Section VI
Schedule of Requirements

PUBLIC BIDDING FOR THE SUPPLY, DELIVERY, CONFIGURATION, DEPLOYMENT, AND COMMISSIONING OF THE NATIONAL CENTER FOR MENTAL HEALTH (NCMH) STRUCTURE CABLING FOR VARIOUS INFRASTRUCTURE AND REDUNDANT CORE NETWORK ACTIVE COMPONENTS, ACCESS SWITCHES, AND ENTERPRISE WIRELESS ACCESS POINTS CY 2024
IB No. E-015-2024-PB

The delivery schedule expressed as weeks/months stipulates hereafter a delivery date which is the date of delivery to the project site.

Item No.	Description	Qty	Delivery Site			Delivery Period and Terms of Payment
			OFFICE	FACILITY	ADDRESS	
1	**SCOPE OF WORKS** **A. General Works** 1. Delivery, configure, deploy, and commission the procured NCMH core network active components. 2. The bidder must configure the procured network active components based on the configuration provided by the NCMH IHOMP/IT Unit and migrate all the configurations from the existing network components to the newly procured network components. 3. During the deployment and configuration, the supplier must ensure that the activity will only have minimal to	1	IHOMP/IT Unit	Pavilion 2	National Center for Mental Health	a. One-time delivery within **thirty (60) calendar days upon receipt of Notice to Deliver** b. Terms of payment at least 30 days from receipt of Sales invoice

no business disruptions.

4. Configure and update the existing core switch that will be used to have a High-Availability (HA)
5. Deploy, deliver, commission, and configure network active components to the following locations:

Network Compo-nents	Locations
Core switch	IT – Server Room
Distribu-tion Switch	OSM Building
	NCMH Wellnes Bldg
Access Switch	Malasakit
	Philhealth 1
	Philhealth 2
	HIMS – Admitting
	HIMS – OPS
	Billing
	Collecting
	Pharmacy
	OPS 1
	OPS 2

		OPS 3					
		IT Room					
		Pavilion 1 Ward 1					
		Pavilion 1 Ward 2&3					
		Pavilion 1 Ward 4&5					
		Pavilion 1 Ward 6&7					
		Pavilion 1 Ward 8					
		Pavilion 3					
		Pavilion 4					
		PETRO					
		IT Room					
		Pavilion 1 Ward 1					
		Pavilion 1 Ward 2&3					
		Pavilion 1 Ward 4&5					
		Pavilion 1 Ward 6&7					
		Pavilion 1 Ward 8					
		Pavilion 3					
		Pavilion 4					
		PETRO					
		PHU					
		HRMO 1st flr.					

	HRMO 2nd flr. - I
	HRMO 2nd flr. - II
	OSM Bldg
	Laundry
	Wellness 1st flr.
	Research Bldg.
	WCPU
	Multipurpose Bldg 1st floor
	Multipurpose Bldg 2nd floor

6. Deploy, deliver, commission, and configure wireless access points to the following locations:

Location	Distance from the box
Pavilion 1 Ward 4 & 5	50m
Pavilion 1 Ward 6 & 7	50m
Pavilion 1 Ward 8	50m
Pavilion 3 Ward 1	50m
Pavilion 3 Ward 2	50m

	Pavilion 3 Ward 3	50m					
	Pavilion 4 Ward 1	90m					
	Pavilion 4 Ward 2	90m					
	Pavilion 4 Ward 3	90m					
	Pavilion 4 Ward 4	10m					
	Pavilion 8 Ward 1 & 2	60m					
	Pavilion 12 Ward 1	20m					
	Pavilion 12 Ward 2	60m					
	Pavilion 15 Ward 1	20m					
	Digihub Office I	50m					
	Digihub Office II	50m					
	Digihub Office III	50m					
	Petro Conference	50m					
	Petro Office Area I	30m					
	Petro Office Area II	50m					
	PHU Building I	50m					
	PHU Building II	50m					

PHU Building III	50m
HRMO I	50m
HRMO II	50m
HRMO III	50m
HRMO IV	70m
HRMO V	70m
OSM I	40m
OSM II	40m
OSM III	30m
R&D I	40m
R&D II	40m
R&D III	30m
Wellness I	50m
Wellness II	50m
Wellness III	60m
Multipurpose I	50m
Multipurpose II	50m
Multipurpose III	60m

