proposal 3. Technical Proposal
	Partner of for at least two (2) years in the Philippines.	Certification from the proposed product that the PB is partner for at least two years.	Post qualification
	Manufacturer technical support engineers, who are regular and locally based employees.	Certification that company have at manufacturer-trained technical support engineers/technical staff, who are regular and locally based	Post-qualification
	PB should have a 24x7 (including holidays) helpdesk system that accept cases and monitors the progress of each open case incident. Physical inspection and testing will done as part of post qualification	a. Description of existing Help Desk system b. Certification of the existence of a 24 x 7 (including holidays) helpdesk system that accept cases and monitors the progress of each open case incident.	Post qualification
3.	Bidder Professional Experience: Engaged for at least three (3) years in various ICT services such as IT project management, security implementation and devices, computer networking, operation and management.	Statement of on-going and completed Contracts for the last 3 Years similar to this project Company profile that must show evidence that the firm is in IT solution provider sector and must have experience in installation, configuration, integration and commissioning of Wireless Network, equipment and peripherals	Technical Proposal Post Qualification
4.	Experience of Personnel to be Assigned to the project	Signed and verified CVs and photocopy of PRC ID and product	Post qualification

		certification if any	
		Certification of availability of 2 or 3 Full Time Employees (FTE) on with expertise on the following: Wireless Network and Security design, installation, configuration, integration and commissioning of Wireless Network.	Post qualification

Signature over Printed Name
[date of signing]

In the capacity of:

Duly authorized to sign bid for and on behalf of:

[title or other appropriate designation]

[Name of Company]

[Complete office address]

[Contact No.]

[Fax No.]

[Email Address]

Technical Specifications

<p>Republic of the Philippines Department of Health</p> <p>TECHNICAL SPECIFICATIONS</p>			
Lot No. 1	Service Provider for the Renewal of Existing Centralized Wireless LAN License Subscription for DOH Central Office	Qty / Unit	1 lot
ABC: PhP3,000,000.00			
PURCHASER'S SPECIFICATION		STATEMENT OF COMPLIANCE	
<p>I. Detailed Technical Specifications:</p> <p>A. General Requirement</p> <ol style="list-style-type: none"> 1. Renewal of existing Meraki Cloud Based Centralized Wireless LAN License (78 licenses) for DOH Central Office for one (1) year, including existing Access Points & POE Switches. 2. Re-Assess the existing DOH Wired LAN (10 Gig) and re-survey of DOH campus wide area to determine if additional WAPs are needed at optimal locations to minimize channel interference while maximizing the range. 3. Restructuring of the DOH Centralized Design that will cater DATA and VOICE that will seamlessly integrate with DOH existing wired network. The design and methodologies will include but not limited to the following; <ol style="list-style-type: none"> a. Radio Frequency (RF) Design b. Robust security to prevent all possible WLAN threats <ol style="list-style-type: none"> i. Authentication ii. Authorization iii. Encryption iv. RF security c. Scalability and Extensibility (for future expansion requirements) d. Power requirements and backup e. Fast, Secure Roaming f. Min/Max users supported and Number of sites supported 			

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Department of Health

TECHNICAL SPECIFICATIONS

Lot No. 1	Service Provider for the Renewal of Existing Centralized Wireless LAN License Subscription for DOH Central Office	Qty / Unit	1 lot
ABC: PhP3,000,000.00			
PURCHASER'S SPECIFICATION		STATEMENT OF COMPLIANCE	
<ul style="list-style-type: none"> g. Load Balancing h. Management and Monitoring i. Standards conformance/requirements j. Wireless intrusion detection and prevention system (WIDS/WIPS) k. Identity-Based Firewall and Application Visibility & Control l. Other quality of service requirement. <p>4. Conduct RF spectrum analysis to provide a the most complete view of the wireless environment with the ability to detect interferences, vulnerabilities, attacks and devices that cause havoc on all channels and network's security or performance.</p> <p>5. Re-access DOH existing Wired Network (10 Gig) to the and WLAN infrastructure;</p> <p>6. Conduct vulnerability assessment on all WLAN equipment, devices and software to verify that all WLAN equipment, devices and software are not leaking any information about DOH enterprise private network, and to ensure that all the equipment will not be used by hackers and malicious externa and /internal users. The vulnerability assessment will also determine;</p> <ul style="list-style-type: none"> a. how to prevent external hackers from getting access to DOH enterprise network, b. how to allow only authorized users into the network, c. how to prevent those inside the network from executing deliberate or inadvertent attacks d. how to monitor the network to 			

