



TERMS OF REFERENCE (PABX SYSTEM)

I. RATIONALE AND BACKGROUND

The Quezon City Government under the present administration resolve to retain the best service of a Telecommunication Company for the purpose of ensuring effective management and administration of incoming, internal and outgoing calls taking advantage of state of the art technology.

II. PROJECT OBJECTIVE

To address the requirement of District II, III, IV, & V QUEZON CITY ACTION CENTER OFFICES, ROSARIO MACLANG BAUTISTA GENERAL HOSPITAL (RMBGH), QC Hall Main Building, Civic Center A & B, KABAHAGI CENTER, AND HEALTH CENTER MAIN QC HALL. for an inbound customer solution with call transfer to different buildings, departments/offices and outside calls through the use of the latest version of IP PABX system.

III. SCOPE OF WORK

A. Maintenance of the following:

1. SIP TRUNK
2. Terminal blocks
3. System configuration and programming
4. Work station (inbound and outbound operation with UPS and back-up batteries to support full operations of the system)
5. Cabling installation for the activation of trunkline connection
6. Design and application integration

B. Conduct latest training and seminar to supervisor, technicians and telephone operators

C. Provide license permit for all equipment/unit needed in the operation of the system

D. Reprogramming of local lines

IV. SYSTEM FEATURE/EQUIPMENT SPECIFICATIONS AND NUMBER OF UNITS

TECHNICAL:

A. DISTRICT II ACTION OFFICE

• 1 IP PBX

unlimited auto attendant, voice mail to fax, fax to email, remote extension, call recording, call details record ring group, Paging, follow me, freeware softphones.

• 1 pc Executive Gigabit IP phone

• 6 pcs. Lite advance Gigabit IP phone

• 1 installation & testing. Commissioning and cut-over procedure programming of system features. End user training for IP users. Technical Training.

• 1 Active Devices

• 8Ports PoE Switch

• **Cabling Components for VOIP Cabling works**

• 3 Cat6 UTP Cables

- 1 cat6 port loaded Patch panel unloaded
- 19 Cat6 information outlet
- 7 Face plate simplex
- 1 12U wall Mounted network cabinet
- 2 1U Horizontal Cable Manager
- 1 1U 6 Universal Outlet PDU/Stip
- 8 Cat6 UTP Patch Cord 1M
- 1 Engineering and Technical Service cost
- 1 Roughing in materials for VOIP Cabling Works
- 1 Mobilization & Demobilization cost
- 5 years Warranty cost
- **5 SIP trunk Subscription**
- Managed Router
- Vanity Number
- Additional number block

B. DISTRICT III ACTION OFFICE

- 20 pcs. Sip Trunk Subscription
- Service connection Charge, Manage router, Vanity Number and Additional number block.
- Active Components, 66 NODES HORIZONTAL and FIBER OPTIC CABLE
- BACKBONE - STRUCTURED CABLING SYSTEM
- 3 Units 24 Port Switch
- 1 SFP Module
- 1 units 1 KFVA UPS
- 66 Telephone Outlet
- 66 Face plate
- 100 PAIR Telephone Terminal Block
- 66 RJ45 Patch Cord
- 19 Cat6 UTP Cable
- 80 6 Core SM mode Fiber Optic Cable
- 1 6 port FOC Panel
- 2 2m SM FOC Patch cord
- 3 12ru Data Cabinet
- 1 Materials Cost (PVC Pipes)
- 1 FOC Termination
- 1 Mobilization / Demobilization
- 1 Engineering and Admin
- 1 Project Management and Safety
- 1 Documentation
- 1 Warranty
- Manage unified communications
- unlimited auto attendant, voice mail to fax, fax to email, remote extension, call recording, call details record ring group, Paging, follow me, freeware softphones.
- 1 pc Executive Gigabit IP phone
- 65 pcs. lite advance Gigabit IP phone
- 1 pc (2-Port GSM gateway for SIM cards)
- 1 installation & testing. Commissioning and cut-over procedure programming of system features. End user training for IP users. Technical Training.
- Monthly Preventive and Corrective maintenance.
- **1 Active Devices for Wi-fi System**
- 20 EAP610 AX1800 Ceiling Mount Dual-Band Wi-fi 6 Access Point
- 6 TL-SG3428XMP JetStream TM 24-Port Gigabit and 4-Port 10GE SFP+L2+Manage switch