7. Deploy, deliver, commission and configure IP Phones to the following locations

Location	Number of units

PHU	7
WCPU	2
HRMO	12
Wellness Bldg.	7
OSM Bldg.	4
Research Bldg.	4
Laundry Bldg.	2
Multipurpose Building	4

8. Fiber Optic Backbone

Source	**Destination Location**
R&D 2nd Flr. (OSM)	NCMH IT Office
Laundry Bldg.	Pavilion 7
ERCI	R&D 2nd Flr. (OSM)
Multipurpose Bldg 1st flr.	NCMH IT Office
Distance	**Type of fiber**
400m	6-core Single-mode fiber
250m	6-core OM3 Multi-mode fiber
300m	6-core OM3 Multi-mode fiber
150m	6-core OM3

	Multi-mode fiber

9. CAT6E Backbone

Source	**Destination Location**
R&D 2nd Flr. (OSM)	HRMO 2nd Flr.
R&D 2nd Flr. (OSM)	R&D 1st Flr.
HRMO 2nd Flr.	HRMO 1st Flr.
Multipurpose Bldg 2nd flr.	Multipurpose Bldg 1st flr.

Distance	**No. of Runs**
80m	2
80m	2
50m	2
50m	2

10. CAT6E Information Outlets

R&D 2nd Flr. OSM	20	See the attached floor plan
PHU	20	See the attached floor plan

11. The bidder must provide all components, cables, modules, or devices that are necessary for

	the project. The bidder must consult the system administrator for their preferred schedule before doing any major installation and/or fixes. 12. Define and configure administrative and system security policies, practices, and codes 13. Prepare hardened system and turnover of administrative rights to NCMH 14. Test and debug the deployed network active components 15. The bidder must provide detailed technical documentation of the project 16. Any improvement and/or supplemental to the conceptual design, quantity, and/or deemed necessary to attain functionality, integrity, security, and completion of the project must be shouldered by the bidder with no additional cost 17. Other works and 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 18. Bidder must provide manufacturer-certified network professional full course training on the existing network engineering technology					

	i. Curriculum-based and manufacturer training from a certified training center for three (3) NCMH network administrators on the following but not limited to installing, configuring, administration, and management of network active components **TECHNICAL SPECIFICATIONS** The specifications of the proposed network core active components will be the following: **Core Network Switch** **1. Chassis Requirements** i. The switch must have seven (7) total slots with five (5) available for line cards and two (2) for supervisor engine slots. ii. The switch must be able to support redundant supervisor engine slots. iii. Has a maximum of eight (8) power supply bays. iv. It has the capability to support a total of at least two-hundred forty (240) ports. v. It has one (1) fan-tray bays.					

	vi. The switch must provide approximately 4300W POE per slot and must be supporting integrated POE. **2. Supervisor Engine Requirements** i. Must be capable to have virtual stacking on NCMH existing core switch. ii. Must include components for Virtual Stacking; 2 links for 100 Gbps. iii. Must be ready for next-generation technologies that are programmable, have micro-engine capabilities, and template-based and Quality-Of-Service entries. iv. Has Intel 2.4 GHZ x86 processor with a maximum of 960 GB of SATA SSD v. It can support 2 non-blocking 25 Gigabit Ethernet uplinks for the supervisor engine. vi. Has the capability to support 2 non-blocking 40 Gigabit Ethernet uplinks (QSFP) and up to eight (8) 10 Gigabit Ethernet (SFP+) for the supervisor engine. vii. Performance and Scalability: a. Has a centralized wired capacity of up to 9.6 Tbps b. Support at least 240 GBPS per line card slot.					

	c. Can store at least 60,000 MAC addresses. d. Can store at least 250,000 IPV4 and IPV6 routes. e. Has the capability to store 4096 VLANs f. Has the capacity to route up to 1000 SVIs. g. Has a jumbo frame of at least 9200 bytes. h. Can support multicast routes of at least 32,000 on Layer 2 and 3. i. Can have at least 16,000 QOS entries. j. Can have at least 16,000 Security ACL hardware entries. k. At least 16 GB DRAM. l. At least 10 GB Flash Memory. m. At least 420GB SSD capacity. n. At least 3 Bpps forwarding rate for IPV4 and IPV6. o. At least 100MB for packet buffer. p. Has the capability to support high-availability deployments. q. Has the capability to perform different advanced switch capabilities such as BGP, HSRP, IS-IS, BSR, MSDP, IP SLA, and OSPF. r. Must be utilizing existing networking protocols. viii. Security a. Supports encryption for MACsec security that will provide secure link connection. b. Provides protection against man-in-the-					

