

EXHIBIT B – SCOPE OF WORK

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1 Introduction

The City of San Diego (“City”) seeks proposals from potential Proposers for the provision of Radio Communication, Emergency Response and Mobile Interoperability equipment and Supporting Services (hereinafter, the “Goods and Services”).

The hardware and supporting services arising from this RFP will enable the City to continue to provide best-in-class wireless communications services to its First Responders, with high levels of availability.

The key components of any resulting Agreement will be as follows:

1. Radios and wireless communications equipment and
2. Training, warranty, and maintenance services for the aforementioned equipment

Proposers should note that the requirements set forth in this document describe the City’s intent to ensure that all wireless communications systems maintain an exceptionally high level of availability, that no disruption to these critical services will be tolerated, and that the resulting system will retain seamless integration with the regional interoperability standards required.

This Request for Proposals (RFP) is intended to result in an Agreement for Goods and Services for an initial ten (10) year term, with two (2), two-year renewal options, to be awarded at the sole discretion of the City.

This RFP sets forth the requirements that responsive Proposers must meet, including the format in which information and RFP responses must be submitted. Additionally, there are specific items of information that must be included in the RFP response, in order, for the response to be considered responsive. Proposers must carefully review the instructions provided in Exhibit A to this document to ensure they comply with the City’s requirements.

2 City of San Diego – Overview

2.1 City Background

The City of San Diego is the 2nd largest incorporated City in the State of California, and the 8th largest City in the United States. The City occupies 325 square miles of land and is located in the southwest corner of the United States. The City has over 1.4 million residents and is comprised of nine distinct council districts.

The City had approximately 11,545 positions budgeted in Fiscal Year 2019. These positions are disbursed across almost seventy (70) distinct business areas comprised of departments, agencies, elected official offices, boards, and commissions. Most of these positions are in business areas that are under the responsibility of the Mayor and managed by the Executive Management Team. The remainder are located in other business areas that are headed up by other elected officials or City Agencies. At various times throughout the fiscal year, the regular City workforce may be augmented by as many as two thousand (2,000) additional seasonal employees. The City operates on a July through June fiscal year.

2.2 Wireless Technology Services Division

The Wireless Technology Services Division (“Wireless Division”) operates as a distinct subset of the Department of Information Technology (“DoIT”) at the City. The Wireless Division is responsible for the provision and stewardship of all the critical and Public Safety wireless infrastructure used by San Diego Police Department (“SDPD”) and San Diego Fire Department (“SDFD”) to serve residents within the City and County of San Diego.

The City is soliciting proposals for Public Safety Radio Communication subscriber equipment and associated accessories to work seamlessly with a 700/800 MHz, UHF, VHF High-band, Radio Communications System.

The City of San Diego Radio Communications System currently includes an ASTRO 25 700 MHz (software release 7.16 or later) trunked simulcast Project 25 (P25) radio system- which includes twenty (20) channels at each of the seven (7) existing remote simulcast sites, with additional coverage provided by trunked Astro Sites and conventional radio sites.

The Radio Communication Systems operated by the City provides mission-critical voice services to law enforcement, fire and rescue, and other city and non-city agencies within the overall service area. The City provides communications services to key customer organizations with broad public safety responsibilities. In total, the Wireless Services Division supports nearly 12,000 mobile and portable radios.

Some radio system users continue to operate on a Motorola 800 MHz SmartZone 4.1 trunked simulcast radio system for voice communications.

The City of San Diego Radio Communications System customers include:

- City of San Diego Police Department;
- City of San Diego Fire-Rescue Department (includes Lifeguard);
- City of San Diego Public Utilities Department;
- City of San Diego Environmental Services Department;
- San Diego Unified School District;
- San Diego Community College District; and
- San Diego Medical Services Enterprise.

3 Radio Communications Systems Overview

The City of San Diego operates two (2) trunked simulcast radio systems for public safety and public service communications. These radio systems operate in the 700 MHz and 800 MHz bands. This section provides a summary of each system in use.

