FIRST AMENDMENT TO ELIGIBLE PURCHASE ORDER AGREEMENT NO. 25-10093
BETWEEN THE CITY OF LOS ANGELES AND
MOTOROLA SOLUTIONS, INC.

THIS FIRST AMENDMENT ("First Amendment") to Eligible Purchase Order Agreement No. 25-10093 ("Eligible Purchase Order") is made and entered into by and between the CITY OF LOS ANGELES, a municipal corporation ("City"), acting by and through its Board of Harbor Commissioners ("Board"), and MOTOROLA SOLUTIONS, INC., a Delaware corporation, 500 W. Monroe Street, 44th Floor, Chicago, IL, 60661 ("Contractor").

RECITALS

WHEREAS, on April 14, 2025, the City and Contractor entered into the Eligible Purchase Order for Contractor to provide services for the upgrade of the Ultra High Frequency T-Band system to include the design and implementation of a four-site, three-channel simulcast system and other related work; and

WHEREAS, the parties desire to amend the Eligible Purchase Order to add services to establish intersystem connection to enhance interoperability between Los Angeles Police Department ("LAPD"), Los Angeles Port Police ("LAPP"), and Los Angeles World Airports ("LAWA") to connect all three via Inter-RF Subsystem Interface 8000 ("ISSI 8000"); and

WHEREAS, ISSI will automatically enable roaming amongst the three City agencies for a specific, limited number of subscribers and talk groups; and

WHEREAS, there are no known Los Angeles Harbor Department ("Harbor Department") personnel or City job classifications with the expertise to perform the proposed Services nor is it feasible to employ such personnel on a temporary or occasional basis.

NOW, THEREFORE, the City and the Contractor agree that the Eligible Purchase Order be amended as follows:

1. Section 5(B) is deleted in its entirety and replaced with the following:

   "B. The maximum payable under this Eligible Purchaser Order, including reimbursable expenses, shall be Two Million Four Hundred Sixty-Five Thousand Nine Hundred Forty-Four Dollars ($2,465,944)."

2. The Eligible Purchase Order shall be amended to include a new Exhibit A-1 "First Amendment Scope of Work" following Exhibit A, which is attached hereto and made a part hereof.

Except as amended herein, all remaining terms and conditions of Eligible Purchase Order shall remain in full force and effect.

Subject to the provisions of Charter Section 245, the effective date of this Amenfdment shall be the date of its execution by Executive Director upon authorization of the Board. Contractor is aware that the City Council, pursuant to Charter Section 245 of the City of Los Angeles, has the right to review this Amendment. Accordingly, in no event shall this Amendment become effective until after the expiration of the fifth Council meeting day after Board action, or the date of City Council's approval of the Amendment.

(Signature page follows)

IN WITNESS THEREOF, the parties hereto have executed this First Amendment to Eligible Purchase Order on the date to the left of their signatures.

THE CITY OF LOS ANGELES, by its
Board of Harbor Commissioners
By signing below, I attest that I have no personal, financial, beneficial, or familial interest in this Agreement.

Dated: _____

By _____
EUGENE D. SEROKA
Executive Director

Attest _____
AMBER M. KLESGES
Board Secretary

MOTOROLA SOLUTIONS INC.

Dated: April, 14th, 2026

By: _____

Jerry Burch Territory Vice President
(Print/type name and title)

By: _____

Scott Lees Regional Vice President
(Print/type name and title)

APPROVED AS TO FORM AND LEGALITY

April 15, 2026
HYDEE FELDSTEIN SOTO, City Attorney
STEVEN Y. OTERA, General Counsel

By: _____
HELEN J. SOK, Deputy

Attachments

Date: April 17, 2026

Contractor/Vendor Name: Motorola Solutions, Inc. (UHF – First Amendment)

Account#	161305	Project#	2581000
Ctr/Div#	00000	Task#	

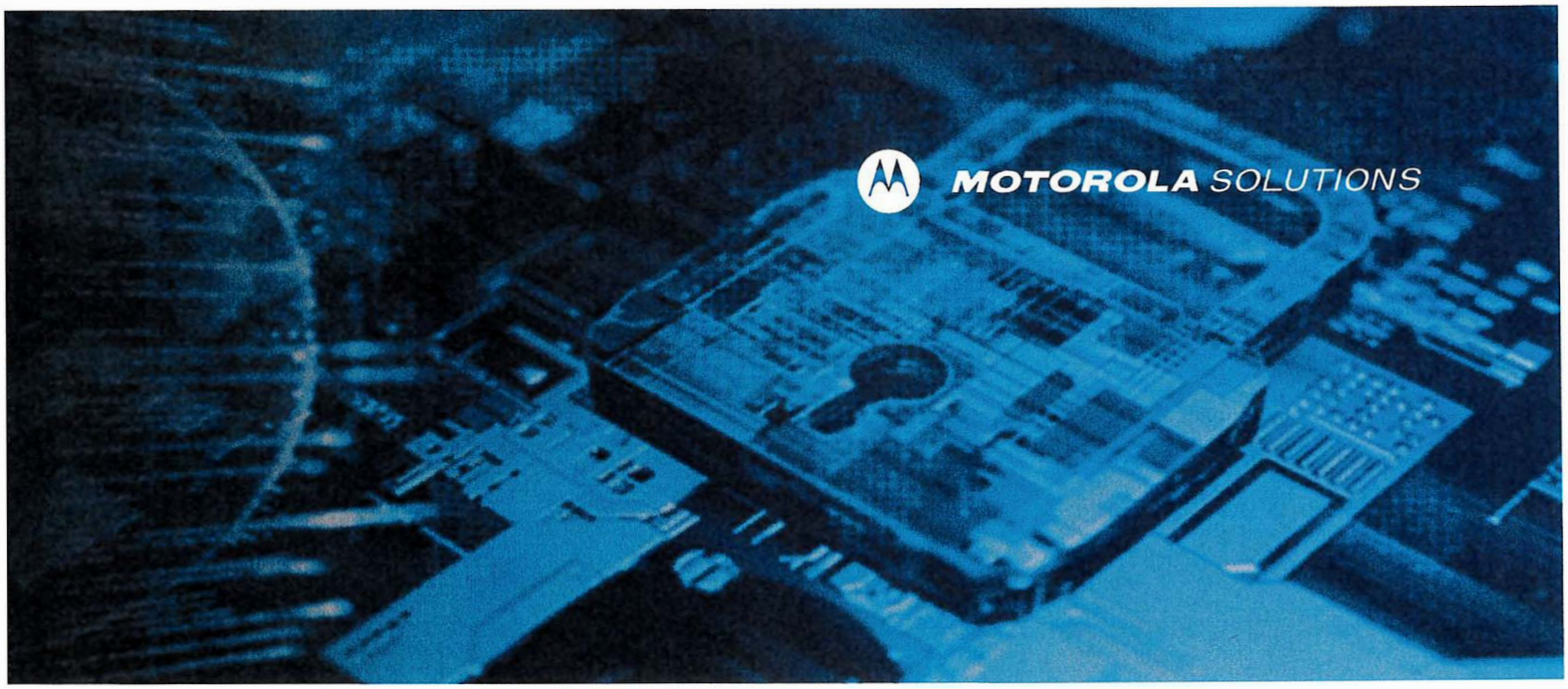
Budget FY:	Amount:
Previous Years	$420,002
2025-26	$52,362
2026-27	$981,223
2027-28	$1,012,357
TOTAL:	$2,465,944

For Acct/Budget Div. Use Only

Verified By: Melody M. Ugalde — Melody Ugalde 2026.04.17 11:59:17 -07'00'

Verified Funds Available: Digitally signed by Frank Liu Date: 2026.04.17 17:47:23 -07'00'

Date Approved: 4/17/26



Los Angeles Port Police

ISSI Activation - LAPD, LAPP & LAWA

January 9, 2026

EXHIBIT A-1

MOTOROLA SOLUTIONS

Motorola Solutions, Inc.
500 W Monroe Street, Ste 4400
Chicago, IL 60661-3781
USA

January 9, 2026

Captain Daniel Cobos
The Los Angeles Port Police
330 S. Centre St.
San Pedro, CA 90731

Subject: ISSI Activation - LAPD, LAPP & LAWA

Dear Captain Cobos,

Motorola Solutions, Inc. ("Motorola") is pleased to provide Los Angeles Port Police("LAPP") with this proposal to connect them to LAWA & LAPD via ISSI. Motorola is providing separate proposals to three agencies: Los Angeles Port Police ("LAPP"), Los Angeles World Airports ("LAWA"), and Los Angeles Police Department ("LAPD") to connect all three via ISSI. The three proposals are interdependent and will enable ISSI automatic roaming amongst the three City agencies. Since ISSI automatic roaming functionality relies on mutual agency agreements and participation, each proposal is conditioned on *all three agencies* entering into their respective contracts with Motorola and Motorola's full performance of all services to be provided under all three proposals.