- 3 EAP610-OUTDOOR AX1800 Indoor/Outdoor Wifi 6 access Point
- 1 ER7206 (TL-ER7206) safeStream TM Gigabit Multi-WAN VPN Router
- 7 UPS 1000VA
- 1 Programming and configuration
- **Cabling & roughing inn Materials for Wi-fi & network cabling Works**
- 7 UTP Cat6 Cables
- 1 cat6 Patch panel 24 ports loaded
- 7 information outlet
- 40 RJ45 Connector Cat6
- 7 Face plate simplex
- 7 RJ45 to RJ45UTP Cat6 patch cord 3M
- 27 RJ45 to RJ45UTP Cat6 patch cord 1M
- 1 Roughing inn materials
- 1 Engineering and Technical Services cost
- 1 Mobilization & Demobilization cost
- 1 Warranty

C. DISTRICT IV ACTION OFFICE

- Private Automatic Branch Exchange (PABX) telephone system that is IP (Internet Protocol) capable
- 10 SIP Trunklines
- 1 Operator IP Phone handsets with display and speaker
- 6 IP Phones handsets for local line
- Feature: Unlimited auto attendant, Call Detail Record, Voice mail, Call Recording
- 8 Ports Switch
- UPS
- 3 CAT6 UTP Cable
- 1 CAT6 port loaded patch panel Unloaded
- 19 CAT6 Information Outlet
- 7 Face plate simplex
- 1 12U Wall mounted Network Cabinet
- 2 1U Horizontal Cable Manager
- 1 1u 6 Universal Outlet PDU/Strip
- 8 CAT6 UTP Patch Cord 1M
- **1 ACTIVE devices for wi-fi system**
- 11 EAP660 HD AX3600 Ceiling Mount Dual-Band Wi-Fi 6 Access Point
PORT: 1×2.5Gbps RJ45 Port, SPEED: 1148Mbps at 2.4 GHz + 2402 Mbps at 5 GHz,
FEATURE: High Density connectivity(1000+ Clients), 802.3at POE and 12V DC,
8×Internal Antennas, MU-MIMO, Seamless Roaming, Band Steering,
Beamforming, Load Balance, Airtime Fairness, Centralized
- 1 TL-SG1218MPE 18-Port Gigabit Easy Smart Switch with 16-Port PoE+ PORT:
16× Gigabit PoE+ Ports, 2× Gigabit SFP Slots
- 1 Programming and Configuration
- **Cabling & Roughing inn Materials for Wi-Fi Cabling Works**
- 3 UTP Cat6 Cable
- 4 UTP Cat6 Cables
- 11 information outlet
- 11 Face plate simplex
- 12 RJ45 to RJ45UTP Cat6 patch cord 1M
- 11 RJ45 to RJ45UTP Cat6 patch cord 2M
- 1 Patch panel Cat6 24ports Loaded
- 1 Roughing inn materials
- 1 Engineering and Technical Services cost
- 1 Mobilization & Demobilization cost
- 1 Warranty

D. DISTRICT V ACTION OFFICE

- Private Automatic Branch Exchange (PABX) telephone system that is IP (Internet Protocol) capable
- 10 SIP Trunklines
- 1 Operator IP Phone handsets with display and speaker
- 6 IP Phones handsets for local line
- Feature: Unlimited auto attendant, Call Detail Record, Voice mail, Call Recording
- 8 Ports Switch
- UPS
- 3 CAT6 UTP Cable
- 1 CAT6 port loaded patch panel Unloaded
- 19 CAT6 Information Outlet
- 7 Face plate simplex
- 1 12U Wall mounted Network Cabinet
- 2 1U Horizontal Cable Manager
- 1 1u 6 Universal Outlet PDU/Strip
- 8 CAT6 UTP Patch Cord 1M