3.1 Radio System Utilization

Both the 700 MHz and the 800 MHz radio systems have approximately 10,000 primary subscribers and 16,000 total subscribers which include mutual aid users. The systems cover an area from Del Mar to Escondido and El Cajon to the east and south to the Mexican border. This network covers over 370 square miles.

3.2 700 MHz Radio System

The City operates a twenty (20) channel, seven site, Project 25 700 MHz Trunked Simulcast Radio System. The 700 MHz Radio System is standards-based and delivers interoperable radio communications for the City of San Diego. The Regional Project 25 Trunked Simulcast Radio System utilizes a Frequency Division Multiple Access (FDMA) based technology. The City uses Ethernet links for connectivity between remote sites and the prime site as well as between console sites and the master site. The System includes two Astro Site Repeaters (ASR's) located at San Diego Sewage Treatment Plant (STP) and Safari Park. Below are the seven 700 MHz remote communications sites:

- Black Mt
- City Administration Building
- Cowles Mt
- Encanto
- Mt Soledad
- Otay Mt
- San Ysidro

3.3 800 MHz Radio System

The City operates an 800 MHz Motorola 4.1 digital, mixed mode, SmartZone trunked radio system. This radio system includes twenty (20) trunked channels configured as a single simulcast zone. System coverage is provided through the use of seven (7) mountain top sites. Additionally, there is one five-channel IntelliRepeater (IR) site. The simulcast system and IntelliRepeater site are interfaced to the P25 Core via SmartX

controllers. The Prime Site controller is located at the City's Chollas communications site. Following are the seven remote communications sites:

- Black Mt
- City Administration Building
- Cowles Mt
- Encanto
- Mt Soledad
- North City
- San Ysidro

The Motorola IntelliRepeater (IR) site is located at San Diego Sewage Treatment Plant (STP).

3.4 The Prime Site is located at the Chollas communications site. Dispatch Locations

The City has eleven (11) dispatch sites using Motorola MC 7500 consoles. Following are the sites and number of operator positions:

- San Diego PD Dispatch – 19 Consoles
- San Diego Fire Dispatch – 13 Consoles
- San Diego Lifeguard – 2 Consoles
- Chollas – 3 Consoles
- MCC – 2 Consoles
- Station 38 – 7 Consoles
- Environmental Services – 2 Consoles
- San Diego Schools PD – 3 Consoles
- San Diego Schools Transportation – 1 Console
- San Diego City College PD – 2 Consoles
- San Ysidro – 1 Console

Radio system usage can be seen in the table below. This usage data was collected for a one (1) year period from March 6, 2019 to March 6, 2020.

ID	Count	Unit
Push to Talk Transactions		
1	19,192,764	PTTs (annual)
2	1,599,397	PTTs per month (average)
Calls		
3	113,858,948.7	seconds (annual total)
4	9,488,245.7	seconds per month (average)
5	1,897,649.1	minutes (annual total)
6	158,137.4	minutes per month (average)
7	31,627.5	hours (annual total)
8	2,635.6	hours per month (average)

Table 3-1: Count of City of San Diego Airtime and PTTs

4 Overview of Requirements

The Wireless Division has historically delivered the Services via the manufacturer 'Motorola'. Over time, the Services have progressed and innovated, in order, to deliver an improved and more highly available service to the public. In 2016, the Wireless Division oversaw an overhaul of the existing voice radio system, resulting in an upgrade to a new digital, regional, interoperable FDMA/TDMA standards-based 700/800 MHz digital trunked communications radio system ("P25"). Proposers should note that the P25 upgrades are standards based, highly reliable, fault tolerant, spectrally efficient, flexible, and encrypted for secure communications that are necessary to safeguard and ensure interoperable communications throughout the San Diego region.