To best meet the functional and operational specifications of this solicitation, our solution includes a combination of licenses and services, and provides:

- Visiting Radio user Licenses on LAPP's system to allow all LAWA & LAPD radios to be programmed natively into LAPP's system.
- Services to establish and verify ISSI autoroaming functionality between all 3 agencies for a specific, limited number of subscribers and talkgroups as defined in this proposal.
- Codeplug development support to modify up-to 10 existing codeplugs to enable ISSI functionality similar to LAPP's master ISSI codeplug.
- Services to program LAPP's radios (129 APX 8500 Mobiles & 261 APX 8000 Portables) with the ISSI codeplugs.

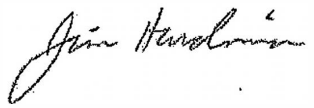
This proposal is subject to the terms and conditions in the Eligible Purchaser Order entered into between the City of Los Angeles and Motorola Solutions, Inc. dated April 14, 2025, Agreement No 25-10093 (the "Eligible Purchaser Order") and shall remain valid for a term of 60 days from the cover date. LAPP may accept this proposal by executing a change order or amendment under the Eligible Purchaser Order incorporating this proposal. Motorola would be pleased to address any concerns LAPP may have regarding the proposal. Any questions can be directed to your Motorola Account Manager, Richard Meza, at 714-928-2574 or Richard.meza@motorolasolutions.com.

We thank you for the opportunity to furnish Los Angeles Port Police with "best in class" solutions and we hope to strengthen our relationship by implementing this project. Our goal is to provide you with the best products and services available in the communications industry.

Sincerely,

Motorola Solutions, Inc.

Motorola Solutions, Inc.
500 W Monroe Street, Ste 4400
Chicago, IL 60661-3781
USA



Jim Hardimon
Area Sales Manager (Los Angeles)

Table of Contents

Section 1

System Description

1.1 Introduction

In response to The City of Los Angeles' request to establish intersystem connection to enhance interoperability between Los Angeles Police Department (LAPD), Los Angeles Port Police (LAPP) and Los Angeles World Airports (LAWA), Motorola has proposed our Inter-RF Subsystem Interface 8000 (ISSI 8000) solution to best suit the 3 City agencies' communication needs.

Due to each agency's own procurement process and contracts, this ISSI connection effort has been split into separate agency proposals addressed to the respective agency.

This proposal is for the Los Angeles Port Police (LAPP).

The following sections provide a high level description of the ISSI feature and the three systems to be connected.

This solution provides the following key benefits:

- Interoperability needed to coordinate a multi-agency response and communicate effectively during these mutual aid incidents.
- Flexibility to connect as a node on another P25 network regardless of that other system's radio frequency bands, manufacturer type, and release versions—allowing the creation of regional multi-system communications networks.
- Ability for multiple agencies to communicate seamlessly while still maintaining control through roaming configuration at the system or talkgroup level.

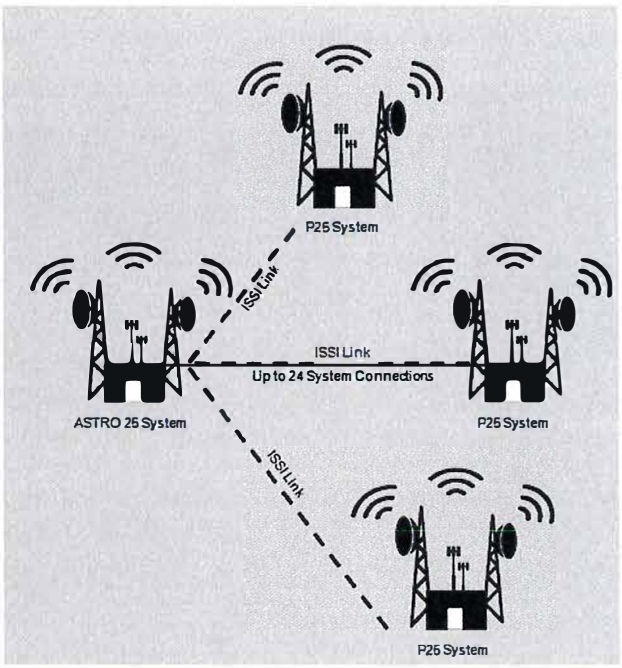


Figure 1: Point to Point ISSI Connections

1.2 High-Level System Designs

1.2.1 Los Angeles Police Department

The LAPD system is a hybrid conventional/P25 TDMA digital trunking simulcast radio system featuring both a primary and redundant controller. The primary controller is located at Mt. Lee with the secondary controller located at the Metropolitan Dispatch Center (MDC). LAPD's P25 Trunking cells/sites operate in the 7/800 MHz frequency band.

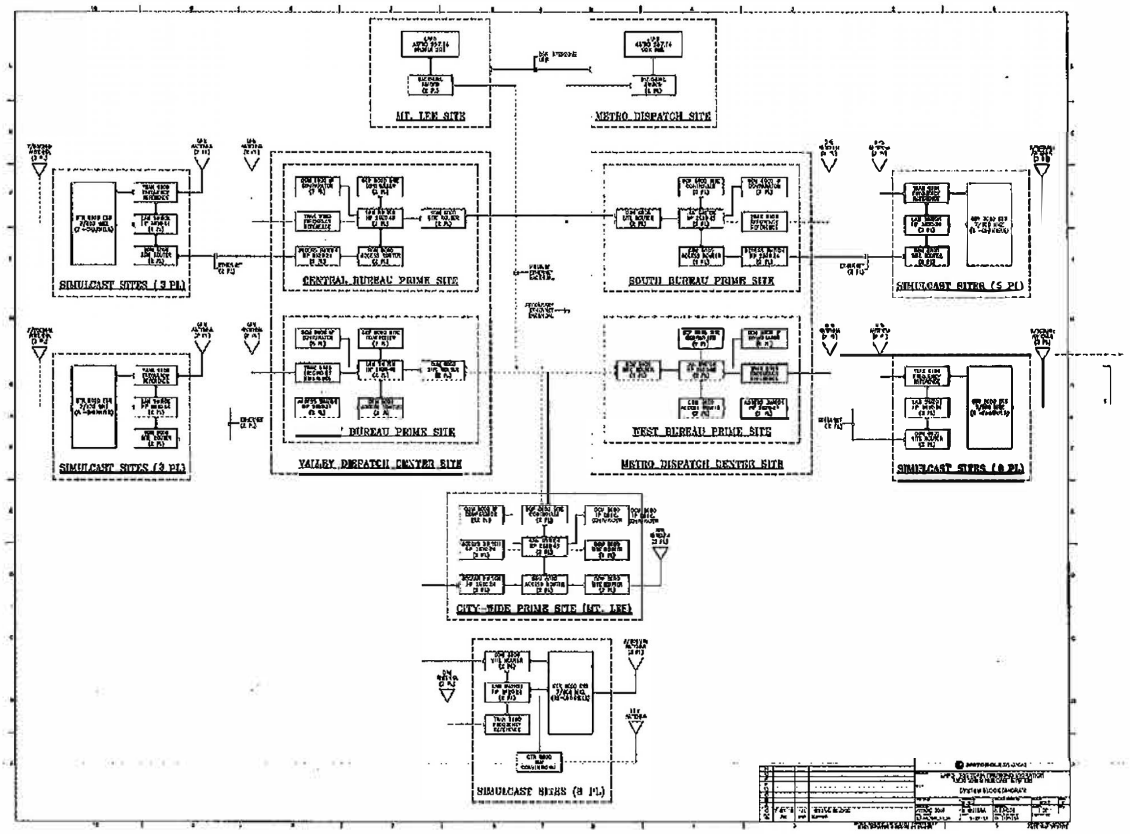


Figure 1-1: LAPD System Block Diagram

1.2.2 Los Angeles World Airports

The LAWA system is a UHF & 7/800MHz trunking radio system with a non-geographically redundant controller located at the Nash Data Center. For the purposes of ISSI interoperability this solution will focus on the 7/800MHz P25 TDMA digital trunking simulcast layer.