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TECHNICAL SPECIFICATIONS

Lot No. 1	Service Provider for the Renewal of Existing Centralized Wireless LAN License Subscription for DOH Central Office	Qty / Unit	1 lot
ABC: PhP3,000,000.00			
PURCHASER'S SPECIFICATION		STATEMENT OF COMPLIANCE	
<p>identify rogue WLANs,</p> <p>e. how to detect intruders and impending threats, and enforce WLAN security policy.</p> <p>7. Conduct vulnerability assessment on the following but not limited to;</p> <p>a. RF Design</p> <p>b. Wireless Access Points Distribution</p> <p>c. WLAN software's</p> <p>d. and other devices and software used to make the wireless solution work</p> <p>8. Provide administrative, management and monitoring tools that will monitor inherent wireless network vulnerabilities;</p> <p>9. Submit administrative and system WLAN policy, WLAN security policy that includes strong mechanisms of authentication and encryption to validate user compliance and WLAN best practices</p> <p>10. Prepare hardened system and turnover of administrative rights and all documentation pertaining to current DOH WLAN;</p> <p>11. Conduct a comprehensive Administrators training for at least 5 staff on the operation of the systems and equipment. The training should include but not limited to:</p> <p>a. RF and Wireless LAN Fundamentals</p> <p>b. RF and Wireless LAN Design, Deployment and Administration</p> <p>c. Installation, Configuration,</p>			

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TECHNICAL SPECIFICATIONS

Lot No. 1	Service Provider for the Renewal of Existing Centralized Wireless LAN License Subscription for DOH Central Office	Qty / Unit	1 lot
ABC: PhP3,000,000.00			
PURCHASER'S SPECIFICATION		STATEMENT OF COMPLIANCE	
<p>Operation, Administration and Maintenance of major DOH WLAN equipment</p> <p>d. Installation, Configuration, Operation and Administration of the DOH WLAN Software</p> <p>e. Installation, Configuration, Operation and Administration on Security of the DOH WLAN infrastructure</p> <p>12. Conduct other works and provide materials that may have been omitted here but are necessary to put the system in operation and to complete the works to commission and implement the system within the required period.</p> <p>B. Technical Requirements</p> <p>The contractor may improve or add to the conceptual design, quantity of the component/s and specification(s) given by the DOH to attain functionality, stability, integrity, connectivity, interoperability and security of the proposed solution and to meet the project objectives, concept of operation and industry standards given proper justification and explanation of the necessity of the improvements recommended.</p> <p>Wireless Access Point</p> <p>Re- access optimal location of Wireless Access Points (WAPs) in all buildings and offices to achieve total performance desired throughout</p> <p>Wireless LAN Security</p> <p>WLAN security design and implementation must secure all DOH DATA and Voice that passes thru Radio Frequency.</p>			

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Building 6, San Lazaro Compound, Rizal Avenue, Sta. Cruz, 1003 Manila, • Trunk Line 651-7800 Loc. 1624 to 1627; Fax 740-6830
URL: <http://www.doh.gov.ph>