The City requires that the functionality of all radios and wireless communications equipment provided under the resulting Agreement deliver continued, seamless radio communications on the existing P25 wireless infrastructure.

The goods and services procured under the resulting Agreement will include, but not be limited to, the following items:

- Subscriber Radios
 - Mobile Radios
 - Portable Radios
 - Control Stations
- Radio Accessories
- Software Upgrades
- Subscriber Radio Applications
- Radio Programming Hardware and Software
- Training
- Warranty
- Maintenance
 - Services
 - Test Equipment

Proposers will be responsible for all costs associated with Interoperability Testing (IOT) for all purchased equipment ensuring Multi-Vendor Integration compatibility. Additionally, Proposer must demonstrate participation in any testing program including those required by FCC rules if applicable at time purchase order is issued.

All radio and wireless hardware provided to the City under the resulting Agreement will be warranted by the manufacturer for a minimum of five (5) years, which may be a combination of the standard manufacturer's warranty, and an extended hardware

maintenance term. The City intends to purchase a full five-year warranty with each wireless device acquired under the resulting Agreement.

The City intends to acquire support for hardware from the manufacturer, and in tandem with its own in-house Field Service Delivery resources.

5 Subscriber Radio Provisioning

5.1 Fleet Map Development Support

- 5.1.1 Proposer shall provide fleet map development services to support the City's effort to establish a fleet map that is compatible with its radio system. Development of the fleet map includes the establishment of a zone / channel structure and the determination of features and functions configuration settings as may be requested by individual user groups.
- 5.1.2 Proposer shall detail the proposed methodology for reviewing and capturing parameters and configuration settings as a result of this effort. Proposer shall provide the method for reviewing features and functions of the subscriber radios. Be detailed and provide examples of the output from this process.

5.2 Programming Template Development Support and Review

- 5.2.1 Proposer shall work together with the City to develop radio programming templates for each model and type of subscriber radio purchased under this contract. Proposer services shall include subject matter expert (SME) support, baseline programming template development, and review of programming templates developed by the City.
- 5.2.2 Prior to programming subscriber radios, Proposer shall program a set of radios, including every model and type of radio purchased under this contract, with a program template. The City will then test the subscriber radios and approve the functionality of each radio program template.

5.3 Radio Programming Services

- 5.3.1 Proposer shall provide radio programming services to augment the City's technical staff. Radio programming will occur after the City approves the radio program templates.

5.4 Online Service Tracking

- 5.4.1 Proposer shall provide an online tool for the reporting and tracking equipment repairs. Proposer shall detail all the features and functions associated with the online tool.

6 Training

6.1 Training Components

6.1.1 At a minimum, training will be comprised of a combination of:

- Instructor-led training
- Onsite training
- Online self-paced and virtual classroom

6.1.2 Fundamentally, Proposers shall ensure that their Proposals demonstrate that City staff will be adequately trained to safely operate all hardware and software provided under any resulting Agreement.

6.2 Training Description

6.2.1 This RFP requires Proposers to provide a comprehensive description of the initial training your company will provide for system operators and system users. The training must include the following:

- Basic information about the system
- Description and instruction on use of the user interface(s)
- End User shall complete understanding of all systems and how they operate
- Additional Training: The Proposer shall provide information on other types of training available such as certified technician training, radio maintenance and codeplug creation/writing training, and/or registration information.
- All Initial and Additional training shall be fully described in the Proposal Response, to include any additional cost that may be incurred by the End User.
- Examples of materials that support the training effort
- Any other training deemed necessary by either the End User or Proposer.

7 Warranty

7.1 Equipment Covered

- 7.1.1 The Proposer shall warrant all equipment and Services provided by the Proposer under the Contract.
- 7.1.2 Proposer shall clearly identify those items covered under each warranty agreement, and clearly identify conditions that are not included or conditions that would invalidate any of the warranties.