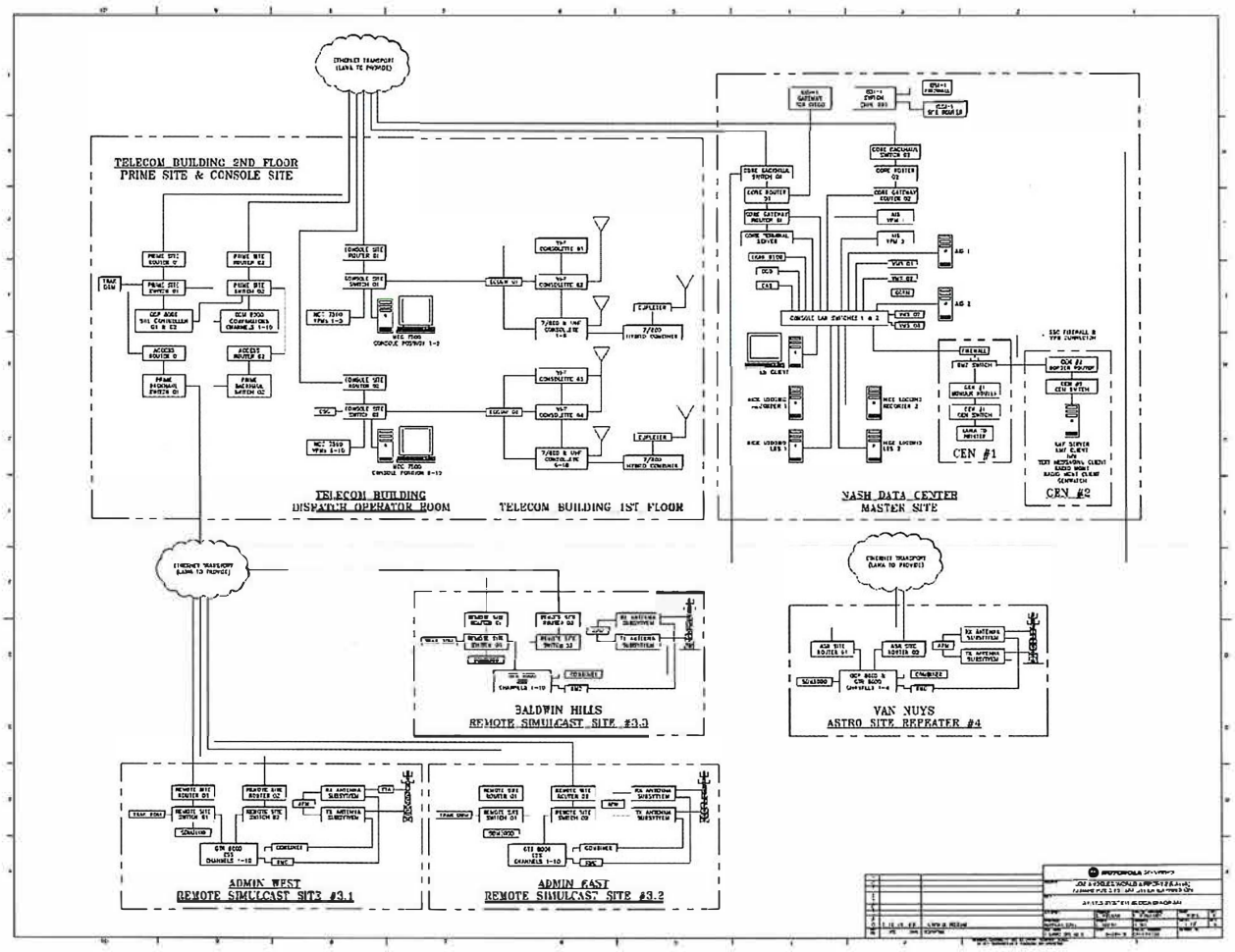


Figure 1-2: LAWA System Block Diagram

1.2.3 Los Angeles Port Police

The LAPP system is a geographically redundant 7/800MHz P25 TDMA digital trunking simulcast system with controllers located at the MLETC and Marine Exchange Facility. This system was cutover in 2023.

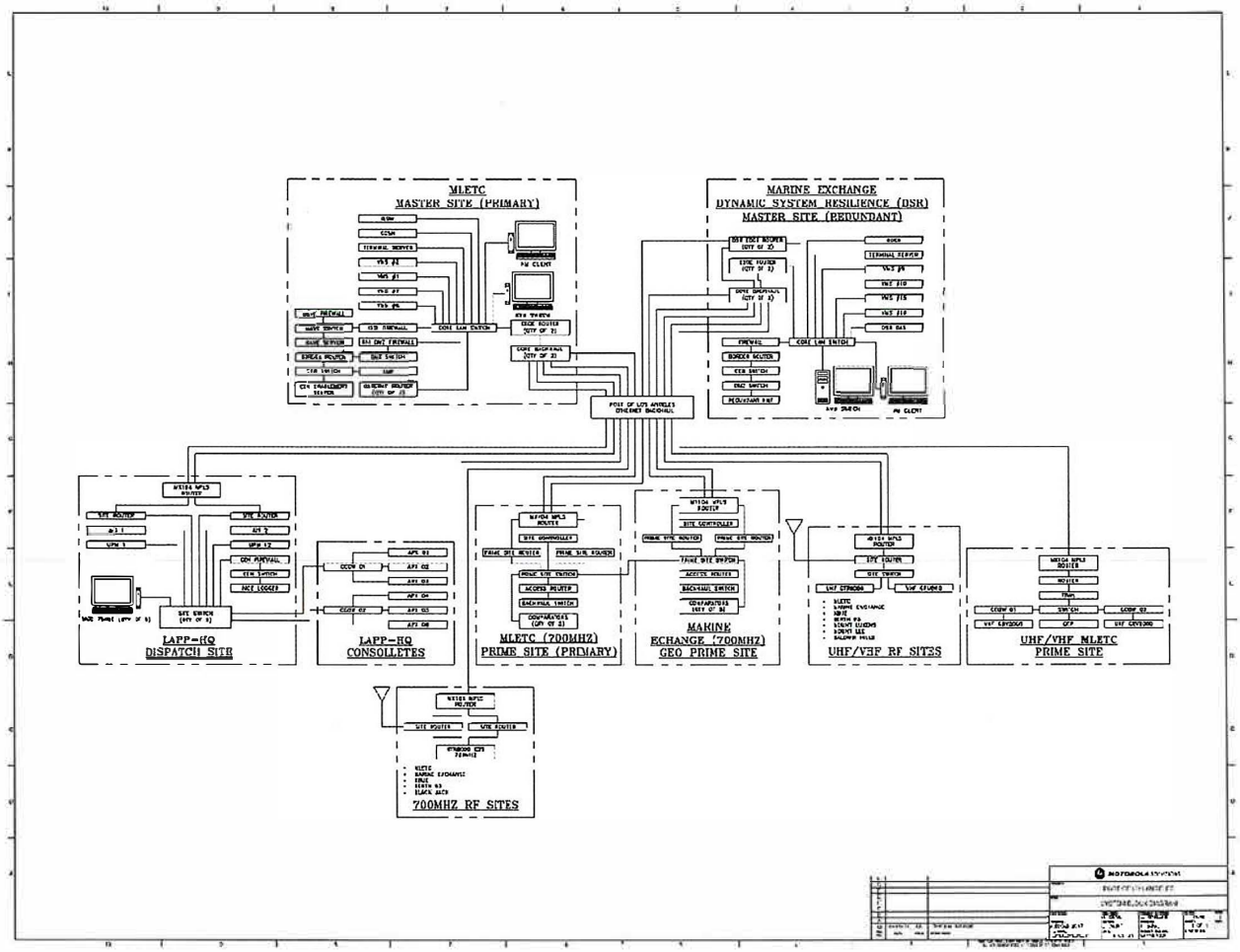


Figure 1-3: LAPP System Block Diagram

1.3 ASTRO 25 ISSI Standards-Based Interoperability Overview

ISSI 8000 is a P25 standard based, wireline interoperability solution that enables ASTRO 25 customers to connect to other P25 systems, regardless of their RF bands, manufacturer type, or release version.

ISSI will enable disparate P25 networks to:

- Interoperate with up to 24 neighboring P25 systems
- Extend their coverage area
- Build an autonomous interconnected network
- Support FDMA or TDMA talkgroup calls
- Maintain system security

The simultaneous talkgroup calls over ISSI are scalable, and the loading of local talkgroup calls can be tailored such that talkgroup resources are only counted when voice is carried to or from a foreign system.

Manual roaming over ISSI requires user intervention to switch the radio between its home personality and a personality of a foreign system. A console patch is required to bridge home and foreign talkgroups.

Automatic roaming over ISSI, on the other hand, requires no user intervention to do the switching of the radio back and forth between the home and foreign system. It is handled as if the radio is actually roaming to another site within its own home system.