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PURCHASER’S SPECIFICATION			STATEMENT OF COMPLIANCE	
1*	1 st	Office of Secretary Admin, Malasakit Program Office (Complaint’s Division)		
	2 nd	Office of Secretary Proper		
2*	1 st	Financial Management Service		
	2 nd	Administrative & Finance Management Team (Usec & Asec) Health Facility Infrastructure Development Team, Commission on Audit		
3*	1 st	Bureau of International Health Cooperation, World Health Organization		
	2 nd	Bureau of Local Health System Development, and Health Policy Development & Planning Bureau; Health Policy & Systems Development Team (Usec)		
4*	1 st	Health Facility Development Bureau		
	2 nd	Health Regulation Team (Usec)		
	3 rd	Health Facility Enhancement Program		
5	1 st	Malasakit Program Office		
6*	1 st	Procurement Service (PS)		
	2 nd			
	3 rd			
9*	1 st	Field Implementation & Coordination Team – Hospitals and NCR (Asec) DOH Library & DOH Records and Archives		
	2 nd	Knowledge Management and Information Technology Service,		

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		DOH Data Center, ICT training Center		
12*	1 st	Health Emergency Management Bureau, National TB Program, Philippine National AIDS Council, Field Implementation & Coordination Team – Luzon (Asec), DOH Coop Office		
	2 nd	Logistic Management Division, Procurement and Supply Chain Management Team		
	3 rd	Legal Service, Public Health Sector Team (Asec), Health Regulation Team (Asec)		
12a*	1 st	Personnel Division		
	2 nd & 3 rd	Health Human Resource Development Bureau (HHRDB)		
14a*	1 st	Field Implementation Coordinating Team (Usec)		
	2 nd	Family Health Office		
	3 rd	Infectious Disease Office		
14b	1st	Public Health Sector Team (Usec); Disease Prevention & Control Bureau; Medical Infirmary (MEDI)		
	2 nd	Environmental and Occupational Health Office		
	3rd	Degenerative Disease Office		
15	1 st	Health Facilities and Services Regulatory Bureau		
	2 nd			
17	1 st	DOH Convention Hall		

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	1 st	Internal Audit Service (IAS)		
18	1 st	DOH Canteen		
	2 nd	Health Promotion Bureau		
19*	1 st	Office of Chief of Staff (USec & Asec), Health Policy & Systems Development Team (Asec), General Services Division – AS, Materials Management Division – AS;		
	2 nd	Epidemiology Bureau		
	3 rd			
	4 th	Dangerous Drugs Abuse Prevention Treatment Program		
*Priority Buildings				
2. System coverage <ul style="list-style-type: none">a. No outdoor coverageb. Contained in side buildingc. Contained only at DOH (San Lazaro Compound)d. Wireless signal must not be automatically broadcast over WLAN infrastructure				
3. Users <ul style="list-style-type: none">• 2, 500 personnel & consultants and average guests per day of 500				
4.Coverage radius <ul style="list-style-type: none">• 100’ to 200’ depending on building or as necessary				
5. Connection to DOH network backbone <ul style="list-style-type: none">• All WAP’s connected to DOH core switch				
D. Capacity				

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<p>a. Scalable and Upgradable</p> <p>b. Support secure and fast roaming in different subnets, segments, & VLANS</p> <p>c. Interference free from non-WIFI sources and private or individual WIFI APs if any</p> <p>d. Frequency must not interfere with any hospitals equipment</p> <p>E. Density Requirements</p> <p>a. Use of Multimedia – Bldgs. 1, 9, & 18</p> <p>b. Training requiring internet access – Bldgs. 9 &, 12</p> <p>c. Streaming of data, voice and video-Building 1,9,3,4,15, 18</p> <p>d. With unique wireless address space management</p> <p>e. With extra address capacity using Class A or B IP Address per wireless subnet with short lease time of 15 minutes</p> <p>F. Security</p> <p>1. Isolation by building via subnet and VLAN</p> <p>a. Support separation of DOH enterprise users (wired and wireless) and guest users</p> <p>b. VPN termination within switch</p> <p>2. Centralized authentication system supporting database synchronization and ability to authenticate individual user</p> <p>a. Supports RADIUS, Active Directory and other authentication server.</p> <p>b. Supports wide range and robust authentication mechanism.</p> <p>c. Supports different type of encryptions (data and voice)</p> <p>d. Supports 802.11i, standard</p>			

