

REPUBLIC OF THE PHILIPPINES QUEZON CITY GOVERNMENT BIDS AND AWARDS COMMITTEE – GOODS AND SERVICES



PHILIPPINE BIDDING DOCUMENTS

(As Harmonized with Development Partners)

SUPPLY, DELIVERY, INSTALLATION, TESTING, AND COMMISSIONING OF RADIO COMMUNICATION FOR QUEZON CITY LOCAL GOVERNMENT UNIT

PROJECT NO. OCM(QCDRRMO)-22-CE1-943

Government of the Republic of the Philippines

Sixth Edition July 2020

Preface

These Philippine Bidding Documents (PBDs) for the procurement of Goods through Competitive Bidding have been prepared by the Government of the Philippines for use by any branch, constitutional commission or office, agency, department, bureau, office, or instrumentality of the Government of the Philippines, National Government Agencies, including Government-Owned and/or Controlled Corporations, Government Financing Institutions, State Universities and Colleges, and Local Government Unit. The procedures and practices presented in this document have been developed through broad experience, and are for mandatory use in projects that are financed in whole or in part by the Government of the Philippines or any foreign government/foreign or international financing institution in accordance with the provisions of the 2016 revised Implementing Rules and Regulations of Republic Act No. 9184.

The Bidding Documents shall clearly and adequately define, among others: (i) the objectives, scope, and expected outputs and/or results of the proposed contract or Framework Agreement, as the case may be; (ii) the eligibility requirements of Bidders; (iii) the expected contract or Framework Agreement duration, the estimated quantity in the case of procurement of goods, delivery schedule and/or time frame; and (iv) the obligations, duties, and/or functions of the winning bidder.

Care should be taken to check the relevance of the provisions of the PBDs against the requirements of the specific Goods to be procured. If duplication of a subject is inevitable in other sections of the document prepared by the Procuring Entity, care must be exercised to avoid contradictions between clauses dealing with the same matter.

Moreover, each section is prepared with notes intended only as information for the Procuring Entity or the person drafting the Bidding Documents. They shall not be included in the final documents. The following general directions should be observed when using the documents:

- a. All the documents listed in the Table of Contents are normally required for the procurement of Goods. However, they should be adapted as necessary to the circumstances of the particular Procurement Project.
- b. Specific details, such as the "name of the Procuring Entity" and "address for bid submission," should be furnished in the Instructions to Bidders, Bid Data Sheet, and Special Conditions of Contract. The final documents should contain neither blank spaces nor options.
- c. This Preface and the footnotes or notes in italics included in the Invitation to Bid, Bid Data Sheet, General Conditions of Contract, Special Conditions of Contract, Schedule of Requirements, and Specifications are not part of the text of the final document, although they contain instructions that the Procuring Entity should strictly follow.
- d. The cover should be modified as required to identify the Bidding Documents as to the Procurement Project, Project Identification Number, and Procuring Entity, in addition to the date of issue.

- e. Modifications for specific Procurement Project details should be provided in the Special Conditions of Contract as amendments to the Conditions of Contract. For easy completion, whenever reference has to be made to specific clauses in the Bid Data Sheet or Special Conditions of Contract, these terms shall be printed in bold typeface on Sections I (Instructions to Bidders) and III (General Conditions of Contract), respectively.
- f. For guidelines on the use of Bidding Forms and the procurement of Foreign-Assisted Projects, these will be covered by a separate issuance of the Government Procurement Policy Board.

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Glossary of Acronyms, Terms, and Abbreviations

ABC – Approved Budget for the Contract.

BAC – Bids and Awards Committee.

Bid – A signed offer or proposal to undertake a contract submitted by a bidder in response to and in consonance with the requirements of the bidding documents. Also referred to as *Proposal* and *Tender*. (2016 revised IRR, Section 5[c])

Bidder – Refers to a contractor, manufacturer, supplier, distributor and/or consultant who submits a bid in response to the requirements of the Bidding Documents. (2016 revised IRR, Section 5[d])

Bidding Documents – The documents issued by the Procuring Entity as the bases for bids, furnishing all information necessary for a prospective bidder to prepare a bid for the Goods, Infrastructure Projects, and/or Consulting Services required by the Procuring Entity. (2016 revised IRR, Section 5[e])

BIR – Bureau of Internal Revenue.

BSP – Bangko Sentral ng Pilipinas.

Consulting Services – Refer to services for Infrastructure Projects and other types of projects or activities of the GOP requiring adequate external technical and professional expertise that are beyond the capability and/or capacity of the GOP to undertake such as, but not limited to: (i) advisory and review services; (ii) pre-investment or feasibility studies; (iii) design; (iv) construction supervision; (v) management and related services; and (vi) other technical services or special studies. (2016 revised IRR, Section 5[i])

CDA - Cooperative Development Authority.

Contract – Refers to the agreement entered into between the Procuring Entity and the Supplier or Manufacturer or Distributor or Service Provider for procurement of Goods and Services; Contractor for Procurement of Infrastructure Projects; or Consultant or Consulting Firm for Procurement of Consulting Services; as the case may be, as recorded in the Contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.

CIF – Cost Insurance and Freight.

CIP – Carriage and Insurance Paid.

CPI – Consumer Price Index.

DDP – Refers to the quoted price of the Goods, which means "delivered duty paid."

DTI – Department of Trade and Industry.

EXW – Ex works.

FCA – "Free Carrier" shipping point.

FOB – "Free on Board" shipping point.

Foreign-funded Procurement or Foreign-Assisted Project— Refers to procurement whose funding source is from a foreign government, foreign or international financing institution as specified in the Treaty or International or Executive Agreement. (2016 revised IRR, Section 5[b]).

Framework Agreement – Refers to a written agreement between a procuring entity and a supplier or service provider that identifies the terms and conditions, under which specific purchases, otherwise known as "Call-Offs," are made for the duration of the agreement. It is in the nature of an option contract between the procuring entity and the bidder(s) granting the procuring entity the option to either place an order for any of the goods or services identified in the Framework Agreement List or not buy at all, within a minimum period of one (1) year to a maximum period of three (3) years. (GPPB Resolution No. 27-2019)

GFI – Government Financial Institution.

GOCC – Government-owned and/or –controlled corporation.

Goods – Refer to all items, supplies, materials and general support services, except Consulting Services and Infrastructure Projects, which may be needed in the transaction of public businesses or in the pursuit of any government undertaking, project or activity, whether in the nature of equipment, furniture, stationery, materials for construction, or personal property of any kind, including non-personal or contractual services such as the repair and maintenance of equipment and furniture, as well as trucking, hauling, janitorial, security, and related or analogous services, as well as procurement of materials and supplies provided by the Procuring Entity for such services. The term "related" or "analogous services" shall include, but is not limited to, lease or purchase of office space, media advertisements, health maintenance services, and other services essential to the operation of the Procuring Entity. (2016 revised IRR, Section 5[r])

GOP – Government of the Philippines.

GPPB – Government Procurement Policy Board.

INCOTERMS – International Commercial Terms.

Infrastructure Projects – Include the construction, improvement, rehabilitation, demolition, repair, restoration or maintenance of roads and bridges, railways, airports, seaports, communication facilities, civil works components of information technology projects, irrigation, flood control and drainage, water supply, sanitation, sewerage and solid waste management systems, shore protection, energy/power and electrification facilities, national buildings, school buildings, hospital buildings, and other related construction projects of the government. Also referred to as *civil works or works*. (2016 revised IRR, Section 5[u])

LGUs - Local Government Units.

NFCC - Net Financial Contracting Capacity.

NGA – National Government Agency.

PhilGEPS - Philippine Government Electronic Procurement System.

Procurement Project – refers to a specific or identified procurement covering goods, infrastructure project or consulting services. A Procurement Project shall be described, detailed, and scheduled in the Project Procurement Management Plan prepared by the agency

which shall be consolidated in the procuring entity's Annual Procurement Plan. (GPPB Circular No. 06-2019 dated 17 July 2019)

PSA – Philippine Statistics Authority.

SEC – Securities and Exchange Commission.

SLCC – Single Largest Completed Contract.

Supplier – refers to a citizen, or any corporate body or commercial company duly organized and registered under the laws where it is established, habitually established in business and engaged in the manufacture or sale of the merchandise or performance of the general services covered by his bid. (Item 3.8 of GPPB Resolution No. 13-2019, dated 23 May 2019). Supplier as used in these Bidding Documents may likewise refer to a distributor, manufacturer, contractor, or consultant.

UN – United Nations.

Section I. Invitation to Bid

Notes on the Invitation to Bid

The Invitation to Bid (IB) provides information that enables potential Bidders to decide whether to participate in the procurement at hand. The IB shall be posted in accordance with Section 21.2 of the 2016 revised IRR of RA No. 9184.

Apart from the essential items listed in the Bidding Documents, the IB should also indicate the following:

- a. The date of availability of the Bidding Documents, which shall be from the time the IB is first advertised/posted until the deadline for the submission and receipt of bids;
- b. The place where the Bidding Documents may be acquired or the website where it may be downloaded;
- c. The deadline for the submission and receipt of bids; and
- d. Any important bid evaluation criteria (*e.g.*, the application of a margin of preference in bid evaluation).

The IB should be incorporated in the Bidding Documents. The information contained in the IB must conform to the Bidding Documents and in particular to the relevant information in the Bid Data Sheet.



QUEZON CITY GOVERNMENT BAC – GOODS AND SERVICES



INVITATION TO BID

June 20, 2022

	P.R. / PROJECT NO.	OFFICE	PROJECT NAME	AMOUNT	SOURCE OF FUND	DELIVERY PERIOD
1	BCRD-22-OESC-883	BARANGAY AND COMMUNITY RELATIONS DEPARTMENT	VARIOUS INK CARTRIDGES	P 312,500.00	GENERAL FUND	30 CD
2	OCM(PDAO)-22-MSLI- 921	OCM (PERSON WITH DISABILITY AFFAIRS OFFICE)	HEARING AID AND OTHERS	P 503,563.00	GENERAL FUND	30 CD
3	CONSO-22-PS2-826B	VARIOUS OFFICES (NOVALICHES DISTRICT HOSPITAL/ CITY LEGAL DEPARTMENT)	PRINTING OF HOSPITAL PATIENT CARD AND OTHERS	P 418,554.00	GENERAL FUND	30 CD
4	CONSO-22-VRM-876B	OFFICE FOR THE SENIOR CITIZENS AFFAIRS / DEPARTMENT OF PUBLIC ORDER AND SAFETY	RM - MOTOR VEHICLE (PARTS AND LABOR)	P 725,180.00	GENERAL FUND	30 CD
5	CONSO-22-DM-951	OFFICE FOR THE SENIOR CITIZENS AFFAIRS / SOCIAL SERVICES DEVELOPMENT DEPARTMENT	MULTIVITAMINS AND OTHERS	P 1,527,986.00	GENERAL FUND	30 CD
6	SSDD-22-BMOP-860	SOCIAL SERVICES DEVELOPMENT DEPARTMENT	VARIOUS BOOKS	P 15,879,500.00	GENERAL FUND	30 CD
7	SSDD-22-PCP1-862	SOCIAL SERVICES DEVELOPMENT DEPARTMENT	HYGIENE KIT	P 9,165,647.40	GENERAL FUND	30 CD
8	SSDD-22-EMS-859	SOCIAL SERVICES DEVELOPMENT DEPARTMENT	VARIOUS SCHOOL SUPPLIES	P 6,321,262.50	GENERAL FUND	30 CD
9	SSDD-22-OE-663	SOCIAL SERVICES DEVELOPMENT DEPARTMENT	DIGITAL COPIER AND OTHERS	P 943,000.00	GENERAL FUND	30 CD
10	SSDD-22-MSLI-641	SOCIAL SERVICES DEVELOPMENT DEPARTMENT	HYGIENE KIT AND OTHERS	P 1,359,760.00	GENERAL FUND	15 CD
11	ASC-22-JS2-720	AMORANTO SPORTS COMPLEX	VARIOUS JANITORIAL SUPPLIES (TRASH CAN AND OTHERS)	P 568,660.00	GENERAL FUND	30 CD
12	OCM(QCDRRMO)-22- CE1-943	OCM (QUEZON CITY DISASTER RISK REDUCTION AND MANAGEMENT OFFICE)	SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF RADIO COMMUNICATION FOR QUEZON CITY LOCAL GOVERNMENT UNIT	P 28,982,500.00	GENERAL FUND	60 CD
13	OCM(POPS)-22-SOP- 452C	OFFICE OF THE CITY MAYOR	ANTI-RIOT TRANSPARENT SHIELD AND OTHERS	P 10,000,000.00	GENERAL FUND	90 CD