E. ROSARIO MACLANG BAUTISTA GENERAL HOSPITAL (RMBGH)

- 10 SIP Trunklines
- Private Automatic Branch Exchange (PABX) telephone system that is IP (Internet Protocol) capable
- IP PABX (IVR Menu System/Auto Attendant, Voice Mail to Fax Email, Remote Extension, Call recording, Call Details Record Ring Groups, Forwarding, Conference Queuing, Barring, DID, Music-on-Hold, Voicemail)
- 1 unit Pro Executive GIGABIT IP phone
- 44 units Lite Advance GIGABIT IP phone
- 2 port GSM Gateway
- Cabling works & roughing inn Materials for VOIP & cabling
- 5 UTP Cat6 Cables
- 5 cat6 Patch Panel 24 ports loaded
- 18 RJ45-RJ45 UTP CAT6 Patch Cord Cables 1M blue
- 18 information outlet
- 18 Face plate
- 5 Horizontal Cable Management Panel
- 2 Velcro
- 1 Roughing inn materials for VOIP Cabling Works
- 1 Mobilization & Demobilization cost
- 1 Miscellaneous cost
- Engineering and technical Services cost
- 1 Warranty

F. QUEZON CITY HALL MAIN BUILDING AND CIVIC CENTER A&B

- COMPLETE IP PABX Unlimited Auto Attendant, Voice Mail to Fax Email, Remote Extension, Call recording, Call Details Record Ring Groups, Paging Follow Me,
- 5 units Executive Gigabit IP Phone
- 85 units Lite Advanced Gigabit IP Phone
- 396 analog phones
- 4 ports GSM automated attendant with voicemail
- 3 pcs. IP Modular 128 FXS Voip Gateways
- 1 pc. IP GW 16 FXS Voip Gateways
- 4 units Desktop with switches and desktop specifications.
- Headsets

- Supervision Switchboard License PRO (Call Center App with perpetual License)
- ISDN PRI-Integrated Services Digital Network Primary Rate Interface provides 3x2048 kbps (e1) bandwidth with 30 channels of 64Kbps each for simultaneous voice and data calls (300 virtual direct lines or DID)
- CoscoCom Contact Center (licenses, training, maintenance, leased line, hardware)

(Health Center Main QC Hall) Additional Equipment

- 3 pcs X3S/3SP LITE Basic Entry – Level
- 3 IP Phone Power dapter
- 18 analog phones
- 1 IP GW 24 FXS Voip Gateway
- installation & testing. Commissioning and cut-over procedure programming of system features. End user training for IP users. Technical Training.
- Monthly Preventive and Corrective maintenance.

G. KABAHAJI CENTER

- 1 IP PBX Unlimited Auto Attendant, Voice Mail to Fax Email, Remote Extension, Call recording, Call Details Record Ring Groups, Paging Follow Me, freeware softphones.
- 1 unit Executive Gigabit IP Phone
- 6 units Lite Advanced Gigabit IP Phone
- Installation & testing. Commissioning and cut-over procedure programming of system features. End user training for IP users. Technical Training.
- Active Devices for VOIP & Wi-fi cabling works & roughing inn Materials for VOIP & Wi-fi cabling
- 1 TP link 24 ports Gigabit managed PoE switch
- 1 UPS 1200VA
- 6 access point
- 3 UTP Cat6 Cables
- 1 cat6 Patch panel 24 ports loaded
- 15 RJ45-RJ45 UTP Cat6 Patch Cord cables 1 M Blue
- 13 information outlet
- 7 Face plate
- 6 RJ45 Connector with Rubber Boot
- 1 PDU 6 CO's
- 3 Horizontal cable management panel
- 1 Roughing inn materials (PVC Pipes, Hangers, Supports, Boxes, Fittings & Consumables
- 1 Engineering and Labor cost
- 1 Mobilization cost
- 5 SIP trunk Subscription
- Managed Router
- Vanity Number
- Additional number block