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<p>specifying increased security mechanisms for wireless networks</p> <p>e. Supports WPA in both enterprise and pre-shared, WEP with static and dynamic keys and other stronger authentication/encryption mechanism</p> <p>3. Wireless Switching or equivalent technology that allows central coordination and APs frequency and power levels control</p> <p>a. WLAN controller is an enterprise-class switch and scalable which will connect, controls, manage and intelligently integrates wireless Access Points (WAPs) and RF Monitors into the wired LAN.</p> <p>b. WLAN controller is capable of monitoring Switch and control the wireless network to reconfigure access point parameters as needed to maintain high service levels.</p> <p>c. High-performance packet processing provides value-added wireless services such as load balancing, rate limiting, self-healing, calibration, authentication, mobility, security, firewalls, encryption, intrusion detection and mitigation, centralized monitoring and configuration</p> <p>G. Deployment</p> <p>1.. Support WLAN industry standards</p> <p>a. Support standard tunneling protocols allowing connection to DOH wired system</p> <p>b. WLAN controller must support 802.11ac</p> <p>c. WAP must support 802.11ac with and must be controllable</p>			

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<ul style="list-style-type: none"> d. WLAN controller and WAPs must support Power-over-Ethernet standard 802.3af e. WLAN controller and WAPs must supports 802.11e and Quality of Service (QoS) f. The WLAN solution must support 802.11i, standard specifying increased security mechanisms for wireless networks g. Both WLAN Controller and WAP must support Traffic Forwarding <p>2. 802.11ac with backward compatibility to n/a/b/g standard with a frequency of 5 GHZ supporting simultaneous 802.11a and 802.11n. 2.4 GHz supporting simultaneous 802.11b, 802.11g and 802.11n</p> <p>3. With visibility monitoring system for system administrator</p> <p>4. Customized password for DOH Guest users</p> <ul style="list-style-type: none"> a. Guest users can use the DOH Free WiFi without any username or password needed (one-time registration only) b. Guest users can only use the DOH Free WiFi for one (1) hour only renewable everyday c. Guest users Access right must be limited (Separate Network and MUST NOT ABLE TO ACCESS the DOH LAN Network) <p>5.Guidelines for employee's access</p> <ul style="list-style-type: none"> a. Written administrative and system WLAN policy b. Written WLAN security policy that includes strong 			

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<p>mechanisms (authentication and encryption) to validate user compliance and WLAN best practices</p> <p>6. Coverage</p> <p>a. Will give all employees, guest users and administrators a single WLAN which they could transmit data and voice without huge operational expense and management complexity.</p> <p>b. Serves as the main backup of DOH wired LAN.</p> <p>c. Also covers all areas in DOH where cabling is impossible to do and where wireless capable desktop and laptop is available.</p> <p>H. Warranty Requirement</p> <p>1. One (1) year warranty is required on all delivered goods and make or workmanship and shall take effect immediately after final acceptance of system by DOH.</p> <p>2.The winning bidder should warrant that should there be announced improvements on the proposed product and/or any of its components, after date of submission of proposals and before date of implementation, such improved product(s) or its components should be delivered to and installed at the DOH by the winning bidder without affecting the submitted bid price proposal.</p> <p>3.If announced improvement is made within six (6) months after installed product has already been accepted for DOH use, the winning bidder must install the product or its components no additional cost to DOH.</p>			

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<p>4. During the warranty period, DOH shall be entitled to all applicable upgrades.</p> <p>5. During the warranty period, the winning supplier must provide maintenance support, consisting of <u>Preventive and Remedial Services</u> on all delivered products and/or its components.</p> <p>Remedial Requirements within One (1) year warranty PERIOD</p> <p>1.All maintenance and technical support must be available locally. The Winning bidder must have experienced and trained technicians or engineers under its direct employment and supervision in rendering the required maintenance</p> <p>2.The winning bidder must provide the following maintenance support consisting of Remedial Maintenance services on all hardware and software components of the proposal onsite;</p> <p>a. Upon receipt of notice, either through phone, electronic communication, or in writing, the service contractor must address the issue through a step -by- step instruction through phone and in writing to the concerned DOH-KMITS. If the problem persists, the service contractor must address the problem onsite.</p> <p>b. Once onsite, the service contractor must repair the malfunctioning equipment, provided equipment has been operated in normal conditions.</p>			