- 1. The *QUEZON CITY LOCAL GOVERNMENT*, through the *General Fund of various years* intends to apply the sums stated above being the ABC to payments under the contract for *the above stated projects* of contract for each lot/item. Bids received in excess of the ABC shall be automatically rejected at bid opening.
- 2. The QUEZON CITY LOCAL GOVERNMENT now invites bids for various Projects. Delivery of the Goods is required as stated above. Bidders should have completed, within the last three (3) years from the date of submission and receipt of bids, a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II. Instructions to Bidders.
- 3. Bidding will be conducted through open competitive bidding procedures using a non-discretionary "pass/fail" criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.
 - a. Bidding is restricted to Filipino citizens/sole proprietorships, partnerships, or organizations with at least sixty percent (60%) interest or outstanding capital stock belonging to citizens of the Philippines, and to citizens or organizations of a country the laws or regulations of which grant similar rights or privileges to Filipino citizens, pursuant to RA No. 5183.

- 4. Prospective Bidders may obtain further information from *QUEZON CITY GOVERNMENT Bids and Awards Committee (BAC) Secretariat* and inspect the Bidding Documents at the address given below during *weekdays from 8:00 a.m.* 5:00 p.m.
- 5. A complete set of Bidding Documents may be acquired by interested Bidders on *Tuesday, June 21*, 2022 from the given address and website(s) below and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB. The Procuring Entity shall allow the bidder to present its proof of payment for the fees in person.

STANDARD RATES:

Approved Budget for the Contract	Maximum Cost of Bidding Documents (in Philippine Peso)
500,000 and below	500.00
More than 500,000 up to 1 Million	1,000.00
More than 1 Million up to 5 Million	5,000.00
More than 5 Million up to 10 Million	10,000.00
More than 10 Million up to 50 Million	25,000.00
More than 50 Million up to 500 Million	50,000.00
More than 500 Million	75,000.00

The following are the requirements for purchase of Bidding Documents;

- 1. PhilGEPS Registration Certificate (Platinum 3 pages)
- 2. Document Request List (DRL)
- 3. Authorization to Purchase Bidding Documents
 - 3.1 Corporate Secretary Certificate for corporation (specific for the project)
 - 3.2 Special Power of Attorney for single proprietorship (specific for the project)
- 4. Notarized Joint Venture Agreement (as applicable)
- 6. The *Quezon City Local Government* will hold a Pre-Bid Conference on 3:30 P.M. of Tuesday, June 28, 2022 at 2nd Floor, Procurement Department-Bidding Room, Finance Building, Quezon City Hall Compound, and/or through video conferencing *via Zoom* which shall be open to prospective bidders.

Topic: BAC-GOODS Pre Bid Conference Meeting

Join Zoom Meeting

https://us02web.zoom.us/j/84835002246?pwd=OVRuVE0weXZMNXYwZG5LaWd1dXk1QT09

Meeting ID: 848 3500 2246

Passcode: 154733

- 7. Bids must be duly received by the BAC Secretariat through manual submission at the 2nd Floor, Procurement Department, Finance Building, Quezon City Hall Compound on or before 11:00 A.M. of **Monday, July 11, 2022.** Late bids shall not be accepted.
- 8. All Bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 14.
- 9. Bid opening shall be on 1:00 P.M. of **Monday**, **July 11**, **2022** at the given address below and/or via Zoom. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.

Topic: BAC-GOODS & SERVICES BIDDING

Join Zoom Meeting

 $\underline{https://us02web.zoom.us/j/85850855933?pwd=R2dZUUp4Z3lyU29iZGV1WmdKRjZCdz09}$

Meeting ID: 858 5085 5933

Passcode: 118682

10. The *Quezon City Local Government* reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Sections 35.6 and 41 of the 2016 revised IRR of RA No. 9184, without thereby incurring any liability to the affected bidder or bidders.

11. For further information, please refer to:

ATTY. DOMINIC B. GARCIA

OIC, Procurement Department 2nd Floor, Procurement Department, Finance Building, Quezon City Hall Compound Elliptical Road, Barangay Central Diliman, Quezon City. Email Add: bacgoods.procurement@quezoncity.gov.ph

Tel. No. (02)8988-4242 loc. 8506/8710 Website: www.quezoncity.gov.ph

12. You may visit the following websites:

For downloading of Bidding Documents: www.quezoncity.gov.ph

By:

MA. MARGARITA T. SANTOS Chairperson, QC-BAC-Goods and Services

Section II. Instructions to Bidders

Notes on the Instructions to Bidders

This Section on the Instruction to Bidders (ITB) provides the information necessary for bidders to prepare responsive bids, in accordance with the requirements of the Procuring Entity. It also provides information on bid submission, eligibility check, opening and evaluation of bids, post-qualification, and on the award of contract.

1. Scope of Bid

The Procuring Entity, **Quezon City Local Government** wishes to receive Bids for the SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF RADIO COMMUNICATION FOR QUEZON CITY LOCAL GOVERNMENT UNIT with identification number PROJECT NO. OCM(QCDRRMO)-22-CE1-943.

[Note: The Project Identification Number is assigned by the Procuring Entity based on its own coding scheme and is not the same as the PhilGEPS reference number, which is generated after the posting of the bid opportunity on the PhilGEPS website.]

The Procurement Project (referred to herein as "Project") is composed of **One** (1) *item*, the details of which are described in Section VII (Technical Specifications).

2. Funding Information

- 2.1. The GOP through the source of funding as indicated below for 2022 in the amount of TWENTY-EIGHT MILLION NINE HUNDRED EIGHTY-TWO THOUSAND FIVE HUNDRED PESOS AND 00/100 ONLY (Php 28,982,500.00).
- 2.2. The source of funding is:
 - a. LGUs, the Annual or Supplemental Budget, as approved by the Sanggunian.

3. Bidding Requirements

The Bidding for the Project shall be governed by all the provisions of RA No. 9184 and its 2016 revised IRR, including its Generic Procurement Manuals and associated policies, rules and regulations as the primary source thereof, while the herein clauses shall serve as the secondary source thereof.

Any amendments made to the IRR and other GPPB issuances shall be applicable only to the ongoing posting, advertisement, or **IB** by the BAC through the issuance of a supplemental or bid bulletin.

The Bidder, by the act of submitting its Bid, shall be deemed to have verified and accepted the general requirements of this Project, including other factors that may affect the cost, duration and execution or implementation of the contract, project, or work and examine all instructions, forms, terms, and project requirements in the Bidding Documents.

4. Corrupt, Fraudulent, Collusive, and Coercive Practices

The Procuring Entity, as well as the Bidders and Suppliers, shall observe the highest standard of ethics during the procurement and execution of the contract. They or through an agent shall not engage in corrupt, fraudulent, collusive, coercive, and obstructive practices defined under Annex "I" of the 2016 revised IRR of RA No. 9184 or other integrity violations in competing for the Project.

5. Eligible Bidders

5.1. Only Bids of Bidders found to be legally, technically, and financially capable will be evaluated.

- 5.2. Foreign ownership exceeding those allowed under the rules may participate pursuant to:
 - i. When a Treaty or International or Executive Agreement as provided in Section 4 of the RA No. 9184 and its 2016 revised IRR allow foreign bidders to participate;
 - ii. Citizens, corporations, or associations of a country, included in the list issued by the GPPB, the laws or regulations of which grant reciprocal rights or privileges to citizens, corporations, or associations of the Philippines;
 - iii. When the Goods sought to be procured are not available from local suppliers; or
 - iv. When there is a need to prevent situations that defeat competition or restrain trade.
- 5.3. Pursuant to Section 23.4.1.3 of the 2016 revised IRR of RA No.9184, 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 CPI, must be at least equivalent to:
 - a. For the procurement of Non-Expendable Supplies and services: The Bidder must have completed a single contract that is similar to this Project, equivalent to at least fifty percent (50%) of the ABC.
- 5.4. The Bidders shall comply with the eligibility criteria under Section 23.4.1 of the 2016 IRR of RA No. 9184.

6. Origin of Goods

There is no restriction on the origin of goods other than those prohibited by a decision of the UN Security Council taken under Chapter VII of the Charter of the UN, subject to Domestic Preference requirements under **ITB** Clause 18.

7. Subcontracts

7.1. The Bidder may subcontract portions of the Project to the extent allowed by the Procuring Entity as stated herein, but in no case more than twenty percent (20%) of the Project.

The Procuring Entity has prescribed that: Subcontracting is not allowed.

8. Pre-Bid Conference

The Procuring Entity will hold a pre-bid conference for this Project on the specified date and time and either at its physical address and/or through videoconferencing as indicated in paragraph 6 of the **IB**.

9. Clarification and Amendment of Bidding Documents

Prospective bidders may request for clarification on and/or interpretation of any part of the Bidding Documents. Such requests must be in writing and received by the Procuring Entity, either at its given address or through electronic mail indicated in the **IB**, at least ten (10) calendar days before the deadline set for the submission and receipt of Bids.

10. Documents comprising the Bid: Eligibility and Technical Components

- 10.1. The first envelope shall contain the eligibility and technical documents of the Bid as specified in **Section VIII** (Checklist of Technical and Financial **Documents**).
- 10.2. The Bidder's SLCC as indicated in **ITB** Clause 5.3 should have been completed within *the last three* (3) *years* prior to the deadline for the submission and receipt of bids.
- 10.3. If the eligibility requirements or statements, the bids, and all other documents for submission to the BAC are in foreign language other than English, it must be accompanied by a translation in English, which shall be authenticated by the appropriate Philippine foreign service establishment, post, or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines. Similar to the required authentication above, for Contracting Parties to the Apostille Convention, only the translated documents shall be authenticated through an Apostille pursuant to GPPB Resolution No. 13-2019 dated 23 May 2019. The English translation shall govern, for purposes of interpretation of the bid.