	middle compromise of software and firmware. ix. Resiliency and high availability a. Has the ability to configure EtherChannel on multiple/different members of the stack to provide high resiliency. b. Supports IEEE 802.1s Multiple Spanning Tree Protocol (MSTP) c. Can be configured using existing network protocols x. Must include perpetual base licenses that can provide the indicated switching features. xi. Must be fully utilizing the existing switching protocols that are configured in NCMH and can be stack configured with the existing core switch. **3. Line Module Requirements** i. Must support gigabit/multigigabit ethernet, SFP, and SFP+ ii. Must have ports for SFP and SFP+ a. Supports up to 24 ports of 10GE SFP+ b. IEEE 802.1AE (MACsec-256) capability in hardware c. Layer 2 to Layer 4 Jumbo Frame support (up to 9216 bytes) d. SFP+ and SFP can be used simultaneously on the same line card without any restrictions iii. Must have 48 ports of					

	Gigabit/Multigigabit Ethernet; a. 24 - 10/100/1000 ports b. 24 - Multigigabit 100/1000 Mbps 2.5/5 Gbps 10GBASE-T ports c. Nonblock of up to 1000 Mbps d. Layer 2 to Layer 4 Jumbo Frame support (up to 9216 bytes) e. Capable of up to 60W on all ports in the line card **Distribution Switch** 1. Hardware Specification i. Must have 24 x 10/100/1000 Ethernet ports POE+ ii. Must have at least 4 SFP-based network modules iii. Must include perpetual licenses that will be used for advanced switching capabilities, network segmentation, and security. 2. Performance and Scalability i. Switching capacity of at least 120 Gbps ii. Forwarding rate of at least 90 Mpps iii. Can support up to 80 Gbps of stacking bandwidth iv. Supports IPV6 routing of at least 1500 v. Supports SVIs of at least 512 vi. Supports MAC Address entries of at least 16,000					

	vii. Supports IPv4 routing entries of at least 3,000 viii. Supports multicast routing scale of at least 1,000 ix. Must have at least 2GB of DRAM x. Must have at least 4GB of Flash xi. Must support at least 4,000 VLAN IDs xii. Must support jumbo frame 9198 bytes xiii. Must be fully utilizing the existing switching protocols that are configured in NCMH. 3. Feature Specification i. Must have Cryptographically signed images provide assurance that the firmware, BIOS, and other software are authentic and unmodified ii. Must have 802.1p Class of Service (CoS) and Differentiated Services Code Point (DSCP) field classification, Shaped Round Robin (SRR) scheduling, Committed Information Rate (CIR), and eight egress queues per port iii. Must support IP unicast routing protocols including static, Routing Information Protocol Version 1, RIPv2, and Open Shortest Path First					

	(OSPF), Routed Access iv. Supports encryption and MACsec of at least 128-bits v. Must be fully utilizing the existing switching protocols that are configured in NCMH. **Access Switch** 1. Hardware Specification i. Must have 24 x 10/100/1000 POE+ Ethernet ports TECHNICAL SPECIFICATIONS The specifications of the proposed network core active components will be the following: Core Network Switch 1. Chassis Requirements i. The switch must have seven (7) total slots with five (5) available for line cards and two (2) for supervisor engine slots. ii. The switch must be able to support redundant supervisor engine slots. iii. Has a maximum of eight (8) power supply bays. iv. It has the capability to support a total of at least two-hundred forty (240) ports. v. It has one (1) fan-tray bays. vi. The switch must provide					

	approximately 4300W POE per slot and must be supporting integrated POE. 2. Supervisor Engine Requirements i. Must be capable to have virtual stacking on NCMH existing core switch. ii. Must include components for Virtual Stacking; 2 links for 100 Gbps. iii. Must be ready for next-generation technologies that are programmable, have micro-engine capabilities, and template-based and Quality-Of-Service entries. iv. Has Intel 2.4 GHZ x86 processor with a maximum of 960 GB of SATA SSD v. It can support 2 non-blocking 25 Gigabit Ethernet uplinks for the supervisor engine. vi. Has the capability to support 2 non-blocking 40 Gigabit Ethernet uplinks (QSFP) and up to eight (8) 10 Gigabit Ethernet (SFP+) for the supervisor engine. vii. Performance and Scalability: a. Has a centralized wired capacity of up to 9.6 Tbps					