H. HEALTH CENTER MAIN CITY HALL

- **1 Active Devices** for VOIP & Wi-fi cabling works & roughing inn Materials
- 6 access point
- 1 TL-SG1218MP 16Ports PoE Switch SFP slots
- 1 UPS 100VA
- 2 TL-SM311LM SFP module Multimode
- Cabling works & roughing inn Materials for VOIP & Wi-fi cabling
- 6 UTP Cat6 Cables
- 2 cat6 Patch panel 24 ports loaded
- 30 RJ45-RJ45 UTP Cat6 Patch Cord cables 1 M Blue
- 21 information outlet
- 15 Face plate simplex

- 3 Face plate Duplex
- 1 Network cabinet 18U
- 1 PDU 6CO's
- 5 Horizontal Cable Management panel
- 1 100 pairs 110type terminal Block
- 15 RJ45 Connector Cat6
- 300 Fiber optic cable 4Core OM3 Outdoor
- 2 Optical Distribution panel 12 ports LC
- 8 Fiber optic Pigtail connector LC OM3
- 2 Fiber optic Pigtail connector LC- LC OM3 Duplex
- 8 Fiber optic Protection Sleeve
- 1 Fiber optic Consumable kit
- 300 Telephone Aipheth cable 50 pairs Jellyfield
- 2 patch Panel 24 ports Cat5e
- 1 Roughing in materials (PVC Pipes, Hangers, Supports, Boxes, Fittings & Consumables)
- 1 Engineering and Labor cost
- 1 Mobilization cost
- 1 Warranty

OTHER SERVICES:

Training – PABX user's training and contact center training

V. GENERAL TERMS AND CONDITIONS (Service Provider Responsibilities)

1. Provide services units and spare parts to replace any defective ones immediately after checked as malfunctioning (including telephone apparatus).
2. 24 x 7 emergency maintenance services.
3. There will be regular monthly preventive maintenance visits to be conducted by technical personnel with or without reported complaints by the clients, along with the full warranty of the PABX System.
4. Immediate restoration of the operation if any problem arises on the system, otherwise, rebates shall be imposed by the City Government.
5. Configuration, maintenance and system upgrades. There will be regular monthly preventive maintenance visits to be conducted by technical personnel during the contract with or without reported complaints by the QC Government.
6. Full warranty of the PABX System.
7. Supply and delivery of the services must be 30 days upon receipt of Notice to Proceed or releasing of the Purchase Order/Resolution.
8. Barr all dialing access to IDD/NDD in the trunkline services.

VI. EFFECTIVITY AND DURATION OF CONTRACT:

Contract term is for nine (9) months.

In case of Pre-termination, customer shall pay the total remaining balance of the unpaid portion of the period (i.e. computed as months left x monthly fee).

VII. BUDGET AND BASIS OF PAYMENT:

The allotted budget for the said program for a monthly subscription of PABX system for **District II, III, IV, & V QUEZON CITY ACTION CENTER OFFICES, ROSARIO MACLANG BAUTISTA GENERAL HOSPITAL (RMBGH), QC Hall Main Building, Civic Center A & B KABAHAGI CENTER, AND HEALTH CENTER MAIN QC HALL** and payment for SIP TRUNK services and PABX is Fourteen Million One Hundred Sixty Thousand Seven Hundred twenty two and four centavos only (Php 14,160,722.04) for (9) nine months.

VIII. TERMS OF PAYMENT:

The City Government shall pay the service provider upon submission of monthly billing documents.

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