11. Documents comprising the Bid: Financial Component

- 11.1. The second bid envelope shall contain the financial documents for the Bid as specified in **Section VIII (Checklist of Technical and Financial Documents)**.
- 11.2. If the Bidder claims preference as a Domestic Bidder or Domestic Entity, a certification issued by DTI shall be provided by the Bidder in accordance with Section 43.1.3 of the 2016 revised IRR of RA No. 9184.
- 11.3. Any bid exceeding the ABC indicated in paragraph 1 of the **IB** shall not be accepted.
- 11.4. For Foreign-funded Procurement, a ceiling may be applied to bid prices provided the conditions are met under Section 31.2 of the 2016 revised IRR of RA No. 9184.

12. Bid Prices

- 12.1. Prices indicated on the Price Schedule shall be entered separately in the following manner:
 - a. For Goods offered from within the Procuring Entity's country:
 - i. The price of the Goods quoted EXW (ex-works, ex-factory, exwarehouse, ex-showroom, or off-the-shelf, as applicable);
 - ii. The cost of all customs duties and sales and other taxes already paid or payable;
 - iii. The cost of transportation, insurance, and other costs incidental to delivery of the Goods to their final destination; and
 - iv. The price of other (incidental) services, if any, listed in e.

- b. For Goods offered from abroad:
 - i. Unless otherwise stated in the **BDS**, the price of the Goods shall be quoted delivered duty paid (DDP) with the place of destination in the Philippines as specified in the **BDS**. In quoting the price, the Bidder shall be free to use transportation through carriers registered in any eligible country. Similarly, the Bidder may obtain insurance services from any eligible source country.
 - ii. The price of other (incidental) services, if any, as listed in **Section VII (Technical Specifications).**

13. Bid and Payment Currencies

- 13.1. For Goods that the Bidder will supply from outside the Philippines, the bid prices may be quoted in the local currency or tradeable currency accepted by the BSP at the discretion of the Bidder. However, for purposes of bid evaluation, Bids denominated in foreign currencies, shall be converted to Philippine currency based on the exchange rate as published in the BSP reference rate bulletin on the day of the bid opening.
- 13.2. Payment of the contract price shall be made in:
 - a. Philippine Pesos.

14. Bid Security

- 14.1. The Bidder shall submit a Bid Securing Declaration¹ or any form of Bid Security in the amount indicated in the **BDS**, which shall be not less than the percentage of the ABC in accordance with the schedule in the **BDS**.
- 14.2. The Bid and bid security in no case shall exceed One Hundred Twenty (120) calendar days from the date of opening of bids, unless duly extended by the bidder upon the request of the Head of the Procuring Entity (HoPE) of the Quezon City Local Government. Any Bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

15. Sealing and Marking of Bids

Each Bidder shall submit one copy of the first and second components of its Bid.

The Procuring Entity may request additional hard copies and/or electronic copies of the Bid. However, failure of the Bidders to comply with the said request shall not be a ground for disqualification.

If the Procuring Entity allows the submission of bids through online submission or any other electronic means, the Bidder shall submit an electronic copy of its Bid, which must be digitally signed. An electronic copy that cannot be opened or is corrupted shall be considered non-responsive and, thus, automatically disqualified.

¹ In the case of Framework Agreement, the undertaking shall refer to entering into contract with the Procuring Entity and furnishing of the performance security or the performance securing declaration within ten (10) calendar days from receipt of Notice to Execute Framework Agreement.

16. Deadline for Submission of Bids

16.1. The Bidders shall submit on the specified date and time through manual submission as indicated in paragraph 7 of the **IB**.

17. Opening and Preliminary Examination of Bids

17.1. The BAC shall open the Bids in public at the time, on the date, and at the place specified in paragraph 9 of the **IB**. The Bidders' representatives who are present shall sign a register evidencing their attendance. In case videoconferencing, webcasting or other similar technologies will be used, attendance of participants shall likewise be recorded by the BAC Secretariat.

In case the Bids cannot be opened as scheduled due to justifiable reasons, the rescheduling requirements under Section 29 of the 2016 revised IRR of RA No. 9184 shall prevail.

17.2. The preliminary examination of bids shall be governed by Section 30 of the 2016 revised IRR of RA No. 9184.

18. Domestic Preference

18.1. The Procuring Entity will grant a margin of preference for the purpose of comparison of Bids in accordance with Section 43.1.2 of the 2016 revised IRR of RA No. 9184.

19. Detailed Evaluation and Comparison of Bids

- 19.1. The Procuring BAC shall immediately conduct a detailed evaluation of all Bids rated "passed," using non-discretionary pass/fail criteria. The BAC shall consider the conditions in the evaluation of Bids under Section 32.2 of the 2016 revised IRR of RA No. 9184.
- 19.2. If the Project allows partial bids, bidders may submit a proposal on any of the lots or items, and evaluation will be undertaken on a per lot or item basis, as the case maybe. In this case, the Bid Security as required by **ITB** Clause 15 shall be submitted for each lot or item separately.
- 19.3. The descriptions of the lots or items shall be indicated in **Section VII** (**Technical Specifications**), although the ABCs of these lots or items are indicated in the **BDS** for purposes of the NFCC computation pursuant to Section 23.4.2.6 of the 2016 revised IRR of RA No. 9184. The NFCC must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder.
- 19.4. The Project shall be awarded as follows:

One Project having several items that shall be awarded as one contract.

19.5. Except for bidders submitting a committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation, all Bids must include the NFCC computation pursuant to Section 23.4.1.4 of the 2016 revised IRR of RA No. 9184, which must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder. For bidders submitting the committed Line of Credit, it must be at least equal to ten percent (10%) of the ABCs for all the lots or items participated in by the prospective Bidder.

20. Post-Qualification

20.1. Within a non-extendible period of five (5) calendar days from receipt by the Bidder of the notice from the BAC that it submitted the Lowest Calculated Bid, the Bidder shall submit its latest income and business tax returns filed and paid through the BIR Electronic Filing and Payment System (eFPS) and other appropriate licenses and permits required by law and stated in the **BDS**.

21. Signing of the Contract

21.1. The documents required in Section 37.2 of the 2016 revised IRR of RA No. 9184 shall form part of the Contract. Additional Contract documents are indicated in the **BDS**.

Section III. Bid Data Sheet

Notes on the Bid Data Sheet

The Bid Data Sheet (BDS) consists of provisions that supplement, amend, or specify in detail, information, or requirements included in the ITB found in Section II, which are specific to each procurement.

This Section is intended to assist the Procuring Entity in providing the specific information in relation to corresponding clauses in the ITB and has to be prepared for each specific procurement.

The Procuring Entity should specify in the BDS information and requirements specific to the circumstances of the Procuring Entity, the processing of the procurement, and the bid evaluation criteria that will apply to the Bids. In preparing the BDS, the following aspects should be checked:

- a. Information that specifies and complements provisions of the ITB must be incorporated.
- b. Amendments and/or supplements, if any, to provisions of the ITB as necessitated by the circumstances of the specific procurement, must also be incorporated.

Bid Data Sheet

ITB	
Clause	
5.3	For this purpose, contracts similar to the Project shall be:
	a. A single contract similar to the items to be bid and must be at least fifty percent (50%) of the ABC.
	b. Completed within the last three (3) years prior to the deadline for the submission and receipt of bids substantially in a FORM prescribed by the QC-BAC-GOODS AND SERVICES, must be accompanied by a copy of Certificate of Acceptance by the end-user or Official Receipt (O.R) or Sales Invoice (S.I.) issued for the Contract.
7.1	Subcontracting is not allowed.
12	The price of the Goods shall be quoted DDP within Quezon City or the applicable International Commercial Terms (INCOTERMS) for this Project.
14.1	The bid security shall be in the form of a Bid Securing Declaration, or any of the following forms and amounts:
	a. The amount of not less than <i>Php 579,650.00</i> or equivalent to two percent (2%) of ABC if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit; or
	b. The amount of not less than <i>Php 1,449,125.00</i> or equivalent to five percent (5%) of ABC if bid security is in Surety Bond.
19.3	[In case the Project will be awarded by lot, list the grouping of lots by specifying the group title, items, and the quantity for every identified lot, and the corresponding ABC for each lot.]
	[In case the project will be awarded by item, list each item indicating its quantity and ABC.]
20.2	List of required licenses and permits relevant to the Project and the corresponding law requiring it.
	 Documents: Authority to sell from the Manufacturer/ Distributorship/Dealers for the products being offered. A valid Radio Dealer's Permit from the National Telecommunications Commission (NTC) Certified True Copy of Manufacturing Certificate stating availability of
	 support and spare parts for the next five (5) years. Organization: Certification for Trading and Distribution of TELCO Equipment or its equivalent Certified True Copy of List of Track Record for at least (5) years in the Padio Communication. Puriness, and has supplied and delivered.
	Radio Communication Business and has supplied and delivered communication equipment. • Manpower:
	-List of Manpower • Warranty:
	- All Workmanship, materials, and equipment shall be warranted by the

	supplier for a period of One (1) year after the date of final acceptance. This covers parts and labor during the warranty period at no cost to the end-user.			
	-Affidavit of undertakings for the following:			
	1) That the bidder must have at least three (3) local personnel qualified and trained to install, repair and maintain the Radio Communication Equipment. 2) Training			
	-Comprehensive Technical Training with Certificate on How to Use and Operate Radio Equipment			
	3) The Bidder/Supplier/Manufacturer shall have at least one (1) Service Center in Manila/NCR with duly qualified and certified Technical (s) capable of			
	providing maintenance, repair, testing, and other after-sales services.			
	(Please refer to the attached Terms of Reference)			
21.2	Additional required documents relevant to the Project that are required by existing laws and/or the Procuring Entity.			
	No additional requirement			

Section IV. General Conditions of Contract

Notes on the General Conditions of Contract

The General Conditions of Contract (GCC) in this Section, read in conjunction with the Special Conditions of Contract in Section V and other documents listed therein, should be a complete document expressing all the rights and obligations of the parties.

Matters governing performance of the Supplier, payments under the contract, or matters affecting the risks, rights, and obligations of the parties under the contract are included in the GCC and Special Conditions of Contract.

Any complementary information, which may be needed, shall be introduced only through the Special Conditions of Contract.

1. Scope of Contract

This Contract shall include all such items, although not specifically mentioned, that can be reasonably inferred as being required for its completion as if such items were expressly mentioned herein. All the provisions of RA No. 9184 and its 2016 revised IRR, including the Generic Procurement Manual, and associated issuances, constitute the primary source for the terms and conditions of the Contract, and thus, applicable in contract implementation. Herein clauses shall serve as the secondary source for the terms and conditions of the Contract.

This is without prejudice to Sections 74.1 and 74.2 of the 2016 revised IRR of RA No. 9184 allowing the GPPB to amend the IRR, which shall be applied to all procurement activities, the advertisement, posting, or invitation of which were issued after the effectivity of the said amendment.