	b. Support at least 240 GBPS per line card slot. c. Can store at least 60,000 MAC addresses. d. Can store at least 250,000 IPV4 and IPV6 routes. e. Has the capability to store 4096 VLANs f. Has the capacity to route up to 1000 SVIs. g. Has a jumbo frame of at least 9200 bytes. h. Can support multicast routes of at least 32,000 on Layer 2 and 3. i. Can have at least 16,000 QOS entries. j. Can have at least 16,000 Security ACL hardware entries. k. At least 16 GB DRAM. l. At least 10 GB Flash Memory. m. At least 420GB SSD capacity. n. At least 3 Bpps forwarding rate for IPV4 and IPV6. o. At least 100MB for packet buffer. p. Has the capability to support high-availability deployments. q. Has the capability to perform different advanced switch capabilities such as BGP, HSRP, IS-IS, BSR, MSDP, IP SLA, and OSPF. r. Must be utilizing existing networking protocols. viii. Security a. Supports encryption for					

	MACsec security that will provide secure link connection. b. Provides protection against man-in-the-middle compromise of software and firmware. ix. Resiliency and high availability a. Has the ability to configure EtherChannel on multiple/different members of the stack to provide high resiliency. b. Supports IEEE 802.1s Multiple Spanning Tree Protocol (MSTP) c. Can be configured using existing network protocols x. Must include perpetual base licenses that can provide the indicated switching features. xi. Must be fully utilizing the existing switching protocols that are configured in NCMH and can be stack configured with the existing core switch. 3. Line Module Requirements i. Must support gigabit/multigigabit ethernet, SFP, and SFP+ ii. Must have ports for SFP and SFP+ a. Supports up to 24 ports of 10GE SFP+ b. IEEE 802.1AE (MACsec-256) capability in hardware					

	c. Layer 2 to Layer 4 Jumbo Frame support (up to 9216 bytes) d. SFP+ and SFP can be used simultaneously on the same line card without any restrictions iii. Must have 48 ports of Gigabit/Multigigabit Ethernet; a. 24 - 10/100/1000 ports b. 24 - Multigigabit 100/1000 Mbps 2.5/5 Gbps 10GBASE-T ports c. Nonblock of up to 1000 Mbps d. Layer 2 to Layer 4 Jumbo Frame support (up to 9216 bytes) e. Capable of up to 60W on all ports in the line card Distribution Switch 1. Hardware Specification i. Must have 24 x 10/100/1000 Ethernet ports POE+ ii. Must have at least 4 SFP-based network modules iii. Must include perpetual licenses that will be used for advanced switching capabilities, network segmentation, and security. 2. Performance and Scalability i. Switching capacity of at least 120 Gbps ii. Forwarding rate of at least 90 Mpps					

	iii. Can support up to 80 Gbps of stacking bandwidth iv. Supports IPV6 routing of at least 1500 v. Supports SVIs of at least 512 vi. Supports MAC Address entries of at least 16,000 vii. Supports IPv4 routing entries of at least 3,000 viii. Supports multicast routing scale of at least 1,000 ix. Must have at least 2GB of DRAM x. Must have at least 4GB of Flash xi. Must support at least 4,000 VLAN IDs xii. Must support jumbo frame 9198 bytes xiii. Must be fully utilizing the existing switching protocols that are configured in NCMH. 3. Feature Specification i. Must have Cryptographically signed images provide assurance that the firmware, BIOS, and other software are authentic and unmodified ii. Must have 802.1p Class of Service (CoS) and Differentiated Services Code Point (DSCP) field classification, Shaped Round Robin (SRR) scheduling, Committed					