COMMUNICATIONS
Extend communication and collaboration across interoperable P25 networks

CONTROL
Maintain full autonomy and control over your system

FLEXIBILITY
Operate across different frequency bands

USABILITY
Eliminate the need to use unfamiliar donor radios

CONTACT
Maintain communications and data connection with roaming personnel

Figure 2: Benefits of ISSI

1.4 Solution Design

1.4.1 Backhaul Connectivity

In order to establish connectivity between all three agencies - LAPP, LAWA and LAPD, Motorola will utilize Mt Lee as the Meet-Me point where all three agencies will have network connectivity.

LAPP is expected to reach Mt Lee as a remaining punchlist item under the POLA Trunking upgrade project.

The current ISSI network connection between LAWA & LAPD is located at the Baldwin Hills site. This existing connection uses a networking protocol that is different from what has been established at Mt Lee to more optimally connect multiple agencies together.

In order to reconfigure the connectivity between LAWA & LAPD at Mt Lee, MSI will baseline the existing network connections between the agencies and utilize that information to create an updated regional network design. In order to implement this design, MSI will work with partners such as IPKeys, AT&T (LAWA's existing contract), as well as the City's ITA. If required, any related networking equipment that may be out of support will be updated as a part of this effort. Finally the new network connection will be tested to Motorola's specifications. The end result of this effort will be for all three agencies to meet at LAPD's ISSI Switch located at Mt Lee.

The scope of work at Mt Lee would be to configure the MPLS routers and Meet-Me switch only. The actual microwave links will not be touched as a part of this scope, as it is not required.

The above defined task to configure and test the new network configuration between the ISSI subsystems from LAWA, LAPD, and LAPP at Mt. Lee will be completed by Motorola under the POLA Trunking upgrade project.

1.4.2 ISSI Interoperability Scope

With this implementation, LAPP will utilize two of their existing ISSI Licenses with Automatic Roaming to connect to the other two agencies. There are no additional ISSI Licenses included in this proposal.

The application level ISSI connectivity between the LAPP and LAPD DSR sites will be established as a part of this proposal, however, there is no redundancy on the networking level. All ISSI connections will be routed through Mt Lee without a redundant connection point.

The final solution resulting from all 3 agencies' proposals is designed to provide a functional ISSI system connecting the 3 City agencies' 7/800MHz P25 LMR systems and supporting voice services across the ISSI connection, including

- Group Call
- Emergency Call
- Emergency Alarm
- Clear or Encrypted Audio
- Unit & Group Registration
- PTT ID, Seamless Automatic Roaming
- Project 25 TDMA Access Mode

Inter-System Data services across ISSI are not part of this project scope.

In order to verify the ISSI functionality across the three City agencies, the acceptance test plan that is proposed is in alignment with the tests that were completed and signed off for the LAWA – LAPD connection. Motorola has accounted for up-to 1 week of ATP testing time in each agency's proposal. The details of the Acceptance Test plan and the specific locations where automatic roaming functionality will be verified and finalized during the post-sale Design Review process.

Motorola will provision all three systems with ISSI network configuration parameters. During the postsale implementation process, Motorola will work with the three agencies to define a limited, efficient number of inter-agency test trunking talkgroups as per ISSI best practice. Services have been included to provision these inter-agency talkgroups as well as (12) existing test portables, (3) existing test mobiles, and (2) existing test consoles. Motorola assumes that the test radios that LAPP will provide for this effort will be on the same firmware and software release version or that Motorola will be allowed to upgrade these test radios to the same firmware and software release version in order to efficiently manage the number of codeplugs that will need to be created per agency.

Note that each agency's ISSI automatic roaming license comes with the ability to process 10 simultaneous TG calls over the ISSI link. Additional talkpaths require additional licenses, network changes, as well as careful consideration as they may have an impact on the system capacity.

The resulting LAPP subscriber codeplugs created as per the SOW defined in this proposal will be able to support the addition of additional users from LAPP in a phased approach by LAPP, as long as the total number of talkgroups does not change.

This proposal includes the cost of up-to 6 total joint working sessions for pilot codeplug development discussions with the other two agencies. This pilot codeplug will support the future phased implementation of an operational interoperability plan between the three agencies. In order for the implementation of this project to commence, it is essential that each agency participate in these joint working sessions.

The desired outcome of these meetings would be to refine the test plan requirements and define the ISSI interoperability parameters such as:

- Talkgroup ID's
- Encryption CKR number
- Voice Type (TDMA)
- ISSI Gateway IP addresses
- Frequency Band Plans
- Cells/Sites to be used to support roaming
- The desired number of test encryption keys

1.4.3 ISSI Backhaul Requirements

The inter-system link is an IP-based link that can be configured for IPv4 or IPv6, depending on the capabilities of the foreign system. For consistency with existing backhaul implementation, Motorola plans to use IPv4 to enable Ethernet connectivity between LAPD, LAWA, and POLA at Mt. Lee.

The ISSI 8000 solution provides an Ethernet connection to connect to the inter-system link. The recommended specifications for the inter-system links without link encryption can be found below. If the

bandwidth specification for the link is below the minimum bandwidth required for the simultaneously active talkgroups, then all inter-system calls will suffer from poor audio quality.

The link specifications provided below were calculated based on the 10 licensed ISSI talkgroups between the City agencies. The final number of the talkgroups to be used for autoroaming is to be determined during the postsale implementation. An increase in the number of simultaneous talkpaths above the licensed count will increase the link specification requirements accordingly.

Table 1-1 Preliminary ISSI Link Specifications

ISSI Link	Recommended Max Jitter	Minimum Bandwidth Required	Recommended End-to-End Delay**
LAPD to LAWA	20ms	4Mbps	20ms
LAWA to POLA	20ms	4Mbps	20ms
LAPD to POLA	20ms	4Mbps	20ms

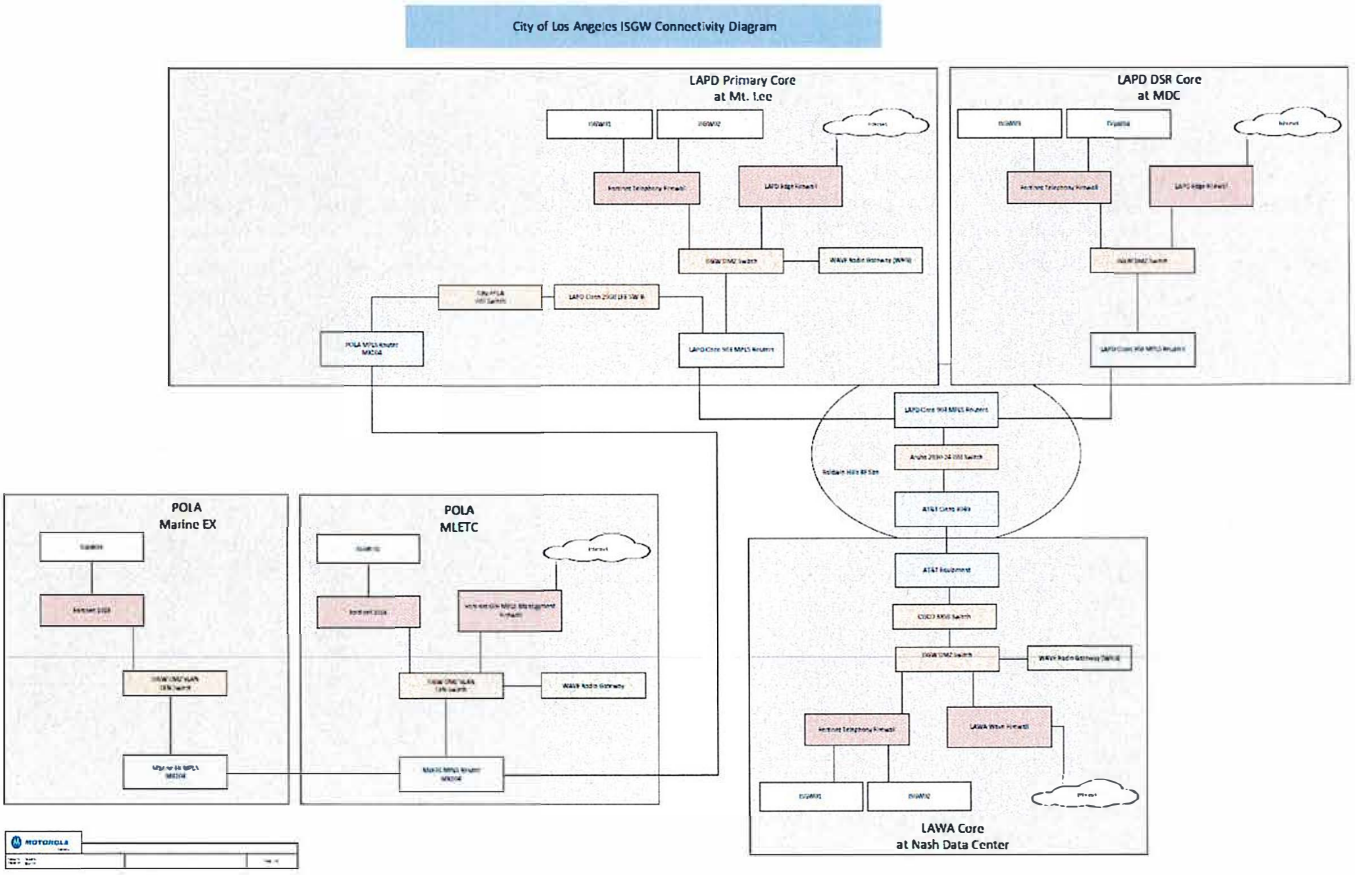
Jitter
The 20ms (core to remote zone core) 99th percentile values are end to end jitter specifications. For a particular system with Ethernet Site/interzone links, there may be multiple links in the call, each with its own jitter characteristics. Because jitter is not additive the derivation of end to end jitter is not trivial. In other words, it is not correct to add up jitter across a source and destination link to arrive at the overall value.