Additional requirements for the completion of this Contract shall be provided in the **Special Conditions of Contract (SCC).**

2. Advance Payment and Terms of Payment

- 2.1. Advance payment of the contract amount is provided under Annex "D" of the revised 2016 IRR of RA No. 9184.
- 2.2. The Procuring Entity is allowed to determine the terms of payment on the partial or staggered delivery of the Goods procured, provided such partial payment shall correspond to the value of the goods delivered and accepted in accordance with prevailing accounting and auditing rules and regulations. The terms of payment are indicated in the **SCC**.

3. Performance Security

Within ten (10) calendar days from receipt of the Notice of Award by the Bidder from the Procuring Entity but in no case later than prior to the signing of the Contract by both parties, the successful Bidder shall furnish the performance security in any of the forms prescribed in Section 39 of the 2016 revised IRR of RA No. 9184.

4. Inspection and Tests

The Procuring Entity or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Project specifications at no extra cost to the Procuring Entity in accordance with the Generic Procurement Manual. In addition to tests in the SCC, Section IV (Technical Specifications) shall specify what inspections and/or tests the Procuring Entity requires, and where they are to be conducted. The Procuring Entity shall notify the Supplier in writing, in a timely manner, of the identity of any representatives retained for these purposes.

All reasonable facilities and assistance for the inspection and testing of Goods, including access to drawings and production data, shall be provided by the Supplier to the authorized inspectors at no charge to the Procuring Entity.

5. Warranty

6.1. In order to assure that manufacturing defects shall be corrected by the Supplier, a warranty shall be required from the Supplier as provided under Section 62.1 of the 2016 revised IRR of RA No. 9184.

6.2. The Procuring Entity shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall, repair or replace the defective Goods or parts thereof without cost to the Procuring Entity, pursuant to the Generic Procurement Manual.

6. Liability of the Supplier

The Supplier's liability under this Contract shall be as provided by the laws of the Republic of the Philippines.

If the Supplier is a joint venture, all partners to the joint venture shall be jointly and severally liable to the Procuring Entity.

Section V. Special Conditions of Contract

Notes on the Special Conditions of Contract

Similar to the BDS, the clauses in this Section are intended to assist the Procuring Entity in providing contract-specific information in relation to corresponding clauses in the GCC found in Section IV.

The Special Conditions of Contract (SCC) complement the GCC, specifying contractual requirements linked to the special circumstances of the Procuring Entity, the Procuring Entity's country, the sector, and the Goods purchased. In preparing this Section, the following aspects should be checked:

- a. Information that complements provisions of the GCC must be incorporated.
- b. Amendments and/or supplements to provisions of the GCC as necessitated by the circumstances of the specific purchase, must also be incorporated.

However, no special condition which defeats or negates the general intent and purpose of the provisions of the GCC should be incorporated herein.

Special Conditions of Contract

	Special Conditions of Contract				
GCC Clause					
1	[List here any additional requirements for the completion of this Contract. The following requirements and the corresponding provisions may be deleted, amended, or retained depending on its applicability to this Contract:]				
	Delivery and Documents –				
	For purposes of the Contract, "EXW," "FOB," "FCA," "CIF," "CIP," "DDP" and other trade terms used to describe the obligations of the parties shall have the meanings assigned to them by the current edition of INCOTERMS published by the International Chamber of Commerce, Paris. The Delivery terms of this Contract shall be as follows:				
	[For Goods supplied from abroad, state:] "The delivery terms applicable to the Contract are DDP delivered [indicate place of destination]. In accordance with INCOTERMS."				
	[For Goods supplied from within the Philippines, state:] "The delivery terms applicable to this Contract are delivered [indicate place of destination]. Risk and title will pass from the Supplier to the Procuring Entity upon receipt and final acceptance of the Goods at their final destination."				
	Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in Section VI (Schedule of Requirements).				
	For purposes of this Clause the Procuring Entity's Representative at the Project Site is [indicate name(s)].				
	Incidental Services –				
	The Supplier is required to provide all of the following services, including additional services, if any, specified in Section VI. Schedule of Requirements: Select appropriate requirements and delete the rest.				
	 a. performance or supervision of on-site assembly and/or start-up of the supplied Goods; b. furnishing of tools required for assembly and/or maintenance of the supplied Goods; c. furnishing of a detailed operations and maintenance manual for each 				
	appropriate unit of the supplied Goods; d. performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and				
	 e. training of the Procuring Entity's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied Goods. f. [Specify additional incidental service requirements, as needed.] 				
	The Contract price for the Goods shall include the prices charged by the Supplier for incidental services and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.				

Spare Parts -

The Supplier is required to provide all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:

Select appropriate requirements and delete the rest.

- a. such spare parts as the Procuring Entity may elect to purchase from the Supplier, provided that this election shall not relieve the Supplier of any warranty obligations under this Contract; and
- b. in the event of termination of production of the spare parts:
 - i. advance notification to the Procuring Entity of the pending termination, in sufficient time to permit the Procuring Entity to procure needed requirements; and
 - ii. following such termination, furnishing at no cost to the Procuring Entity, the blueprints, drawings, and specifications of the spare parts, if requested.

The spare parts and other components required are listed in **Section VI** (**Schedule of Requirements**) and the cost thereof are included in the contract price.

The Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spare parts or components for the Goods for a period of [indicate here the time period specified. If not used indicate a time period of three times the warranty period].

Spare parts or components shall be supplied as promptly as possible, but in any case, within [insert appropriate time period] months of placing the order.

Packaging -

The Supplier shall provide such packaging of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in this Contract. The packaging shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packaging case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.

The packaging, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified below, and in any subsequent instructions ordered by the Procuring Entity.

The outer packaging must be clearly marked on at least four (4) sides as follows:

Name of the Procuring Entity
Name of the Supplier

Contract Description Final Destination Gross weight Any special lifting instructions Any special handling instructions Any relevant HAZCHEM classifications A packaging list identifying the contents and quantities of the package is to be placed on an accessible point of the outer packaging if practical. If not practical the packaging list is to be placed inside the outer packaging but outside the secondary packaging. Transportation – Where the Supplier is required under Contract to deliver the Goods CIF, CIP, or DDP, transport of the Goods to the port of destination or such other named place of destination in the Philippines, as shall be specified in this Contract, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price. Where the Supplier is required under this Contract to transport the Goods to a specified place of destination within the Philippines, defined as the Project Site, transport to such place of destination in the Philippines, including insurance and storage, as shall be specified in this Contract, shall be arranged by the Supplier, and related costs shall be included in the contract price. Where the Supplier is required under Contract to deliver the Goods CIF, CIP or DDP, Goods are to be transported on carriers of Philippine registry. In the event that no carrier of Philippine registry is available, Goods may be shipped by a carrier which is not of Philippine registry provided that the Supplier obtains and presents to the Procuring Entity certification to this effect from the nearest Philippine consulate to the port of dispatch. In the event that carriers of Philippine registry are available but their schedule delays the Supplier in its performance of this Contract the period from when the Goods were first ready for shipment and the actual date of shipment the period of delay will be considered force majeure. The Procuring Entity accepts no liability for the damage of Goods during transit other than those prescribed by INCOTERMS for DDP deliveries. In the case of Goods supplied from within the Philippines or supplied by domestic Suppliers risk and title will not be deemed to have passed to the Procuring Entity until their receipt and final acceptance at the final destination. **Intellectual Property Rights –** The Supplier shall indemnify the Procuring Entity against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods or any part thereof. 2.2 [If partial payment is allowed, state] "The terms of payment shall be as follows: 4 inspections and tests that will be conducted **Product** are: Presentation/Demonstration/Site Inspection, if applicable.

Section VI. Schedule of Requirements

PROJECT NAME: SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF RADIO COMMUNICATION FOR QUEZON CITY LOCAL GOVERNMENT UNIT PROJECT NO. OCM(QCDRRMO)-22-CE1-943

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

Item Number	Description	Unit of Issue	Quantity	Delivered, Weeks / Months
Item Number	SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF RADIO COMMUNICATION FOR QUEZON CITY LOCAL GOVERNMENT UNIT (with the following minimum specifications) 3 LOTS OF DIGITAL RADIO REPEATERS WITH CORRESPONDING ACCESSORIES A. Digital Radio Repeaters SPECIFICATIONS Frequency Range: 350-400 MHz Channel Capacity: 64 RF Output Power: 1-50 W Weight: 19 lbs (8.6 kg) Input Voltage: (AC) 100-240 VAC, 47-63 Hz Current (standby): 110 / 240 V 0.18 / 0.25 A Current (transmitting): 110 / 240 V 1.5 / 0.9 A Input Voltage: (DC) 11.0-14.4 Vdc Current (transmitting): 9.5 A Operating Temperature Range: -22 to +140 °F (-30 to +60 °C) Humidity RH of 95%: non-condensing at 50 °C (122 °F) Max Duty Cycle: 100% FCC Description: ABZ99FT3094 ABZ99FT4096 - IC Description: 109AB-99FT3094 109AB-99FT4096 - Digital Vocoder Type: AMBE+2 TM Battery Charger Capacity 12 V: 3 A Connectivity Tx (N female), Rx (BNC female), USB A receptacle, 2x Ethernet Analog Conventional: MPT 1327 RECEIVER Frequency Range: 350-400 MHz Channel Spacing: 12.5 / 20 / 25* kHz Frequency Stability: (-30°C, +60°C, +25°C Ref) +/- 0.5 ppm Sensitivity: 12dB SINAD 0.22 uV Sensitivity: 12dB SINAD 0.22 uV Sensitivity: 5% BER 0.22 uV Selectivity: (TIA603D), 12.5/20/25* kHz 68 / 83 / 83 dB 68 / 80 / 80 dB 68 / 80 / 80 dB Selectivity: (TIA603D), 12.5/20/25* kHz 63 / 70 / 70 dB Intermodulation Rejection (TIA603D/ETSI): 82 / 73 dB	Unit of Issue Lot	Quantity	Delivered, Weeks / Months Within Sixty (60) Calendar Days upon issuance of Notice to Proceed
	Selectivity: (ETSI), 12.5/20/25* kHz 63 / 70 / 70 dB			
	TRANSMITTER			
	Frequency Range: 350-400 MHz RF Output Power: 1-50 W Max Duty Cycle: 100% Channel Spacing: 12.5 / 20 / 25* kHz Frequency Stability (-30°C, +60°C, +25°C Ref): +/- 0.5 ppm Intermodulation Attenuation: 40 dB Adjacent Channel Power (TIA603D): 25*/ 12.5 kHz 62 / 78 / 78 dB			

Adjacent Channel Power (ETSI): $25\,^*\,/$ 12.5 kHz 62 / 78 / 78

dΒ

Conducted Spurious Emissions: -36 dBm $< 1\ GHz,$ -30 dBm

> 1 GHz

Modulation Fidelity (4FSK) FSK Error 5%: FSK Magnitude

1%

Audio Response: TIA603D Audio Distortion: < 1%

Hum and Noise: 12.5/20/25* kHz -45 / -45 / -50 dB Rated System Deviation: 12.5/20/25* kHz ±2.5 / ±4.0 / ±5.0

kHz Antenna

Frequency: 320-380 MHz

Gain: 5.5 dBi
Power: 200 Watts
Impedance: 50 Ohms
VSWR: 1.5:1 (nominal)
Rated wind velocity: 60 m/sec
Mast diameter accepted: 30-62 mm