	Information Rate (CIR), and eight egress queues per port iii. Must support IP unicast routing protocols including static, Routing Information Protocol Version 1, RIPv2, and Open Shortest Path First (OSPF), Routed Access iv. Supports encryption and MACsec of at least 128-bits v. Must be fully utilizing the existing switching protocols that are configured in NCMH. Access Switch 1. Hardware Specification i. Must have 24 x 10/100/1000 POE+ Ethernet ports ii. Must have at least 10/100/1000 4 SFP-based network module iii. Must have redundant uplinks iv. Must support POE with a budget of 195W, 30W per port 2. Performance and Scalability i. Must have 256 MB of Flash Memory ii. Must have 512 MB of DRAM iii. Must have a throughput of at least 40 Mpps iv. Must have forwarding performance (64-byte packet size) of at least 28 Gbps					

	v. Must have switching performance of at least 56 Gbps vi. Support up to 1023 active VLANs vii. Must support up to 4096 VLAN 3. Feature Specification i. Device management support with over-the-air access via Bluetooth, Simple Network Management Protocol (SNMP), RJ-45 console access ii. Must have an automatic attempt to reactivate a link that is disabled because of a network error iii. Must be fully utilizing the existing switching protocols that are configured in NCMH. 4. Must support fundamental switch features and must have the following Standards: i. IEEE 802.1D Spanning Tree Protocol ii. IEEE 802.1P CoS Prioritization iii. IEEE 802.1Q VLAN iv. IEEE 802.1S v. IEEE 802.1W vi. IEEE 802.1X vii. IEEE 802.1AB (LLDP) viii. IEEE 802.3ad 5. Must include Maintenance Support					

	8x5xNBD (Next Business Day) 6. Supports modern operating systems for the enterprise with support for model-driven programmability features Wireless Access Point 1. Radio Specifications i. Can support simultaneous device connections; Radio 2x2:2 in both 2.4GHz and 5GHz. ii. 2.4 GHz & 5 GHz dual-band WIDS/WIPS, spectrum analysis, & location analytics radio. iii. 2.4 GHz Bluetooth Low Energy (BLE) radio with Beacon and BLE scanning support. iv. Supports Multi-user, multiple-input, multiple-output technology (MU-MIMO) and utilizes Downlink Orthogonal Frequency Division Multiple Access (DL-OFDMA) multiplexing technique. v. Supports 1024-QAM multiplexing vi. Supports maximal ratio combining (MRC) & beam forming vii. Data rate up to 286 Mbps on 2.4GHz and 1.2 Gbps on 5GHz viii. Supports 802.11a, 802.11b,					

	802.11g, 802.11n, 802.11ac, 802.11ax standards ix. Has antenna gain of less than or equal to 4.5dbi when using 2.4Ghz and less than or equal to 5dbi when using 5Ghz. x. Supports roaming and mobility; PMK, OKC, & 802.11r for fast Layer 2 roaming; Distributed or centralized layer 3 roaming. xi. Supports Bluetooth Low Energy. xii. Supports mesh self-healing 2. Radio Management i. Must be seamlessly integrated with the existing cloud-based wireless controller of NCMH. ii. Has the ability to change an AP's channel automatically within either the 2.4 or 5 GHz bands/channels when interference or contention conditions require. ii. Has the ability to scan other channels to be able to detect congested and free ones. Also, to efficiently detect rogue WAPs. iii. Has the ability to redistribute clients on different bands dynamically to balance associated clients so that APs can provide better Wi-Fi service to clients with weaker signals.					

	iv. Has the ability to spread associated clients within adjacent WAPs. v. Has the ability to divide Wi-Fi signals into many time slots and make each client take turns sending and receiving data from the network to improve efficiency. Also, it must have the ability to prioritize certain connections. vi. Must support L2-L4 ACLs. vii. Must have diagnostic tools for spectrum analysis and network traffic. viii. Analytics: • Embedded location analytics reporting and device tracking • Global L7 traffic analytics reporting per network, per device, & per application 3. Networking i. 1x 10/100/1000 BASE-T Ethernet (RJ45) ii. Supports 802.3af (PoE): 37-57 V iii. Must support rate limiting 4. Security i. Supports WPA, WPA2, WPA3 – Personal and Enterprise ii. Supports AES and SAE encryption. iii. Can be integrated and supports L2 to L7 stateful firewall from cloud-based wireless controller					

	iv. Flexible guest access with device isolation v. Enterprise Mobility Management (EMM) & Mobile Device Management (MDM) integration vi. Supports EAP-TLS, EAP-TTLS, EAP-MSCHAPv2, EAP-SIM vii. Supports VLAN tagging/pooling and tunneling with IPsec VPN viii. Real-time WIDS/WIPS with alerting and automatic rogue WAP containment 5. Wi-Fi Alliance Certifications i. Wi-Fi CERTIFIED 6™ ii. Wi-Fi CERTIFIED™ a, b, g, n, ac iii. WPA™ – Enterprise, Personal iv. WPA2™ – Enterprise, Personal v. WPA3™ – Enterprise, Personal 6. Perpetual license is preferred if applicable but if not, it must include a 5-year license; With a 3-year warranty and advanced replacement included. 7. Must be operational even if the cloud management license is no longer active. 8. Must be managed on the existing cloud administration platform.					