In the ASTRO system the method of calculating jitter across multiple link segments is done via ITU-T Recommendation Y.1541 Amendment 1.

Bandwidth Required
The 4Mbps value is the minimum committed information rate required. Changes to the autoroam talkgroup or mutual aid patchable talkgroup call count may change the minimum bandwidth requirement.

Delay
The 20ms is a conservative value to minimize the audio delay. The ISSI standard recommends up to 100ms maximum delay with up to 20ms average delay.

1.5 System Diagram



1.6 Visiting Radio User Licenses

As requested by the LAPP, this proposal also includes visiting radio user licenses on LAPP's system to allow all LAPD & LAWA radios to be programmed natively into LAPP's system. As such, these licenses are not necessary for ISSI. Provisioning of Radio IDs in the systems/subscribers is not included.

The Visiting Radio Users licenses are sold in bundles of 500 users. The number of bundles included per agency is defined in Table 1-2 below.

Table 1-2 Visiting Radio User Licenses

Agency	License Qty (500 Visiting Radio Users per license)
LAPP	68

1.7 ISSI Codeplug Development

Upon final testing and approval of LAPP's pilot ISSI portable and mobile radio codeplugs, Motorola will modify up-to 10 additional existing LAPP mobile and portable radio codeplugs with the ISSI parameters. LAPP is responsible for providing their different APX 8000 and APX 8500 codeplugs to Motorola.

1.8 Subscriber Programming

This proposal includes pricing for single-touch programming and keyloading to LAPP's existing Motorola APX Mobile and Portable radio fleet.

The table below summarizes the types and counts of radios that are included in the scope of this proposal:

	LAPP
APX 8500	129
APX 8000	261
MCC 7500	11

Section 2

Statement of Work

2.1 ISSI Activation and Codeplug Development Statement of Work

2.1.1 Interoperability Objectives

Through the RFI process and subsequent discussions, Motorola understands the following items to be the primary expected operational objectives of the ISSI Activation effort.

- Establish System to System ISSI connectivity between all three City agencies
- Establish DSR to DSR connectivity for LAPD/POLA for enhanced redundancy
- Enable and test automatic roaming at the system level for all three systems.
- Create and connect up-to 10 AES encrypted, mutual-aid talkgroups to be used city-wide across all three systems.
- Create & deploy the pilot dispatch console templates containing the mutual-aid talkgroups and an additional "citywide dispatch intercom" talkgroup for two console positions per agency.
- Update a pilot codeplug for each agency to include the mutual-aid channels and automatic roaming capabilities.

This proposal is intended as a proof of concept to be used to demonstrate ISSI between the three City of LA agencies. The proposed scope intends to show ISSI functionality and does not provide a day to day operational configuration or plan accounting for actual mission critical call processing on each agency's system TGs. Extensive multi-agency meetings, discussions and configuration to both the systems and subscribers are needed to deliver a regional and operational ISSI deployment.

2.1.2 Responsibilities Matrix

The following matrix is intended to capture the operational objectives and identify the responsible entity for each of the major tasks required for successful implementation of the objectives listed above.

Tasks	Motorola	LAPP
PRE-CONTRACT REQUIREMENTS		
Execute Contract for the City of LA ISSI interoperability		
Issue individual ISSI System Proposals to LAPD, LAWA & LAPP	X	
Review their own ISSI System Proposal		X

Tasks	Motorola	LAPP
Each agency to sign their respective contracts to initiate project		X
Deliverable: All three City of LA agencies (LAPD, LAWA, LAPP) in active contract with Motorola for the implementation of ISSI automatic roaming between them.		
PROJECT INITIATION		
Contract Finalization and Team Creation		
Execute contract and distribute contract documents.	X	X
Assign a Project Manager as a single point of contact.	X	X
Assign resources.	X	X
Schedule project kickoff meeting.	X	X
Deliverable: Signed contract, defined project team, and scheduled project kickoff meeting.		
Project Administration		
Ensure that project team members attend all meetings relevant to their role on the project.	X	X
Complete assigned project tasks according to the project schedule.	X	X
Submit project milestone completion documents.	X	
Identify designated technical point of contact per agency that is knowledgeable in radio programming.		X
Upon completion of tasks, approve project milestone completion documents.		X
Conduct all project work Monday thru Friday, 7:30 a.m. to 5:00 p.m.). Adjustments can be made with mutual agreement.	X	X
Deliverable: Completed and approved project milestones throughout the project.		
Project Kickoff / Design Review		
Define DDR duration prior to Meeting Date	X	
Introduce team, review roles, and decision authority.	X	X
Provide detailed MOU(s) containing autoroaming talkgroup requirements established between the agencies for the proof of concept implementation.		X
Review MOU(s) and update Interoperability design accordingly.	X	
Present the current ISSI design and operational requirements for the solution.	X	

Tasks	Motorola	LAPP
Present configuration and details of sites required by system design.	X	
Validate that radio sites can accommodate proposed equipment if applicable.	X	X
Provide approvals required to add equipment (if necessary) to proposed existing sites.		X
Review safety, security, and site access procedures.	X	
Provide ISSI connectivity & backhaul performance specifications and demarcation requirements.	X	
Review and update design documents, including System Description, Statement of Work, Project Schedule, and Acceptance Test Plan, based on Design Review agreements.	X	
Execute Change Order in accordance with all material changes to the Contract resulting from the Design Review.	X	

Deliverable: Finalized design documentation based upon "frozen" design, along with any relevant Change Order documentation.

SITE PREPARATION AND DEVELOPMENT		
Site Access		
Provide unescorted/pre-approved entry to sites identified in the project design documentation. For sites requiring City escorts, MSI shall provide sufficient notice for site access requests.		X

Deliverable: Access necessary to install system equipment at each site.

General Facility Improvements		
During Pre and Post Contract DDR, validate facility improvement requirements based upon the final solution design.	X	
If required, provide adequate AC/DC power, HVAC, grounding, lighting, cable routing, floor space, rack space, and surge protection based upon Motorola Solutions' Standards and Guidelines for Communication Sites (R56).		X

Deliverable: Sites meet physical requirements for equipment installation.

SYSTEM CONFIGURATION		
Develop Console and User Radio Pilot Codeplugs		
Review and determine appropriate settings for the pilot codeplug for LAPP	X	X
Review pilot codeplug requirements with LAPP, including user ID and talkgroup structures.	X	X

Tasks	Motorola	LAPP
Review pilot codeplug requirements with all City agencies together, including User ID and talkgroup structures.	X	X
Designate user group representatives for the user groups, to make timely decisions on their behalf.		X
Provide advisory input during pilot codeplug development.		X
Create and maintain an Encryption key for the ISSI Mutual Aid talkgroups.		X
Update one (1) pilot ISSI portable radio codeplug template for LAPP to include a new personality for the ISSI Talkgroups and selected automatic roaming enabled channels.	X	
Update one (1) pilot ISSI mobile radio codeplug template for LAPP to include a new personality for the ISSI Talkgroups and selected automatic roaming enabled channels.	X	
Update one (1) pilot ISSI dispatch console template for LAPP to include a new personality for the ISSI Talkgroups and selected automatic roaming enabled channels.	X	
Participate in a meeting to finalize any changes among user groups.	X	X
Review and approve initial pilot codeplug templates.		X
Program sample radios with approved templates and deliver for evaluation by the agencies. (3 Mobiles, 12 Portables)	X	
Program the approved console templates and ISSI encryption keys into the two pilot dispatch console positions for LAPP.	X	
Evaluate sample radio pilot codeplug functionality and provide feedback.		X
Approve final pilot codeplug templates.		X
Provide LAPP with a basic "User Instruction Manual" covering ISSI-centric codeplug parameters.	X	
Provide LAPP with limited system familiarization support for the ISSI functionality.	X	

Deliverable: Pilot ISSI codeplug completed and approved by LAWA and "User Instruction Manual" provided.