Length: 1.7 m Weight: 0.9 kg Connector: MJ

B. Two (2) units of Access Point

SPECIFICATIONS

RF Connectors: (2) RP-SMA Weatherproof (CH0, CH1) (1)

SMA Weatherproof (GPS)

GPS Antenna: External, Magnetic Base

Power Supply: 24V, 1A Gigabit PoE Adapter (included) Power Method: Passive Power over Ethernet Pins 1, 2, 4, 5

(+) and Pins 7, 8, 3, 6 (-)

Max Power Consumption: 6-12W1

Supported Voltage Range: +18 to +54VDC2

Mounting: Rocket Mount Compatible GPS Pole Mount

(included)

Operating Temperature: -40 to 50° C (-40 to 131° F)

Weatherproofing: IP673 Certifications: CE, FCC, IC

SYSTEM

Maximum Throughput: 1.34Gbps4,5

Maximum Range: 100 km4
Packets per second: 2+ Million6
Latency: 1.5 ms- 3.5 ms7
Encryption: AES-256

Wireless Modes: PtP Master/Slave

NETWORKING INTERFACE

Data Port: (1) 10/100/1000 Ethernet Port

Management Port: (1) 10/100/1000 Ethernet Port Bluetooth

RADIO

Max. Conducted TX Power: 29 dBm

Frequency Accuracy: <2 ppm

Channel Bandwidth: 10/20/30/40/50/60/80/100 MHz Selectable Programmable Uplink and Downlink Duty

Cycles

OPERATING FREQUENCY (MHz)

Worldwide: 4800-6200*

BLUETOOTH LE MANAGEMENT RADIO (MHz)

Worldwide: 2400-2483.5

SUGGESTED MAX. TX POWER

12x: 12-15 dBm 10x: 19-20 dBm 8x: 21-22 dBm 6x: 23-24 dBm 4x: 29 dBm 2x: 29 dBm 1x: 29 dBm

C. Two (2) units Antenna

SPECIFICATIONS

Antenna

Frequency: 320-380 MHz

Gain: 5.5 dBi
Power: 200 Watts
Impedance: 50 Ohms
VSWR: 1.5:1 (nominal)
Rated wind velocity: 60 m/sec
Mast diameter accepted: 30-62 mm

Length: 1.7 m Weight: 0.9 kg Connector: MJ

D. One (1) 60 FT. Mast

SPECIFICATIONS

GI Pipe: (2") Ø60.20x2.90 (ASTM A53)

Height: 18,000mm Paint: red and white

Steps: 12mmØ round bar steps Guy wire: AWG 0.0508 Turnbuckle: 5/8x12 Base plate: 12mm THK. Plate

E. One (1) lot Coaxial Cable

SPECIFICATIONS

RG Type: 8 CONDUCTOR Size: 10 AWG Stranding: Solid Nom. Diameter: 0.108 in Material: BC- Bare Cooper

INSULATION

Material: PE- Polyethylene (Semi-Solid) Nom. Insulation Diameter: 0.285 in (7.24mm)

OUTER SHIELD

Layer 1: Tape outer shield type tri-laminate

(alum+poly+alum)

Layer 2: Braid outer shield type Tinne Copper (TC)

OUTER JACKET

Material: PVC- Polyvinyl chloride Nom. Diameter: 0.405 in (10.3 mm)

Voltage: 300 V

MECHANICAL CHARACTERISTICS Operating Temperature: -30 $^{\circ}$ C to +75 $^{\circ}$ C

Bend Radius: 4.0 in

Max pull tension: 184 lbs (83.5 kg) STANDARD COMPLIANCE

Environment Suitability: Indoor (not Riser or Plenum),

Indoor

Sustainability: CA Prop 65

F. Ten (10) Connectors

SPECIFICATIONS

Cable RG-/U: 8, 9, 11, 13, 58, 63, 87A, 149, 213, 214, 216,

225

Conn Type: Plug

Outer Cable Attachment: Solder/Crimp/ FCP Inner Cable Attachment: Solder/ Crimp/ Pliers

G. One (1) lot NTC Permits and Licenses

H. One (1) lot Lightning surge and arrester

I. One (1) lot Mobilization Cost

J. One (1) lot Installation Cost for the whole system Includes: Installation, configuration, testing, training, and commissioning

Eight (8) lots of Digital Base Radios with Corresponding Accessories

A. One (1) unit of Digital Base Radios

SPECIFICATIONS Frequency:350-400 MHz

Low Power Output: 1-25 W - 1-25 W - - 1-25 W - 1-25 W

High Power Output: 1-40W Channel Spacing: 12.5, 25 kHz Channel Capacity: 1000

Weight: 1.8 kg

Power Supply (Nominal): 12 V Max Current Drain: Standby 0.8A Max Current Drain: Receive 2A

Max Current Drain Transmit(Low Power): 11A Max Current Drain Transmit (High Power): 14.5A

BLUETOOTH 4.0 STANDARD Frequency Range: 2400 - 2483.5 MHz

Channel

BT ver < 4: 0 ~ 78 BT ver 4: 0 ~ 39

Max power Class: $1 - 100 \text{ mW} (20 \text{ dBm}) \sim 1 \text{m W} (0 \text{ dBm})$

Max Bandwidth BT ver < 4: 1 MHz BT ver 4: 2 MHz Technology: FHSS WIFI STANDARD

Frequency Range: 2400 - 2483.5 MHz

Channel: 1 ~ 13

Max Bandwidth: 20 MHz

Max Power Rated: 14 dBm, max 16 dBm

Technology: b/g/n

TRANSMITTER SPECIFICATIONS

4FSK Digital Modulation 12.5 kHz Data: 7K60F1D and

7K60FXD.

12.5 kHz Voice: 7K60F1E and 7K60FXE,

Combination of 12.5 kHz Voice and Data: 7K60F1W Digital Protocol: ETSI TS 102 361-1, -2, -3, -4 Conducted/Radiated Emissions(TIA603D): -36 dBm <

1GHz, -30 dBm > 1GHz

Adjacent Channel Power 60 dB (12.5 kHz channel): 70 dB

(25 kHz channel)

Frequency Stability: ± 0.5 ppm RECEIVER SPECIFICATIONS

Analogue Sensitivity (12dB SINAD): 0.22 uV typical Digital Sensitivity (5% BER): 0.19 uV typical Intermodulation (TIA603D) VHF: 78dB

UHF1, 350: 75dB

Adjacent Channel Selectivity: (TIA603A)-1T

UHF1, 350: 65 dB (12.5 kHz channel), 75 dB (25 kHz

channel)

Spurious Rejection (TIA603D) UHF1, 350: 75 dB

AUDIO SPECIFICATIONS Digital Vocoder Type AMBE+2TM Audio Response: TIA603D

Rated Audio: 3 W (internal speaker) Audio Distortion at Rated Audio: 3%

Hum and Noise: -40 dB (12.5 kHz channel),-45 dB (25 kHz

Conducted Spurious Emissions(TIA603D): -57 dBm

*BLUETOOTH SPECIFICATIONS

Version 4.0

Range Class 2, 10 m

Supported Profiles Bluetooth Headset Profile (HSP), Serial

Port

Simultaneous Connections 1 x audio accessory and 1 x data

Permanent Discoverable Mode Optional

*GNSS SPECIFICATIONS

Constellation Support: GPS, BEIDOU Time To First Fix: Cold Start < 60 s Time To First Fix: Hot Start < 10 s Horizontal Accuracy: < 5 m *Wi-Fi SPECIFICATIONS

Standards Supported IEEE 802.11b, 802.11g, 802.11n Security Protocol Supported WPA, WPA-2, WEP

Maximum Number of SSIDs 128 (64 for Numeric Models)

ENVIRONMENTAL SPECIFICATIONS Operating Temperature: -30 °C to +60 °C Storage Temperature: -40 °C to +85 °C Electrostatic Discharge: IEC 61000-4-2 Level 4 Dust and Water Intrusion: IEC 60529 - IP54 Packaging Test: MIL-STD 810C, D, E, F, and G

Antenna

Frequency: 320-380 MHz

Gain: 5.5 dBi
Power: 200 Watts
Impedance: 50 Ohms
VSWR: 1.5:1 (nominal)
Rated wind velocity: 60 m/sec
Mast diameter accepted: 30-62 mm

Length: 1.7 m Weight: 0.9 kg Connector: MJ

B. One (1) unit Antenna

SPECIFICATIONS

Antenna

Frequency: 320-380 MHz

Gain: 5.5 dBi
Power: 200 Watts
Impedance: 50 Ohms
VSWR: 1.5:1 (nominal)
Rated wind velocity: 60 m/sec
Mast diameter accepted: 30-62 mm

Length: 1.7 m Weight: 0.9 kg Connector: MJ

C. One (1) 20 FT. Mast

SPECIFICATIONS

GI Pipe: (2") Ø60.20x2.90 (ASTM A53) Height: 6000mm

Height: 6000mm Paint: red and white

Steps: 12mmØ round bar steps Guy wire: AWG 0.0508 Turnbuckle: 5/8x12

Base plate: 12mm THK. Plate

D. One (1) lot Coaxial Cable

SPECIFICATIONS

RG Type: 8 CONDUCTOR Size: 10 AWG Stranding: Solid Nom. Diameter: 0.108 in Material: BC- Bare Cooper

INSULATION

Material: PE- Polyethylene (Semi-Solid) Nom. Insulation Diameter: 0.285 in (7.24mm)

OUTER SHIELD

Layer 1: Tape outer shield type tri-laminate

(alum+poly+alum)

Layer 2: Braid outer shield type Tinne Copper (TC)

OUTER JACKET

Material: PVC- Polyvinyl chloride Nom. Diameter: 0.405 in (10.3 mm)

Voltage: 300 V

MECHANICAL CHARACTERISTICS Operating Temperature: -30 $^{\circ}\text{C}$ to +75 $^{\circ}\text{C}$

Bend Radius: 4.0 in

Max pull tension: 184 lbs (83.5 kg) STANDARD COMPLIANCE

Environment Suitability: Indoor (not Riser or Plenum),

Indoor

Sustainability: CA Prop 65

E. Five (5) Connectors

SPECIFICATIONS

Cable RG-/U: 8, 9, 11, 13, 58, 63, 87A, 149, 213, 214, 216,

225

Conn Type: Plug

Outer Cable Attachment: Solder/Crimp/ FCP Inner Cable Attachment: Solder/ Crimp/ Pliers

F. One (1) Power Supply

SPECIFICATIONS Input Power: 220V Output Power: 13.8V

DC Switch Mode Power Supply with Battery Charger, Wide input voltage range (220V \pm 20% VAC),

Display: Output voltage and output current meter

Protection: output over voltage and over current protection, Battery backup function: 12V 1A Battery charging during normal operation automatically switches to battery on AC power loss, compact

- G. One (1) lot NTC Permits and Licenses
- H. One (1) lot Lightning Surge and arrester
- I. One (1) lot Mobilization Cost
- J. One (1) lot Installation Cost for the whole system Includes: Installation, configuration, testing, training, and commissioning

A. One (1) Unit of Computer Workstation with Dispatch Communication

Features

VOICE DISPATCH

Provide communications between the dispatcher and remote radios. Make broadcast, group, private, remote monitor, or emergency calls quickly using programmable shortcuts.