	Fiber Optic Cable Fusion Splicer 1. LCD-display 2. Core or cladding alignment 3. Double heaters, 30 sec. tube-heat time 4. 3 magnification modes max. 360 magnifications 5. 4 display modes, fiber core visible 6. 8 sec. splice time 7. Lithium battery 8. Splicing method: auto, manual 9. Store 8000 groups of splice results 10. USB interface 11. Specifications: i. Applicable fibers: at least Single Mode and Multi-Mode ii. Cladding diameter: 100 to 150mm iii. Coating diameter: 100 to 1000mm iv. Fiber cleaved length: 8-22mm (standard) v. Splicing mode: Auto & Manual vi. Average splice loss: 0.02dB(SM), 0.01dB(MM), 0.04dB(DS), 0.04dB(NZDS) vii. Return loss: > 60dB viii. Environment conditions: -25~+50°C (operation temperature), 0~95%RH (humidity), 0~5000m (altitude)					

	Entry Level IP Phones 1. Must have at least one programmable line key. 2. With a lit and colored display. 3. Must have indicators for the audio path keys, select keys, line keys, and message waiting. 4. Must have a volume control toggle to adjust the volume of the handset, speakerphone, and ringer. 5. Must have a full-duplex speakerphone. 6. Must support H.323 and/or SIP for signaling protocol. 7. Audio codec must support G.711a, G.711μ, G.722, G.729a, 8. Must have two ports 10/100/1000 BASE-T Ethernet connection 9. Must support telephony features such as display of caller ID, auto-answer, call forwarding, call pickup, call waiting, call transfer, call back, call history, call park, call timer, conference call, music on hold, redial, message-waiting indicator, direct transfer, hold/resume, mute, time and date display, speed dial and shared line 10. Must include all licenses needed					

	11. Functions and Features: i. Call Forwarding ii. Last Number Redial iii. Call Waiting iv. Call Pick-Up v. Call-back features vi. Call on hold vii. Caller number displayed on the screen viii. Do Not Disturb ix. Multiple ringtones x. Voice and video conferencing xi. Automatic Call Distribution xii. Dial by Name, Unified Directory Access xiii. Unified Call Detail records xiv. Caller ID feature xv. Transfer xvi. Point-to-point video calling xvii. Desktop sharing via softphones xviii. Capable of handling up to 800 users xix. Personalized Automated Attendant xx. Welcome Greetings xxi. Call History xxii. Voicemail xxiii. Directory xxiv. Audio Conference xxv. Hold xxvi. Paging Integration					

	xxvii. Perpetual licenses if applicable xxviii. Centralized licensing application xxix. Each IP Phone must provide high-quality speakerphone technology including an easy-to-use speaker on / off, and microphone mute. xxx. Must have volume control. xxxi. Can support Dual power: PoE with Standard power adaptor **EXPECTED DELIVERABLES** 1. 1 unit of Core Switch including licenses 2. 2 Units of Distribution Switch including licenses 3. 29 units of Access Switches including licenses 4. 43 units of Wireless Access Points including a 5-year license 5. 18 units of SFP+ transceivers (18 SR) 6. 1 unit of Fiber Optic Cable Fusion Splicer 7. 38 units of IP Phones					

	8. 8 units 2ft by 4ft Data Cabinet 9. Structured and Backbone cabling (refer to scope of work) **IMPLEMENTATIONS ARRANGEMENTS INCLUDING ROLES AND RESPONSIBILITIES** **Within the Project Duration, the NCMH shall:** 1. Provide a technical working committee to supervise and monitor the project. 2. Provide a technical contact person 3. Facilitate access to information, documents, facilities, and other necessary things needed by the contractor to perform services. 4. Assist in coordinating with and issue instructions as may be necessary or appropriate to other government agencies for the prompt and effective implementation of the services. 5. Approve the proposed working schedule of the supplier. 6. Provide temporary ID to all personnel involved in the installation					