System Configuration		
Ensure network can provide Ethernet (bandwidth, latency, jitter) requirements as indicated in Section 1.4.3 of this proposal.		X
For LAPP, configure the existing Microwave Backhaul and MPLS routers to support ISSI connectivity.	X	
For Meet-Me / Connection locations (Mt. Lee, Baldwin Hills, etc.) provide Ethernet connectivity between floors, racks, shelters, etc.		X

Tasks	Motorola	LAPP
Program and patch a limited number of regional ISSI talkgroups into each agency core.	X	
Configure the determined number of limited ISSI talkgroups to require AES encryption.	X	
Provide radio user licenses on the LAPP system as defined in the System Description to allow all LAPD and LAWA radios to be programmed natively into LAPP's system. Provisioning of Radio IDs in the systems/subscribers is not included.	X	

Deliverable: LMR System is configured for the ISSI functionality between the three City Agencies.

SYSTEM OPTIMIZATION AND TESTING		
Functional Acceptance Testing		
Provide advance copies of functional Acceptance Test Plan for City's review.	X	
Approve ATPs.		X
Verify the Auto-Roaming functionality and features of the ISSI solution.	X	
Verify the Mutual-Aid talkgroup functionality and features of the ISSI solution.	X	
Verify the console-to-console intercom functionality and features of the ISSI solution.	X	
Witness the functional testing.		X
Document all issues that arise during the acceptance tests.	X	
If any major task for the system as contractually described fails during acceptance testing or beneficial use, repeat that particular task after Motorola Solutions determines that corrective action has been taken.	X	
Resolve any minor task failures before Final System Acceptance.	X	
Document the results of the acceptance tests and present for review.	X	
Review and approve final acceptance test (FATP) results.		X
Perform a successful 30 Days Pilot Phase test period and apply corrective action as needed during test period.	X	X

Deliverables: Completion of functional testing, 30 Days pilot test period, and approved by LAPP.

Codeplug Development

Provide additional codeplugs that are in use in the LAPP radios for modification to enable ISSI functionality.		X
Modify up-to 10 additional existing LAPP codeplugs to enable the ISSI functionality as defined in Section 1.7 of this proposal.	X	
Program LAPP radios with the provided codeplugs as per SOW defined in Section 2.2 of this proposal.	X	

Deliverable: Up-to 10 additional variants of ISSI codeplugs created and delivered to LAPP.

PROJECT TRANSITION

Transition to Warranty

Provide 3-year support for the ISSI hardware components for LAPP under their existing radio system support contract. Note that support of the existing MPLS equipment was covered during the manufacturers' one year warranty and any extended support is not covered in this proposal.	X	

Deliverable: Service information delivered and approved by Customer

Finalize Documentation and System Acceptance

Provide manufacturer's installation material, parts list and other related material to LAPP upon project completion.	X	
Provide an electronic as-built system manual. The documentation will include the following: • ATP Test Checklists • Functional Acceptance Test Plan Test Sheets and Results • Equipment Inventory List • System Interconnect Diagrams • ISSI IP Plan • Updated Router / Microwave Configurations • Console Programming Template (where applicable) • Codeplugs Developed as part of this proposal Drawings will be delivered in Adobe PDF format.	X	
Receive and approve documentation.		X
Execute Final Project Acceptance.	X	X

Deliverable: All required documents are provided and approved. Final Project Acceptance.

2.2 Subscriber Programming Statement of Work

Following the ISSI activation in 2024, Motorola will work with LAPP to modify up-to 10 additional existing codeplugs to enable a new personality for the ISSI Talkgroups and selected automatic roaming enabled channels.

Motorola will provide a subscriber team that will setup a programming trailer at the LAPP headquarters for programming and encryption keyloading the (261) APX 8000 portable radios and (129) APX 8500 mobile radios.

This quote has been generated with the assumption that LAPP will be able to provide at-least 30-50 portables per day and 10-20 mobiles to be serviced per day.

During this time, LAPP's MCC 7500 consoles will also be loaded with updated elite templates containing the ISSI talkgroups.

The proposal pricing is built on the approach that the teams will be utilized to their maximum capacity. Motorola will work with LAPP to ensure a plan and corresponding schedule is established before the subscriber programming effort begins. It is the responsibility of LAPP to ensure the teams are being utilized to their full capacity. Any reduction in the expected throughput due to customer delays will lead to longer schedules and therefore, increased costs.

This section further delineates the general responsibilities between Motorola and LAPP as agreed to by contract.

Motorola Responsibilities

Motorola's responsibilities include the following:

- Set up test and programming equipment table (for portables) and trailer (for mobiles) at the LAPP provided space at the LAPP headquarters.
- Receive each portable unit and log into database.
- Remove each mobile unit from vehicle and relocate to trailer to be serviced.
- Read and store existing radio codeplug.
- Connect radio to programming device and initiate programming.
- Read and record newly programmed codeplug for each unit and save.
- Keyload encryption keys to mobile and portable radios using customer provided KVL.
- Label mobile and portable radios with date and version.
- Test each radio for valid operations.
- Reinstall mobile radios into vehicle and verify operation.
- Coordinate the activities of all Motorola subcontractors under this contract.

Los Angeles Port Police Responsibilities

General responsibilities for LAPP include the following:

- Provide adequate space and power for a service vehicle/lab for mobile radios as well as a table setup for servicing portable radios.
- LAPP is responsible for indicating which codeplugs are to be loaded onto which radios.

- LAPP will be responsible for providing their own cache of spare portable radios in order to kick start the subscriber programming effort while minimizing operational disruption.
- LAPP is responsible for bringing their subscribers to the table setup for servicing portables and trailer setup for servicing mobile radios.
- LAPP will provide the KVL with the appropriate encryption key(s) for loading onto the radios.

LAPP is responsible for ensuring a minimum throughput of 30 to 50 portables and 10 to 20 mobiles per day is provided for being serviced.

2.3 ISSI Activation and Codeplug Development Assumptions and Considerations

Motorola has made several assumptions and considerations in preparing this proposal, which are noted below.

- A memorandum of understanding and inter-agency agreement has been agreed upon between LAPP, LAWA and LAPD to enable and coordinate system and project resources to establish ISSI connectivity.
- Motorola is planning on using 2 of the existing automatic roaming licenses on LAPP's core. This design does not include any additional ISSI licenses.
- This proposal is only limited to configuring a limited number of portables, mobiles, and consoles, and a limited number of automatic roaming talkgroups between the three agencies.
- It is assumed that the test radios that LAPP will provide for will be on the latest firmware and software release version or that Motorola will be allowed to upgrade these test radios to the latest firmware and software release version in order to efficiently manage the number of codeplugs that will need to be created per agency.
- Codeplug development discussions need to include the appropriate decision makers from each of the three agencies / City of LA in order to finalize over 6 working sessions. Any additional sessions beyond the 6 will require a Change Order.
- For the initial ISSI activation, a limited number of subscribers will be programmed to perform ATP testing as referenced in Section 1.4.2 of this proposal. Up-to two subscriber programming touches are included for these limited subscribers in case modifications are required based on customer feedback. Once these pilot codeplugs have been tested and approved, the programming effort for the remaining subscribers as referenced in Section 1.8 will kick off.
- Future ISSI roaming operations will require further detailed discussions and MOUs to be established between the City of LA Agencies.
- Although each ATP test case may not be run with all 12 portables and 3 mobiles, it will be ensured that all 12 configured portables and 3 configured mobiles are tested at least once to ensure that they are programmed correctly to roam between the three systems.
- Visiting Radio User licenses are included in this proposal, however, the visiting subscriber database in the provisioning manager of the foreign systems will not be updated to add all Visiting Radio IDs for the purposes of manual roaming.
- The configured automatic roaming talkgroups and mutual aid talkgroups will be limited to the three City of LA Agencies – LAPD, LAPP and LAWA only. Any additional agencies such as LARICS, ICI, Orange County, etc. are not a part of the scope of this proposal.