EVENT LOGGING

Log all system events including voice calls, text messages, and status changes. Customize rules,

filter and group events or generate reports detailing location and radio status.

TELEMETRY*

Monitor and manage remote equipment from the control room.

ALARM AND LONE WORKER

Improve the safety of personnel with automatic alarms and lone worker protection. The alarm can also be sent as an automated message, e-mail or SMS.

FLEET ADMINISTRATION

Efficiently manage fleet operations and remotely control radios. Get live status updates and configure the radio to send online/offline reports to the server.

JOB TICKETING*,

** Create, assign and monitor job tickets through the radio network to deliver routine tasks more efficiently. Radio users can accept or decline the job ticket by simply pushing a button.

TEXT MESSAGES AND EMAIL

When you need silent communications or referenceable instructions, send broadcast, group or private text messages. Radio users can text back to the dispatcher.

DATA WEB CLIENT

Empower remote dispatchers to access the system using a web interface.

VOICE RECORDING

Continuous voice recording of all calls with playback for analysis, reporting or training purposes. Audio files are stored in MP3 format on the Radio Server and Dispatcher.

GPS TRACKING

Follow workers, vehicles and business assets in real-time to ensure maximum safety and productivity. View routes, set up geo-fencing and log radio movements using a configurable set of rules.

Digital Portable Radios

A. 203 units of Digital Portable Radios

SPECIFICATIONS Frequency: 350-400 MHz High Power Output: 4W Low Power Output: 1 Channel Spacing: 12.5, 25 kHz

Weight Radio + Standard 1600 mAh Battery: 315g Digital / Analogue Battery Life2, Standard 1600 mAh

Battery: 15.6 / 12 hrs

Channel Capacity: 1000

Power Supply (Nominal): 7.5 V

TRANSMITTER SPECIFICATIONS

Channel Spacing: 12.5, 25 kHz

4FSK Digital Modulation: 12.5 kHz Data: 7K60F1D and

7K60FXD,

12.5 kHz Voice: 7K60F1E and 7K60FXE,

Combination of 12.5 kHz Voice and Data:7K60F1W Digital Protocol: ETSI TS 102 361-1, -2, -3, -4

Conducted/Radiated Emissions:

(TIA603D) -36 dBm < 1GHz, -30 dBm > 1GHz

Adjacent Channel Power: 60dB (12.5 kHz channel), 70dB

(25 kHz channel)

Frequency Stability: ± 0.5 ppm RECEIVER SPECIFICATIONS

Analogue Sensitivity (12dB SINAD): 0.16 uV

Digital Sensitivity (5% BER): 0.14 uV Intermodulation (TIA603D) :70 dB

Adjacent Channel Selectivity (TIA603A)-1T: 60 dB (12.5

kHz channel), 70 dB (25 kHz channel)

Adjacent Channel Selectivity (TIA603D)-2T & (TIA603C)-

2T: 45 dB (12.5 kHz channel),

70 dB (25 kHz channel)

Spurious Rejection (TIA603D): 70 dB

AUDIO SPECIFICATIONS

Digital Vocoder Type: AMBE+2TM

Audio Response: TIA603D

Rated Audio: 0.5 W

Audio Distortion at Rated Audio: 3%

Hum and Noise: -40 dB (12.5 kHz channel), -45 dB (25*

kHz channel)

Conducted Spurious Emissions (TIA603D): -57 dBm

*BLUETOOTH SPECIFICATIONS

Version 4.0

Range Class 2, 10 m

 $Supported\ Profiles\ Bluetooth\ Headset\ Profile\ (HSP),\ Serial$

Port

Simultaneous Connections 1 x audio accessory and 1 x data

device

Permanent Discoverable Mode Optional

*GNSS SPECIFICATIONS

Constellation Support GPS

Time To First Fix, Cold Start < 60 s

Time To First Fix, Hot Start < 10 s

Horizontal Accuracy < 5 m

*Wi-Fi SPECIFICATIONS

 $Standards\ Supported\ IEEE\ 802.11b,\ 802.11g,\ 802.11n$

Security Protocol Supported WPA, WPA-2, WEP

Maximum Number of SSIDs 128 (64 for LKP and NKP models)

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature: -30 °C to +60 °C

Storage Temperature: -40 °C to +85 °C

Electrostatic Discharge IEC 61000-4-2: Level 4

Dust and Water Intrusion IEC 60529 - IP68 Capable

Packaging Test MIL-STD 810D and E

B. 203 lot Dispatch License of Digital Portable

Radios

E. One (1) lot configuration Cost, testing, training, and commissioning		
C. One (1) lot NTC Permits and LicensesD. One (1) lot Mobilization Cost		
C (1) ATTCD : III		

I hereby certify to comply and deliver all the above requirements.

Jame:	_
egal Capacity:	_
ignature:	
Ouly authorized to sign the Bid for and behalf of:	

 $Schedule\ of\ Requirements\ Page\ 8\ of\ 8$

Section VII. Technical Specifications

Notes for Preparing the Technical Specifications

A set of precise and clear specifications is a prerequisite for Bidders to respond realistically and competitively to the requirements of the Procuring Entity without qualifying their Bids. In the context of Competitive Bidding, the specifications (*e.g.* production/delivery schedule, manpower requirements, and after-sales service/parts, descriptions of the lots or items) must be prepared to permit the widest possible competition and, at the same time, present a clear statement of the required standards of workmanship, materials, and performance of the goods and services to be procured. Only if this is done will the objectives of transparency, equity, efficiency, fairness, and economy in procurement be realized, responsiveness of bids be ensured, and the subsequent task of bid evaluation and post-qualification facilitated. The specifications should require that all items, materials and accessories to be included or incorporated in the goods be new, unused, and of the most recent or current models, and that they include or incorporate all recent improvements in design and materials unless otherwise provided in the Contract.

Samples of specifications from previous similar procurements are useful in this respect. The use of metric units is encouraged. Depending on the complexity of the goods and the repetitiveness of the type of procurement, it may be advantageous to standardize the General Technical Specifications and incorporate them in a separate subsection. The General Technical Specifications should cover all classes of workmanship, materials, and equipment commonly involved in manufacturing similar goods. Deletions or addenda should then adapt the General Technical Specifications to the particular procurement.

Care must be taken in drafting specifications to ensure that they are not restrictive. In the specification of standards for equipment, materials, and workmanship, recognized Philippine and international standards should be used as much as possible. Where other particular standards are used, whether national standards or other standards, the specifications should state that equipment, materials, and workmanship that meet other authoritative standards, and which ensure at least a substantially equal quality than the standards mentioned, will also be acceptable. The following clause may be inserted in the Special Conditions of Contract or the Technical Specifications.

Sample Clause: Equivalency of Standards and Codes

Wherever reference is made in the Technical Specifications to specific standards and codes to be met by the goods and materials to be furnished or tested, the provisions of the latest edition or revision of the relevant standards and codes shall apply, unless otherwise expressly stated in the Contract. Where such standards and codes are national or relate to a particular country or region, other authoritative standards that ensure substantial equivalence to the standards and codes specified will be acceptable.

Reference to brand name and catalogue number should be avoided as far as possible; where unavoidable they should always be followed by the words "or at least equivalent." References to brand names cannot be used when the funding source is the GOP.

Where appropriate, drawings, including site plans as required, may be furnished by the Procuring Entity with the Bidding Documents. Similarly, the Supplier may be requested to provide drawings or samples either with its Bid or for prior review by the Procuring Entity during contract execution.

Bidders are also required, as part of the technical specifications, to complete their statement of compliance demonstrating how the items comply with the specification.

Technical Specifications

PROJECT NAME: SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF RADIO COMMUNICATION FOR QUEZON CITY LOCAL GOVERNMENT UNIT PROJECT NO. OCM(QCDRRMO)-22-CE1-943

Item	Specification	Statement of Compliance
		[Bidders must state here either "Comply" or "Not Comply" against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of "Comply" or "Not Comply" must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer's un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidder's statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the applicable laws and issuances.]
A.1	SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF RADIO COMMUNICATION FOR QUEZON CITY LOCAL GOVERNMENT UNIT (with the following minimum specifications) 3 LOTS OF DIGITAL RADIO REPEATERS WITH CORRESPONDING ACCESSORIES A. Digital Radio Repeaters SPECIFICATIONS Frequency Range: 350-400 MHz Channel Capacity: 64 RF Output Power: 1-50 W Weight: 19 lbs (8.6 kg) Input Voltage: (AC) 100-240 VAC, 47-63 Hz Current (standby): 110 / 240 V 0.18 / 0.25 A Current (transmitting): 110 / 240 V 1.5 / 0.9 A Input Voltage: (DC) 11.0-14.4 Vdc Current (standby): 0.7 A Current (transmitting): 9.5 A Operating Temperature Range: -22 to +140 °F (-30 to +60 °C) Humidity RH of 95%: non-condensing at 50 °C (122 °F) Max Duty Cycle: 100% FCC Description: ABZ99FT3094 ABZ99FT4096 - IC Description: 109AB-99FT3094 109AB-99FT4096 - Digital Vocoder Type: AMBE+2TM Battery Charger Capacity 12 V: 3 A Connectivity Tx (N female), Rx (BNC female), USB A receptacle, 2x Ethernet Analog Conventional: MPT 1327 RECEIVER Frequency Range: 350-400 MHz Channel Spacing: 12.5 / 20 / 25* kHz Frequency Stability: (-30°C, +60°C, +25°C Ref) +/- 0.5 ppm Sensitivity: 12dB SINAD 0.22 uV Sensitivity: 5% BER 0.22 uV Sensitivity: (TIA603D), 12.5/20/25* kHz 55 / 83 / 83 dB 55 / 80 / 80 dB 55 / 80 / 80 dB	

Selectivity: (TIA603), 12.5/20/25* kHz 68 / 83 / 83 dB 68

/ 80 / 80 dB 68 / 80 / 80 dB

Selectivity: (ETSI), 12.5/20/25* kHz 63 / 70 / 70 dB Intermodulation Rejection (TIA603D/ETSI): 82 / 73 dB Spurious Rejection (TIA603D/ETSI): 95 / 90 dB

Audio Distortion: < 1%

Hum and Noise: 12.5/20/25* kHz -45 / -45 / -50 dB

TRANSMITTER

Frequency Range: 350-400 MHz RF Output Power: 1-50 W Max Duty Cycle: 100%

Channel Spacing: 12.5 / 20 / 25* kHz

Frequency Stability (-30°C, +60°C, +25°C Ref): +/- 0.5

ppm

Intermodulation Attenuation: 40 dB

Adjacent Channel Power (TIA603D): 25*/ 12.5 kHz 62 /

78 / 78 dB

Adjacent Channel Power (ETSI): 25* / 12.5 kHz 62 / 78 /

78 dB

Conducted Spurious Emissions: -36 dBm < 1 GHz, -30

dBm > 1 GHz

Modulation Fidelity (4FSK) FSK Error 5%: FSK

Magnitude 1%

Audio Response: TIA603D Audio Distortion: < 1%

Hum and Noise: 12.5/20/25* kHz -45 / -45 / -50 dB Rated System Deviation: 12.5/20/25* kHz ± 2.5 / ± 4.0 /