	7. Grant authorized representative access to premises as well as equipment and all facilities located therein to perform the supplier's obligations. 8. Make prompt review and revision, if necessary, which shall be not later than ten (10) working days from receipt of the work produced. 9. Pay the contractor upon presentation of requisite documents, the amount due him upon receipt of claims supported with documents subject to acceptance by the NCMH. **Within the Project duration the winning Contractor/Supplier shall:** 1. Perform services professionally based on industry standards and always protect the interest of the government in general and NCMH. 2. Provide list of certified engineers/technical support team with addresses and contact numbers, involved and other activities related to the project. 3. Secure for the NCMH permits,					

	licenses and approvals that are or maybe necessary to perform services. 4. Provide a chief officer or program manager (licensed ECE, COE or EE) who will be directly in charge of managing the project, and day-to-day contact personnel in charge of operations. 5. Complete the delivery, installation and configuration within sixty (60) calendar days from the receipt of the Notice to Proceed. Otherwise, the winning Service Provider/Bidder shall pay the corresponding penalties/liquidated damages in the amount of one tenth of one percent (1/10 of 1%) of the total contract price for every calendar day of delay. 6. Submit a proposed working schedule for approval of NCMH and secure security pass and working permit on their site. 7. Ensure that all personnel involved in the project must be in proper uniform, because it will be their identification from the rest of NCMH's					

	employees and visitors. 8. Protect the privacy of NCMH and ensure that all confidential information and data on its ICT infrastructure are kept confidential. **QUALIFICATION OF THE SUPPLIER** 1. 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 2. Company profile that shows evidence that the firm has: i. Extensive knowledge, background, and technical experience in a great number of projects covering Network installation, configuration cabling, set-up of PABX, IP Telephony, VOIP, WLAN, VLAN Systems, and Maintenance. ii. Extensive knowledge, background, and technical experience in the installation, configuration, interoperability, security, and industry standards on fiber and structured data cabling, wireless LAN, IP telephony, and other factors concerning cabling solutions. iii. Should have been engaged for at least five (5) years in various ICT services such as IT project					

	management, computer networking, voice and data communications infrastructure development, and ICT facilities operation and management. 3. The bidder should have locally-based manufacturer-certified engineers who will do the installation, configuration, and after-sales support of all proposed equipment for cabling, WLAN, and Network Engineering. i. Licensed Electronics and Communications Engineer ii. Manufacturer Certified Network Associate iii. Manufacturer Certified Network Professional 6. Must have a 24x7 helpdesk support system. 7. All proposed items must be certified genuine and brand new. Bidder must be an authorized Philippine Distributor, Dealer or Value-Added Reseller of his/her proposed products and must provide local technical services on these. **ADDITIONAL REQUIREMENTS TO BE SUBMITTED WITH TECHNICAL PROPOSAL** **1.** Plan of Approach and Methodology **2.** Complete technology solution					

	offered including detailed specifications. 3. Corporate Profile which should include major achievements, service Portfolio or services offered by the firm, experience or engagements both local and international. 4. Certification from the manufacturer or main authorized distributor in the Philippines that all proposed items will not reach their END-OF-SALE and END-OF-SUPPORT (services) in 3 years' time from the date of award of the contract. 5. Training proposal shall be curriculum-based Training from a certified training center for three (3) NCMH system administrators on the following but not limited to installing, configuring, administration,					

	management, and policy creation 6. Draft of Service Level Agreement. **WARRANTY PERIOD AND SERVICES** 1. Certification of After Sales Service that components/parts for the active network components shall be available at the authorized Philippine Service Center/s for a period of at least three (3) years after the warranty period i. Period: Three (3) years warranty is required on all delivered goods and shall take effect immediately after final acceptance of the project with NCMH. ii. Period: Three (3) years of workmanship on support and cabling and shall take effect immediately after final acceptance of the project with NCMH. 2. Product upgrades: i. Provision, supply and installation of announced improvements on the proposed product and/or any of its components, after date of submission of proposals and before date of implementation in the project sites without additional costs to NCMH. ii. Provision or entitlement of all applicable upgrades including hardware firmware or software					

	upgrades without additional cost to NCMH. 3. Preventive and Remedial Services: i. Preventive maintenance services are done semi-annually on-site.					
CONFORME:						
(Company Name)						
(Name and Signature of Authorized Representative)						