- Compared to call processing within an ASTRO Core, ISSI has a limited set of Project 25 features.
- Automatic roaming across ISSI depends on configured GTR 8000 site equipment and TDMA and AES encryption capable APX subscribers on LAPP, LAWA's and LAPD's trunking systems.
- All the sites in each system are TDMA capable. As such, a transcoder is not required and transcoders are not included in this proposal.
- Ethernet Site Links between the three systems meet the ISSI bandwidth requirement and Ethernet Service Level Agreement.
- This solution is designed to enable voice services across the ISSI connection. Inter-System Data services across ISSI are not part of this project scope.
- Customer has power, space, and grounding availability to accommodate any new hardware equipment that may be required for this solution.
- The demarcation point between the three agencies shall be at the Mt Lee site.
- Any required FCC licensing will be provided by Customer.
- Approved local, State or Federal permits as may be required for the installation and operation of any required equipment are the responsibility of the Customer.
- All required Ethernet connections will be within the industry standard 100 meter limitations.
- Because ISSI automatic roaming functionality relies on mutual agency agreements and participation, *all three* interdependent proposals submitted to LAPP, LAWA, and LAPD are required to be accepted by each of the three City agencies as a condition for Motorola providing the products and services detailed in this proposal.

2.4 Subscriber Programming Assumptions & Considerations

- Algorithm changes or flashes are not included in the scope of this proposal.
- Radio alignment or firmware upgrade is not included in the scope of this proposal.
- It is assumed that LAPP's subscribers are at a minimum on firmware version 18 or newer.
- Work will be conducted on scheduled days during normal business hours, M-F 8am-5pm. Motorola will be at the designated location(s) during these hours and it is the responsibility of LAPP to ensure that sufficient subscribers are available to be serviced.
- Services will be provided at the LAPP headquarters.
- There are no prevailing wage requirements.
- The designated service location(s) will provide adequate space and power service for a Service Vehicle/Lab to set up and connect to AC Power. A 40 Amp service will be required. Generators can be provided at an additional cost if sufficient power is not available.
- The designated service location(s) parking lot will have sufficient space to accommodate the mobile radio lab and the required number of vehicles per day being serviced.
- Testing of the antenna lines and antennas, or their replacement, is not included in the scope of this proposal.
- No additional features, flashcode updates, or hardware is included in this proposal.

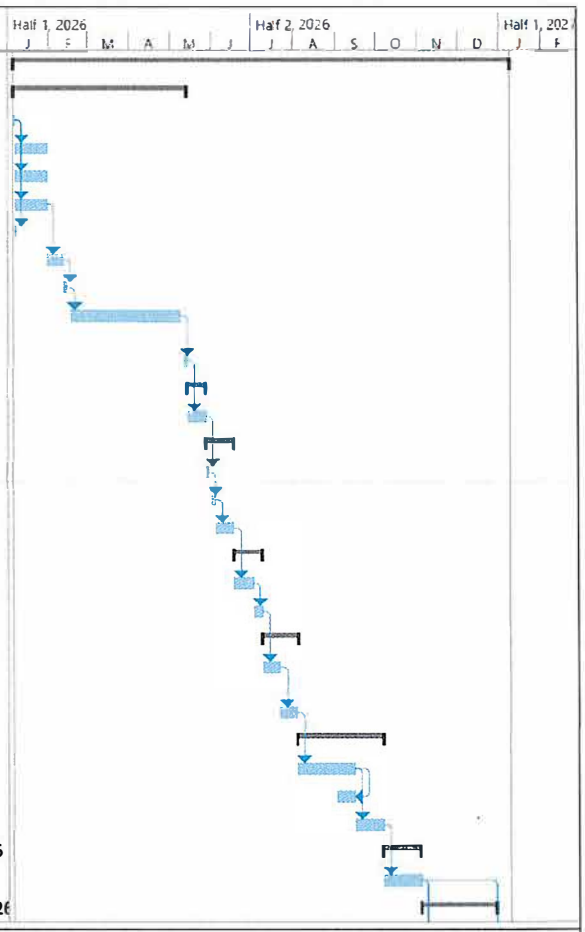
- Any subscriber radio repair is not included in the scope of this proposal.
- This proposal is based on a "one-time only" programming approach. Motorola will not be responsible for tracking down unreachable / unavailable subscribers.

2.5 Project Schedule

The estimated time for completion of the project is 13 months from Project Kickoff through Final Project Acceptance. A detailed project schedule will be prepared by the assigned Motorola Solutions Project Manager during Detailed Design Review.

Below is a snapshot of the preliminary project schedule prepared for this proposal.

ID	Task Name	Duration	Start	Finish
1	**LAPP ISSI Implementation to LAWA & POLA**	**265 days**	**Mon 1/5/26**	**Fri 1/8/27**
2	**Project Planning**	**93 days**	**Mon 1/5/26**	**Wed 5/13/26**
3	Project Kick-Off	1 day	Mon 1/5/26	Mon 1/5/26
4	Schedule Created	18 days	Tue 1/6/26	Thu 1/29/26
5	Detailed Design Information Acquisition	18 days	Tue 1/6/26	Thu 1/29/26
6	System / Network Diagrams Completed	18 days	Tue 1/6/26	Thu 1/29/26
7	IPKeys engaged for network configurati	1 day	Tue 1/6/26	Tue 1/6/26
8	IP Plan Created	8 days	Fri 1/30/26	Tue 2/10/26
9	Detailed Design Review (DDR) Meeting	3 days	Wed 2/11/26	Fri 2/13/26
10	Biweekly meetings involving all parties over 3 months	60 days	Mon 2/16/26	Fri 5/8/26
11	Customer to Review and Approve DDR	3 days	Mon 5/11/26	Wed 5/13/26
12	**Equipment**	**10 days**	**Thu 5/14/26**	**Wed 5/27/26**
13	Process Equipment List	10 days	Thu 5/14/26	Wed 5/27/26
14	**Functional Link and Connectivity**	**15 days**	**Thu 5/28/26**	**Wed 6/17/26**
15	Motorola Switch Configuration (Mt Lee)	2 days	Thu 5/28/26	Fri 5/29/26
16	Link Verification (Y.1564)	3 days	Mon 6/1/26	Wed 6/3/26
17	Program ISSI Hardware	10 days	Thu 6/4/26	Wed 6/17/26
18	**ISSI Configuration**	**15 days**	**Thu 6/18/26**	**Wed 7/8/26**
19	ISSI Programming	10 days	Thu 6/18/26	Wed 7/1/26
20	Functional Testing	5 days	Thu 7/2/26	Wed 7/8/26
21	**Subscriber Prep**	**18 days**	**Thu 7/9/26**	**Mon 8/3/26**
22	APX Subscriber Programming and Keyloading	9 days	Thu 7/9/26	Tue 7/21/26
23	Console Programming and Keyloading	9 days	Wed 7/22/26	Mon 8/3/26
24	**Testing**	**45 days**	**Tue 8/4/26**	**Mon 10/5/26**
25	30 day Pilot Test Period	30 days	Tue 8/4/26	Mon 9/14/26
26	Second Touch for Subscriber Programm	9 days	Wed 9/2/26	Mon 9/14/26
27	ATP Testing	15 days	Tue 9/15/26	Mon 10/5/26
28	**Codeplug Development**	**20 days**	**Tue 10/6/26**	**Mon 11/2/26**
29	Codeplug Development	20 days	Tue 10/6/26	Mon 11/2/26
30	**Subscriber Programming**	**40 days**	**Tue 11/3/26**	**Mon 12/28/26**



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ID	Task Name	Duration	Start	Finish
31	Subscriber Programming	40 days	Tue 11/3/26	Mon 12/28/26
32	**Finalize**	**9 days**	**Tue 12/29/26**	**Fri 1/8/27**
33	Punchlist Resolution	3 days	Tue 12/29/26	Thu 12/31/26
34	Finalize Documentation (System Manua	4 days	Fri 1/1/27	Wed 1/6/27
35	Final Acceptance	2 days	Thu 1/7/27	Fri 1/8/27

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Section 3

Acceptance Test Plan

System Acceptance of the proposed solution will occur upon successful completion of a Functional Acceptance Test Plan (FATP), which will test the feature and functions to verify that the ISSI solution operates according to its design. A preliminary Functional Acceptance Test is summarized below. The FATP will be jointly developed and finalized during the proposed working sessions as well as the Design Review.