±5.0 kHz Antenna

Frequency: 320-380 MHz

Gain: 5.5 dBi Power: 200 Watts Impedance: 50 Ohms VSWR: 1.5:1 (nominal) Rated wind velocity: 60 m/sec Mast diameter accepted: 30-62 mm

Length: 1.7 m Weight: 0.9 kg Connector: MJ

Two (2) units of Access Point

SPECIFICATIONS

RF Connectors: (2) RP-SMA Weatherproof (CH0, CH1)

(1) SMA Weatherproof (GPS)

GPS Antenna: External, Magnetic Base

Power Supply: 24V, 1A Gigabit PoE Adapter (included) Power Method: Passive Power over Ethernet Pins 1, 2, 4,

5 (+) and Pins 7, 8, 3, 6 (-) Max Power Consumption: 6-12W1

Supported Voltage Range: +18 to +54VDC2 Mounting: Rocket Mount Compatible GPS Pole Mount

(included)

Operating Temperature: -40 to 50° C (-40 to 131° F)

Weatherproofing: IP673 Certifications: CE, FCC, IC

SYSTEM

Maximum Throughput: 1.34Gbps4,5

Maximum Range: 100 km4 Packets per second: 2+ Million6 Latency: 1.5 ms- 3.5 ms7 Encryption: AES-256

Wireless Modes: PtP Master/Slave

NETWORKING INTERFACE

Data Port: (1) 10/100/1000 Ethernet Port Management Port: (1) 10/100/1000 Ethernet Port

Bluetooth

RADIO

Max. Conducted TX Power: 29 dBm

Frequency Accuracy: <2 ppm

Channel Bandwidth: 10/20/30/40/50/60/80/100 MHz Selectable Programmable Uplink and Downlink Duty

Cycles

OPERATING FREQUENCY (MHz)

Worldwide: 4800-6200*

BLUETOOTH LE MANAGEMENT RADIO (MHz)

Worldwide: 2400-2483.5

SUGGESTED MAX. TX POWER

12x: 12-15 dBm 10x: 19-20 dBm 8x: 21-22 dBm 6x: 23-24 dBm 4x: 29 dBm 2x: 29 dBm 1x: 29 dBm

Two (2) units Antenna

SPECIFICATIONS

Antenna

Frequency: 320-380 MHz

Gain: 5.5 dBi Power: 200 Watts Impedance: 50 Ohms VSWR: 1.5:1 (nominal) Rated wind velocity: 60 m/sec Mast diameter accepted: 30-62 mm

Length: 1.7 m Weight: 0.9 kg Connector: MJ

One (1) 60 FT. Mast D.

SPECIFICATIONS

GI Pipe: (2") Ø60.20x2.90 (ASTM A53)

Height: 18,000mm Paint: red and white

Steps: 12mmØ round bar steps Guy wire: AWG 0.0508 Turnbuckle: 5/8x12

Base plate: 12mm THK. Plate

One (1) lot Coaxial Cable

SPECIFICATIONS

RG Type: 8 CONDUCTOR Size: 10 AWG Stranding: Solid Nom. Diameter: 0.108 in Material: BC- Bare Cooper

INSULATION

Material: PE- Polyethylene (Semi-Solid) Nom. Insulation Diameter: 0.285 in (7.24mm)

OUTER SHIELD

Layer 1: Tape outer shield type tri-laminate

(alum+poly+alum)

Layer 2: Braid outer shield type Tinne Copper (TC)

OUTER JACKET

Material: PVC- Polyvinyl chloride Nom. Diameter: 0.405 in (10.3 mm) Voltage: 300 V

MECHANICAL CHARACTERISTICS Operating Temperature: -30°C to +75 °C

Bend Radius: 4.0 in

Max pull tension: 184 lbs (83.5 kg) STANDARD COMPLIANCE

Environment Suitability: Indoor (not Riser or Plenum),

Indoor

Sustainability: CA Prop 65

Ten (10) Connectors

SPECIFICATIONS

Cable RG-/U: 8, 9, 11, 13, 58, 63, 87A, 149, 213, 214,

216, 225

Conn Type: Plug

Outer Cable Attachment: Solder/Crimp/ FCP

Inner Cable Attachment: Solder/ Crimp/ Pliers

G. One (1) lot NTC Permits and Licenses

H. One (1) lot Lightning surge and arrester

I. One (1) lot Mobilization Cost

One (1) lot Installation Cost for the whole system Includes: Installation, configuration, testing, training, and commissioning

Eight (8) lots of Digital Base Radios with Corresponding

One (1) unit of Digital Base Radios

SPECIFICATIONS

Frequency:350-400 MHz

Low Power Output: 1-25 W - 1-25 W - - 1-25 W - 1-25

High Power Output: 1-40W Channel Spacing: 12.5, 25 kHz Channel Capacity: 1000

Weight: 1.8 kg

Power Supply (Nominal): 12 V Max Current Drain: Standby 0.8A Max Current Drain: Receive 2A

Max Current Drain Transmit(Low Power): 11A Max Current Drain Transmit (High Power): 14.5A

BLUETOOTH 4.0 STANDARD

Frequency Range: 2400 - 2483.5 MHz

Channel

BT ver $< 4: 0 \sim 78$ BT ver 4: 0 ~ 39

Max power Class: 1 - 100 mW (20 dBm) ~ 1m W (0

dBm)

Max Bandwidth BT ver < 4: 1 MHz BT ver 4: 2 MHz Technology: FHSS WIFI STANDARD

Frequency Range: 2400 - 2483.5 MHz

Channel: 1 ~ 13

Max Bandwidth: 20 MHz

Max Power Rated: 14 dBm, max 16 dBm

Technology: b/g/n

TRANSMITTER SPECIFICATIONS

4FSK Digital Modulation 12.5 kHz Data: 7K60F1D and 7K60FXD.

12.5 kHz Voice: 7K60F1E and 7K60FXE,

Combination of 12.5 kHz Voice and Data: 7K60F1W Digital Protocol: ETSI TS 102 361-1, -2, -3, -4 Conducted/Radiated Emissions(TIA603D): -36 dBm < 1GHz, -30 dBm > 1GHz

Adjacent Channel Power 60 dB (12.5 kHz channel): 70

dB (25 kHz channel)

Frequency Stability: ± 0.5 ppm RECEIVER SPECIFICATIONS

Analogue Sensitivity (12dB SINAD): 0.22 uV typical Digital Sensitivity (5% BER): 0.19 uV typical

Intermodulation (TIA603D) VHF: 78dB

UHF1, 350: 75dB

Adjacent Channel Selectivity: (TIA603A)-1T

UHF1, 350: 65 dB (12.5 kHz channel), 75 dB (25 kHz

channel)

Spurious Rejection (TIA603D) UHF1, 350: 75 dB

AUDIO SPECIFICATIONS Digital Vocoder Type AMBE+2TM

Audio Response: TIA603D

Rated Audio: 3 W (internal speaker) Audio Distortion at Rated Audio: 3%

Hum and Noise: -40 dB (12.5 kHz channel),-45 dB (25

kHz channel)

Conducted Spurious Emissions(TIA603D): -57 dBm

*BLUETOOTH SPECIFICATIONS

Version 4.0

Range Class 2, 10 m

Supported Profiles Bluetooth Headset Profile (HSP),

Serial Port

Simultaneous Connections 1 x audio accessory and 1 x $\,$

data device

Permanent Discoverable Mode Optional

*GNSS SPECIFICATIONS

Constellation Support: GPS, BEIDOU Time To First Fix: Cold Start < 60 s Time To First Fix: Hot Start < 10 s Horizontal Accuracy: < 5 m *Wi-Fi SPECIFICATIONS

Standards Supported IEEE 802.11b, 802.11g, 802.11n Security Protocol Supported WPA, WPA-2, WEP Maximum Number of SSIDs 128 (64 for Numeric

Models)

ENVIRONMENTAL SPECIFICATIONS Operating Temperature: -30 °C to +60 °C Storage Temperature: -40 °C to +85 °C Electrostatic Discharge: IEC 61000-4-2 Level 4 Dust and Water Intrusion: IEC 60529 - IP54 Packaging Test: MIL-STD 810C, D, E, F, and G

Antenna

Frequency: 320-380 MHz

Gain: 5.5 dBi
Power: 200 Watts
Impedance: 50 Ohms
VSWR: 1.5:1 (nominal)
Rated wind velocity: 60 m/sec
Mast diameter accepted: 30-62 mm

Length: 1.7 m Weight: 0.9 kg Connector: MJ

B. One (1) unit Antenna

SPECIFICATIONS

Antenna

Frequency: 320-380 MHz Gain: 5.5 dBi

Power: 200 Watts Impedance: 50 Ohms VSWR: 1.5:1 (nominal) Rated wind velocity: 60 m/sec Mast diameter accepted: 30-62 mm

Length: 1.7 m Weight: 0.9 kg Connector: MJ

C. One (1) 20 FT. Mast

SPECIFICATIONS

GI Pipe: (2") Ø60.20x2.90 (ASTM A53)

Height: 6000mm Paint: red and white

Steps: 12mmØ round bar steps Guy wire: AWG 0.0508 Turnbuckle: 5/8x12

Base plate: 12mm THK. Plate

D. One (1) lot Coaxial Cable

SPECIFICATIONS

RG Type: 8 CONDUCTOR Size: 10 AWG Stranding: Solid Nom. Diameter: 0.108 in Material: BC- Bare Cooper

INSULATION

Material: PE- Polyethylene (Semi-Solid) Nom. Insulation Diameter: 0.285 in (7.24mm)

OUTER SHIELD

Layer 1: Tape outer shield type tri-laminate

(alum+poly+alum)

Layer 2: Braid outer shield type Tinne Copper (TC)

OUTER JACKET

Material: PVC- Polyvinyl chloride Nom. Diameter: 0.405 in (10.3 mm)

Voltage: 300 V

MECHANICAL CHARACTERISTICS Operating Temperature: -30°C to +75 °C

Bend Radius: 4.0 in

Max pull tension: 184 lbs (83.5 kg) STANDARD COMPLIANCE

Environment Suitability: Indoor (not Riser or Plenum),

Indoor

Sustainability: CA Prop 65

E. Five (5) Connectors

SPECIFICATIONS

Cable RG-/U: 8, 9, 11, 13, 58, 63, 87A, 149, 213, 214,

216, 225 Conn Type: Plug

Outer Cable Attachment: Solder/Crimp/ FCP Inner Cable Attachment: Solder/ Crimp/ Pliers

F. One (1) Power Supply

SPECIFICATIONS Input Power: 220V

Input Power: 220V Output Power: 13.8V

DC Switch Mode Power Supply with Battery Charger,

Wide input voltage range ($220V \pm 20\% \, VAC$), Display: Output voltage and output current meter Protection: output over voltage and over current

protection,

Battery backup function: 12V 1A Battery charging during normal operation automatically switches to battery on AC power loss, compact

- G. One (1) lot NTC Permits and Licenses
- H. One (1) lot Lightning Surge and arrester
- I. One (1) lot Mobilization Cost
- J. One (1) lot Installation Cost for the whole system Includes: Installation, configuration, testing, training, and commissioning
- A. One (1) Unit of Computer Workstation with Dispatch Communication

Features

VOICE DISPATCH

Provide communications between the dispatcher and remote radios. Make broadcast, group, private, remote monitor, or emergency calls quickly using programmable shortcuts.