7.2 Warranty Conditions

- 7.2.1 The Proposer shall be responsible for the repair or replacement of equipment provided or installed under the contract, in like new operating condition over the life of the applicable warranty period.
- 7.2.2 The Proposer shall warrant all materials, workmanship, and the successful operation of all equipment supplied by the Proposer. If any defects in material, functionality or workmanship occur within the warranty period, including, but not limited to, non-conformance with the applicable RFP Specification, the Proposer's response to the specification or the Proposer's published specifications, whichever is most stringent, the Proposer shall determine the cause of failure; remove, repair or replace any defective part or parts or software; deliver and reinstall the part or software; and place the equipment back into service at the Proposer's sole cost and expense.
- 7.2.3 Proposer shall keep all programming information secured and not allow any duplication of information to others.

7.3 Warranty Period

- 7.3.1 Each mobile, portable and control station unit shall be warranted against any failure for a period of five (5) years from the date it is placed in service. Proposer shall provide the option to purchase additional warranty service.
- 7.3.2 Warranty support will be depot level support. Proposer will be responsible for shipping costs of defective radios sent to, and returned from, its depot service location.
- 7.3.3 Radios sent in for warranty service must be returned to the City no longer than Twenty (20) Business Days from receipt of the radio at the Depot Service location.

- 7.3.4 Service for mobile and control station units shall include preliminary testing at the Proposer's depot service location and, if needed, removal and reinstallation from and into the vehicle or place of use.
- 7.3.5 Such defective components, unless damaged beyond the warranty limits, shall be replaced in accordance with the Proposer's equipment warranty terms. Proposer's equipment warranty terms shall be provided as part of the response.

7.4 New Equipment

- 7.4.1 The Proposer shall warrant to the City that the equipment to be delivered shall be new, not remanufactured, and that it shall conform to these requirements and be free from defects in materials and workmanship.
- 7.4.2 The Proposer shall warrant capable of satisfactory performance under the City's operating conditions at specified equipment rating and capacity and conformance with this specification, the Proposer response to this specification or the Proposer's published specifications, whichever is most stringent.

7.5 Lemon Rule

- 7.5.1 If during the Warranty period equipment is found not to meet the warranty specified including repeated failures of the same components or units and nonconformance with the specification, the Proposer shall correct any defect or replace any unit that exhibits more than three instances of failure. Should the repeated failures be the result of a design defect, the Proposer shall replace all involved equipment.

7.6 Software and Hardware Replacement

- 7.6.1 The Proposer is responsible, at its cost and expense, for the installation and support of software manufacturer-recommended enhancements for all the City equipment.
- 7.6.2 The Proposer is responsible for coordination with the original equipment manufacturer (OEM) or software developer(s) (if not the Proposer) during the Proposer's warranty period.
- 7.6.3 The Proposer will be required to provide a plan and methodology for each, and all, Enhancements that shall be subject to the City's approval. Any plan

must include, but not be limited to, timeliness, effect on service, testing and fallback options. If physical software/hardware equipment enhancements must be performed by the OEM, the Proposer shall be responsible for coordinating all aspects of the Enhancements and ensuring compatibility and continued performance, with all components of the new equipment.

8 Maintenance

8.1 Overview

The City plans to operate the new equipment for at least 10 years from Final Acceptance. The City's goal is to manage the new equipment, but have the Proposer provide warranty, telephone technical support, spare equipment, depot repairs and possibly component upgrades to allow the new equipment to reliably provide the operational features and functions over the life of the new equipment. The City has historically been a "self-maintained" radio facility. It is expected that this will continue to be the case.

8.2 Equipment Covered

The City is self-maintained and may provide maintenance after expiration of warranty.

8.3 Service Technicians

- 8.3.1 The Proposer shall include in the response a list of recommended qualifications for service technicians.
- 8.3.2 The Proposer shall outline the required courses to maintain the new equipment and the required refresh period for the training that will be required of the technicians.