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<p>c. The service contractor must at all times maintain a reasonable supply of replacement and spare parts to effect the remedial services required. The DOH may, at any time during the term of agreement, require the contractor to provide an inventory list of such supply of Replacement and Spare Parts.</p> <p>d. Reinstall corrupted software caused by hardware failure.</p> <p>A designated DOH representative shall always be present during the performance of the above - mentioned maintenance and remedial services to provide assistance especially in compliance with safety regulations. In the event that safety is compromised, the service contractor must terminate the ongoing work and to resume the same only as soon as the danger to one's safety is terminated.</p> <p>I. Warranty Service</p> <p>1. Warranty includes the following but not limited to:</p> <ol style="list-style-type: none"> Locally available technical support for hardware and software components upon receipt of call; 24 x 7 Technical support Guaranteed availability of service/backup units for WLAN equipment (AP and POE Switch) <p>2. The contractor shall provide One (1) year warranty on all the proposed hardware, equipment and other related peripherals.</p>			

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<p>J. Expected Deliverables (Outputs):</p> <p>The expected deliverables (outputs) of this project are the following:</p> <ol style="list-style-type: none"> 1. One (1) year Wireless Subscription and Support License Certificate 2. A fully operational and secured DOH Cloud-Based Centralized Wireless Infrastructure 3. Vulnerability Assessment results/report (in hardcopy and softcopy) based on SCOPE OF WORK under A. General Requirement, No. 6; 4. Wireless LAN policy, security, standard and best practices; 5. Comprehensive training modules which shall be submitted and approved by DOH; 6. Manufacturers' or Main Distributor's Comprehensive Training for DOH Administrators in installing, configuring, administration, management, monitoring and troubleshooting for at least five (5) persons of the proposed wireless LAN infrastructure; 7. Draft Maintenance Agreement after the warranty period. 			
<p>II. Additional Requirements to be attached to Technical Specifications form arranged, numbered and tabbed as enumerated below:</p> <ol style="list-style-type: none"> a) Complete Proposal as required in the TOR that complies with DOH requirements; b) Certification from the manufacturer or main authorized distributor in the Philippines that all proposed items will not reach its END-OF-LIFE (products) and END-OF-SUPPORT (services) in one (1) years' time from the date of award of contract. c) Proposed implementation, organization Structure and escalation procedure; d) Proposed Implementation Schedules; e) Sworn Statement using the prescribed form. 			

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III. Additional Requirement to be submitted by Single/Lowest Calculated Bid during Post-Qualification:

- a) Help Desk Management Proposal & escalation procedures;
- b) Project standards and quality assurance program;
- c) Warranty Proposal;
- d) Service Level Agreement;
- e) Company Profile;
- f) Certification from the proposed product that the PB is partner of a certain company with similar contract of service for at least two years
- g) Certification that company have at manufacturer-trained technical support engineers/technical staff, who are regular and locally based
- h) Description of existing Help Desk system
- i) Certification of the existence of a 24 x 7 (including holidays) helpdesk system that accept cases and monitors the progress of each open case incident
- j) Company profile that must show evidence that the firm is in IT solution provider sector and must have experience in installation, configuration, integration and commissioning of Wireless Network, equipment and peripherals
- k) Signed and verified CVs and photocopy of PRC ID and product certification if any
- l) Certification of availability of 2 or 3 Full Time Employees (FTE) on with expertise on the following: Wireless Network and Security design, installation, configuration, integration and commissioning of Wireless Network

Signature over Printed Name

[date of signing]

In the capacity of:

Duly authorized to sign bid for and on behalf of:

[title or other appropriate designation]

[Name of Company]

[Complete office address]

[Contact No.]

[Fax No.]

[Email Address]