EVENT LOGGING

Log all system events including voice calls, text messages, and status changes. Customize rules, filter and group events or generate reports detailing location and radio status.

TELEMETRY*

Monitor and manage remote equipment from the control room.

ALARM AND LONE WORKER

Improve the safety of personnel with automatic alarms and lone worker protection. The alarm can also be sent as an automated message, e-mail or SMS.

FLEET ADMINISTRATION

Efficiently manage fleet operations and remotely control radios. Get live status updates and configure the radio to send online/offline reports to the server.

JOB TICKETING*,

** Create, assign and monitor job tickets through the radio network to deliver routine tasks more efficiently. Radio users can accept or decline the job ticket by simply pushing a button.

TEXT MESSAGES AND EMAIL

When you need silent communications or referenceable instructions, send broadcast, group or private text messages. Radio users can text back to the dispatcher.

DATA WEB CLIENT

Empower remote dispatchers to access the system using a web interface.

VOICE RECORDING

Continuous voice recording of all calls with playback for analysis, reporting or training purposes. Audio files are stored in MP3 format on the Radio Server and Dispatcher.

GPS TRACKING

Follow workers, vehicles and business assets in real-time to ensure maximum safety and productivity. View routes, set up geo-fencing and log radio movements using a configurable set of rules.

Digital Portable Radios

203 units of Digital Portable Radios

SPECIFICATIONS

Frequency: 350-400 MHz High Power Output: 4W Low Power Output: 1

Channel Spacing: 12.5, 25 kHz Channel Capacity: 1000

Weight Radio + Standard 1600 mAh Battery: 315g Digital / Analogue Battery Life2, Standard 1600 mAh

Battery: 15.6 / 12 hrs

Power Supply (Nominal): 7.5 V

TRANSMITTER SPECIFICATIONS

Channel Spacing: 12.5, 25 kHz

4FSK Digital Modulation: 12.5 kHz Data: 7K60F1D and

7K60FXD.

12.5 kHz Voice: 7K60F1E and 7K60FXE,

Combination of 12.5 kHz Voice and Data:7K60F1W Digital Protocol: ETSI TS 102 361-1, -2, -3, -4

Conducted/Radiated Emissions:

(TIA603D) - 36 dBm < 1GHz, -30 dBm > 1GHz

Adjacent Channel Power: 60dB (12.5 kHz channel), 70dB

(25 kHz channel)

Frequency Stability: ± 0.5 ppm RECEIVER SPECIFICATIONS

Analogue Sensitivity (12dB SINAD): 0.16 uV

Digital Sensitivity (5% BER): 0.14 uV

Intermodulation (TIA603D):70 dB

Adjacent Channel Selectivity (TIA603A)-1T: 60 dB (12.5

kHz channel), 70 dB (25 kHz channel)

Adjacent Channel Selectivity (TIA603D)-2T &

(TIA603C)-2T: 45 dB (12.5 kHz channel),

70 dB (25 kHz channel)

Spurious Rejection (TIA603D): 70 dB **AUDIO SPECIFICATIONS**

Digital Vocoder Type: AMBE+2TM

Audio Response: TIA603D

Rated Audio: 0.5 W

Audio Distortion at Rated Audio: 3%

Hum and Noise: -40 dB (12.5 kHz channel), -45 dB (25*

kHz channel)

Conducted Spurious Emissions (TIA603D): -57 dBm

*BLUETOOTH SPECIFICATIONS

Version 4.0

Range Class 2, 10 m

	Supported Profiles Bluetooth Headset Profile (HSP),	
	Serial Port	
	Simultaneous Connections 1 x audio accessory and 1 x	
	data device	
	Permanent Discoverable Mode Optional	
	*GNSS SPECIFICATIONS	
	Constellation Support GPS	
	Time To First Fix, Cold Start < 60 s	
	Time To First Fix, Hot Start < 10 s	
	Horizontal Accuracy < 5 m	
	*Wi-Fi SPECIFICATIONS	
	Standards Supported IEEE 802.11b, 802.11g, 802.11n	
	Security Protocol Supported WPA, WPA-2, WEP	
	Maximum Number of SSIDs 128 (64 for LKP and NKP	
	models)	
	ENVIRONMENTAL SPECIFICATIONS	
	Operating Temperature: -30 °C to +60 °C	
	Storage Temperature: -40 °C to +85 °C	
	Electrostatic Discharge IEC 61000-4-2: Level 4	
	Dust and Water Intrusion IEC 60529 - IP68 Capable	
	Packaging Test MIL-STD 810D and E	
	B. 203 lot Dispatch License of Digital Portable	
	Radios	
	C. One (1) lot NTC Permits and Licenses	
	D. One (1) lot Mobilization Cost	
	2. One (1) for modification cost	
	E. One (1) lot configuration Cost, testing, training,	
	and commissioning	
	and commissioning	
В.	Compliance to the Schedule of	
D.	<u> </u>	
	Requirements (Section VI)	
		ı

I hereby certify to comply and deliver all the above requirements.

Name:	
Legal Capacity:	
Signature:	
Duly authorized to sign the Bid for and behalf of:	

Technical Specifications Page 8 of 8

Section VIII. Checklist of Technical and Financial Documents

Notes on the Checklist of Technical and Financial Documents

The prescribed documents in the checklist are mandatory to be submitted in the Bid, but shall be subject to the following:

- a. GPPB Resolution No. 09-2020 on the efficient procurement measures during a State of Calamity or other similar issuances that shall allow the use of alternate documents in lieu of the mandated requirements; or
- b. Any subsequent GPPB issuances adjusting the documentary requirements after the effectivity of the adoption of the PBDs.

The BAC shall be checking the submitted documents of each Bidder against this checklist to ascertain if they are all present, using a non-discretionary "pass/fail" criterion pursuant to Section 30 of the 2016 revised IRR of RA No. 9184.

Checklist of Technical and Financial Documents

I. TECHNICAL COMPONENT ENVELOPE

Class "A" Documents

<u>Legal Documents</u>					
(a)	Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages) in accordance with Section 8.5.2 of the IRR;				
<u>Technical Documents</u>					
(b) S	statement of the prospective bidder of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid (in a				
(f)	FORM prescribed by the QC-BAC-GOODS AND SERVICES); <u>and</u> Statement of the bidder's Single Largest Completed Contract (SLCC) similar to the contract to be bid, except under conditions provided for in Sections 23.4.1.3 and 23.4.2.4 of the 2016 revised IRR of RA No. 9184, within the				
(g)	relevant period as provided in the Bidding Documents (in a FORM prescribed by the QC-BAC-GOODS AND SERVICES); <u>and</u> Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission;				
(h)	Original copy of Notarized Bid Securing Declaration; <u>and</u> Conformity with Section VI. (Schedule of Requirements) and Section VII. (Technical Specifications), which may include production/delivery schedule,				
(i)	manpower requirements, and/or after-sales/parts, if applicable; <u>and</u> Original duly signed Omnibus Sworn Statement (OSS); and if applicable, Original Notarized Secretary's Certificate in case of a corporation, partnership, or cooperative; or Original Special Power of				
	Attorney of all members of the joint venture giving full power and authority to its officer to sign the OSS and do acts to represent the Bidder.				
Financia.	The prospective bidder's computation of Net Financial Contracting Capacity (NFCC) (in a FORM prescribed by the QC-BAC-GOODS AND SERVICES);				
	or A committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation.				
(k)	Class "B" Documents If applicable, a duly signed joint venture agreement (JVA) in case the joint venture is already in existence;				
	or duly notarized statements from all the potential joint venture partners stating that they will enter into and abide by the provisions of the JVA in the instance that the bid is successful.				
Other documentary requirements under RA No. 9184 (as applicable)					
(l)	[For foreign bidders claiming by reason of their country's extension of reciprocal rights to Filipinos] Certification from the relevant government office of their country stating that Filipinos are allowed to participate in				
(m)	government procurement activities for the same item or product. Certification from the DTI if the Bidder claims preference as a Domestic Bidder or Domestic Entity.				

II. FINANCIAL COMPONENT ENVELOPE

- ☐ (a) Original of duly signed and accomplished Financial Bid Form;
- (b) Original of duly signed and accomplished Price Schedule(s); and
 - (c) Original of duly signed and accomplished Cost Derivation

III. REQUIRED DOCUMENTS IN BDS SECTION 20.2 AND 21.2

List of required licenses and permits relevant to the Project and the corresponding law requiring it.

• Documents:

- Authority to sell from the Manufacturer/ Distributorship/Dealers for the products being offered.
- A valid Radio Dealer's Permit from the National Telecommunications Commission (NTC)
- Certified True Copy of Manufacturing Certificate stating availability of support and spare parts for the next five (5) years.

• Organization:

- -Certification for Trading and Distribution of TELCO Equipment or its equivalent
- -Certified True Copy of List of Track Record for at least (5) years in the Radio Communication Business and has supplied and delivered communication equipment.

• Manpower:

-List of Manpower

• Warranty:

- All Workmanship, materials, and equipment shall be warranted by the supplier for a period of One (1) year after the date of final acceptance. This covers parts and labor during the warranty period at no cost to the enduser.

-Affidavit of undertakings for the following:

1) That the bidder must have at least three (3) local personnel qualified and trained to install, repair and maintain the Radio Communication Equipment.

2) Training

- -Comprehensive Technical Training with Certificate on How to Use and Operate Radio Equipment
- 3) The Bidder/Supplier/Manufacturer shall have at least one (1) Service Center in Manila/NCR with duly qualified and certified Technical (s) capable of providing maintenance, repair, testing, and other after-sales services.

(Please refer to the attached Terms of Reference)

Note:

1. Please refer to

[https://drive.google.com/file/d/1uiYurh5WrpBL5B_pqpzAb62yucAblR1p/view?usp=sharing] for the following requirements:

- a. Computation of NFCC;
- b. List of All Ongoing Contracts/List of Contracts already awarded but not yet started:
- c. Statement of Single Largest Completed Contract
- 2. Please refer to GPPB Resolution No. 16-2020 for the following requirements:
 - a. Bid Form;
 - b. Price Schedule (for Goods Offered from Abroad/ Within the Philippines)
 - c. Bid Securing Declaration; and
 - d. Omnibus Sworn Statement

COST DERIVATION

PROJECT NAME: SUPPLY, DELIVERY, INSTALLATION, TESTING, AND COMMISSIONING OF RADIO COMMUNICATION FOR QUEZON CITY LOCAL GOVERNMENT UNIT PROJECT NO. OCM(QCDRRMO)-22-CE1-943

RADIO COMMUNICATION

	Unit of Issue	Quantity	Unit Cost		
1) Digital Radio Repeaters with Corresponding Accessories	Package	3			
2) Digital Base Radios with Corresponding Accessories	Package	8			
3) Computer Workstation with Dispatch Communication	Unit	1			
4) Digital Portable Radios	Unit	203			
5) Mobilization Cost	Lot	1			
6) Installation Cost	Lot	1			
TOTAL BID AMOUNT:					
Name:					
Legal Capacity:					
Signature:					
Duly authorized to sign the Bid for and behalf of:					