8.4 Technical Support

- 8.4.1 The City will require 24/7 telephone technical support. The Proposer shall outline the level, method, and location of the factory support that will be provided to the local service presence. The discussion should detail how issues are escalated and on what criteria those issues are escalated.

8.5 Monthly Service Meetings

- 8.5.1 The City may, at its sole discretion, require a monthly meeting (in-person or virtual) with the Proposer to discuss the implementation of the Contract, to discuss specific radio repair issues and to resolve any outstanding radio repair issues.

8.6 Database

- 8.6.1 The Proposer shall be responsible for providing an accurate database of all control stations, mobiles, portables and other associated equipment that is part of new equipment. The database should identify warranty start and end dates for all equipment. Such a database will be available to The City upon request electronically in Microsoft Excel format.

8.7 Depot Repair

- 8.7.1 The City will require equipment to be repaired within twenty (20) Business Days from receipt of the equipment at the Depot Service location.
- 8.7.2 Proposer will pay for all out-going shipping required for Depot Repair. Proposer shall also pay the shipping back to the City facility.

8.8 Timeline

- 8.8.1 Proposer shall provide Maintenance Resources for ten (10) years after Final Acceptance.

8.9 Cost

- 8.9.1 Proposer shall provide pricing for all Maintenance Resources, in one (1) year increments, for a total of ten (10) years after Final Acceptance.
- 8.9.2 Proposer shall provide itemized pricing for all equipment covered by Depot Repair in one (1) year increments, for a total of ten (10) years after Final Acceptance.

8.10 Obsolescence

- 8.10.1 If any new equipment component is not repairable and/or discontinued, and spare parts are no longer available during the first 10 years from Final Acceptance, the Proposer will replace the new equipment component and any affected new equipment components with components of equal or better quality and functionality at no cost to The City.
- 8.10.2 The Proposer shall indicate on the spares list the expected life of each spare.

8.11 Spares

- 8.11.1 The spares will be used in the case of corrective maintenance. The Proposer must indicate on the list of spare equipment whether Depot Repair supports the item.
- 8.11.2 The Proposer shall notify The City twelve (12) months prior to a component on the new equipment being discontinued. No new equipment component shall be discontinued in the first three (3) years after Final Acceptance.
- 8.11.3 The Proposer shall supply a list of all recommended test equipment that The City will utilize to perform maintenance on the new equipment. Test equipment shall be identified as pertaining to subscriber radios, accessories, or both.
- 8.11.4 The Proposer shall provide a list of hardware and software, other than spare parts and test equipment, required to manage and maintain the new equipment and ensure interconnectivity is functioning properly.

8.12 Scheduled Maintenance

- 8.12.1 The City shall undertake a preventative scheduled maintenance program for the inspection and evaluation of the new equipment. However, the City may desire to implement a hybrid approach for maintaining the new equipment. To that end, Proposer shall detail scheduled maintenance partnering options for the City's consideration.
- 8.12.2 The Proposer shall provide a list of equipment that requires preventative maintenance.
- 8.12.3 The Proposer must describe the scheduled preventive maintenance for monthly, quarterly, bi-annual, and yearly maintenance for the new equipment.

8.13 Corrective Maintenance

- 8.13.1 The City will perform all corrective maintenance. It is expected the maintenance technical training with telephone support will provide the necessary skills to diagnose and repair all issues on the new equipment via spares located in the City's possession.
- 8.13.2 Proposer shall detail any and all additional maintenance partnering options for the City's consideration.

9 RFP Schedule

The City provides the following tentative schedule for this RFP; Proposers should note that this schedule is subject to change at the sole discretion of the City of San Diego.

Activity	Date
RFP Released	November 3, 2020
Deadline for Submission of Questions	November 23, 2020
Deadline for Submission of RFP Proposals	December 14, 2020
Demonstrations / Oral Interviews	February/March 2021
Intent to Award Issued	April 2021
City Council Review	June/July 2021
Contract Executed	August 2021