In order to optimize testing of the automatic roaming between the agencies, Motorola will work with the agencies to select key locations where we expect the radios to affiliate to a foreign system via ISSI. Examples of these locations may be the tunnels at LAX, Underground train stations, and inside the Port HQ building.

This proposal includes up-to 1 week of ATP testing time for LAPP. Motorola expects this to be sufficient to verify the recommended Acceptance test cases as well as automatic roaming between the different systems. Any additional time required to perform Acceptance Testing will result in a change order.

3.1 Automatic Roaming

3.1.1 Automatic Roaming - Automatic Roaming to Foreign System

DESCRIPTION

This test demonstrates that a home radio can roam automatically from its home system to a foreign system without manually changing mode on the radio.

3.1.2 Automatic Roaming - Talkgroup Call for Home Talkgroup

DESCRIPTION

This test will demonstrate that a group call initiated from a home radio/console in the local system that is affiliated to a home talkgroup can be heard by a home radio that has roamed to a foreign system and is affiliated to the home talkgroup.

This test will also demonstrate that a group call initiated from a home radio that has roamed to a foreign system and is affiliated to a talkgroup home to the local system can be heard by home radio and console affiliated to the home talkgroup in the local system.

3.1.3 Automatic Roaming - Secure Talkgroup Call for Home Talkgroup

DESCRIPTION

This test will demonstrate that a secure group call initiated from a home radio/console in the local system that is affiliated to a home talkgroup can be heard by a home radio that has roamed to a foreign system and is affiliated to the home talkgroup.

3.1.4 Automatic Roaming - Emergency Alarm and Call for Home Talkgroup

DESCRIPTION

This test will demonstrate that emergency alarm and call initiated from a home radio that has roamed to a foreign system and is affiliated to a talkgroup home to the local system can be heard by a console that is affiliated to the home talkgroup in the local system. This test also verifies that the emergency can be acknowledged and knocked down by the console in the local system.

3.1.5 Automatic Roaming - Talkgroup Call for Foreign Talkgroup

DESCRIPTION

This test will demonstrate that a group call initiated from a home radio/console in the local system that is affiliated to a foreign talkgroup can be heard by a home radio that has roamed to the foreign system and is affiliated to the foreign talkgroup.

This test will also demonstrate that a group call initiated from a home radio that has roamed to a foreign system and is affiliated to a talkgroup home to the foreign system can be heard by home radio and console affiliated to the foreign talkgroup in the local system.

3.1.6 Automatic Roaming - Secure Talkgroup Call for Home Talkgroup

DESCRIPTION

This test will demonstrate that a secure group call initiated from a home radio/console in the local system that is affiliated to a foreign talkgroup can _be heard by a home radio that has roamed to a foreign system and is affiliated to the foreign talkgroup.

This test will also demonstrate that a secure group call initiated from a home radio that has roamed to a foreign system and is affiliated to a talkgroup home to the foreign system can be heard by home radio and console affiliated to the foreign talkgroup in the local system.

3.1.7 Automatic Roaming - Emergency Alarm and Call for Foreign Talkgroup

DESCRIPTION

This test will demonstrate that emergency alarm and call initiated from a home radio that has roamed to a foreign system and is affiliated to a talkgroup home to the foreign system can be heard by a console that is affiliated to the foreign talkgroup in the local system. This test will also demonstrate that the emergency can be acknowledged and knocked down by the console in the local system.

Section 4

Service/Warranty

Motorola will provide support for the existing ISSI hardware components for LAPP under their existing radio system support contracts. Note that support of the existing MPLS equipment was only covered during the manufacturers' one year warranty period and any extended support is not included in this proposal.

The table below provides the validity dates for each agency's service contracts.

Table 5-1 Existing Service Contract Validity

Agency	Existing Service Contract
POLA	Valid until 6/30/27

Section 5

Bill of Materials

AGENCY	QUANTITY	NOMENCLATURE	DESCRIPTION
LAPP	1	SQM01SUM0323	ASTRO MASTER SITE
LAPP	1	CA03517AB	ADD: CORE EXPANSION
LAPP	68	UA00664AA	ADD: 500 VISITING RADIO USER LICENSES

Section 6

Conventional GTR Equipment Spares

The following equipment spares are included in this proposal. This equipment is blackbox only and does not include any services. The proposed equipment includes Motorola's standard 1 year warranty.

QTY	NOMENCLATURE	DESCRIPTION
	GTR 8000 Base Radio	
1	T7039A	BASE RADIO, GTR 8000
1	CA03863AA	ADD: ASTRO SYSTEM RELEASE 2022.1
1	X640AL	ADD: UHF R2 (435-524 MHZ)
1	CA01948AA	ADD: DIGITAL CONVENTIONAL SOFTWARE
1	CA01953AA	ADD: POWER EFFICIENCY PACKAGE
1	CA01502AA	ADD: ASTRO 25 CONV SIMULCAST SW
1	X153AW	ADD: RACK MOUNT HARDWARE
	GTR 8000 Base Radio	
1	T7039A	BASE RADIO, GTR 8000
1	CA03863AA	ADD: ASTRO SYSTEM RELEASE 2022.1
1	X640AL	ADD: UHF R2 (435-524 MHZ)
1	CA01948AA	ADD: DIGITAL CONVENTIONAL SOFTWARE
1	CA01953AA	ADD: POWER EFFICIENCY PACKAGE
1	CA01502AA	ADD: ASTRO 25 CONV SIMULCAST SW
1	X153AW	ADD: RACK MOUNT HARDWARE
	GTR 8000 Base Radio	
1	T7039A	BASE RADIO, GTR 8000
1	CA03863AA	ADD: ASTRO SYSTEM RELEASE 2022.1
1	X640AL	ADD: UHF R2 (435-524 MHZ)
1	CA01948AA	ADD: DIGITAL CONVENTIONAL SOFTWARE
1	CA01953AA	ADD: POWER EFFICIENCY PACKAGE
1	CA01502AA	ADD: ASTRO 25 CONV SIMULCAST SW
1	X153AW	ADD: RACK MOUNT HARDWARE
	GTR 8000 Base Radio	
1	T7039A	BASE RADIO, GTR 8000
1	CA03863AA	ADD: ASTRO SYSTEM RELEASE 2022.1
1	X640AL	ADD: UHF R2 (435-524 MHZ)
1	CA01948AA	ADD: DIGITAL CONVENTIONAL SOFTWARE

1	CA01953AA	ADD: POWER EFFICIENCY PACKAGE
1	CA01502AA	ADD: ASTRO 25 CONV SIMULCAST SW
1	X153AW	ADD: RACK MOUNT HARDWARE
6	DLN6805A	FRU: ENERGY EFFICIENT POWER SUPPLY
6	DLN6896A	FRU: PA UHF R2
6	DLN6898A	FRU: FAN MODULE

Section 7

Pricing Summary

The pricing provided below is valid for 60 days from the date of this proposal.

7.1 Pricing Summary

Description	Price (USD)
Licenses: **- (68) Bundles of 500 Radio User Licenses**	$68,000
Discount (Incentive)	*-$68,000*
Project Services: **- Project Management** **- Engineering Support** **- Detailed Design Review** **- Programming and Configuration** **- Acceptance Testing**	$205,251
Codeplug Development **- Up-to 10 variants of codeplugs to be modified to enable the ISSI feature**	$66,534
Subscriber Programming: **- Programming and Keyloading Services (261 APX 8000 portables, 129 APX 8500 Mobiles)**	$168,796
Technical Support Services:	$105,270
Project Services and Licesnses Total	**$545,851**
Equipment Spares	$134,787
Est. Tax on Equipment Spares (9.75%)	$13,142
LAPP Grand Total (including equipment spares and taxes)	**$693,780**

7.2 Payment Terms

The Contract Price in U.S. dollars is $693,780.

Except for a payment that is due on the Effective Date, Customer will make payments to Motorola within thirty (30) days after the date of each invoice. Customer will make payments when due in the form of a check, cashier's check, or wire transfer drawn on a U.S. financial institution. If Customer has purchased additional Professional or Subscription services, payment will be in accordance with the applicable addenda. Payment for the System purchase will be in accordance with the following milestones.

System Purchase:

- 50% of the Contract Price due upon the Customer Kickoff Meeting;

- 25% of the Contract Price due upon completion of the FATP;
- 25% of the Contract Price due upon completion of Codeplug Development.

Subscriber Programming:

- 50% of the Contract price for Subscriber Programming due upon Contract Execution;
- 50% of the Contract price for Subscriber Programming due upon final acceptance.

Blackbox Equipment Purchase:

- 100% of the Contract price for equipment due upon equipment shipment.

Motorola shall make partial shipments of equipment and will request payment upon shipment of such equipment. In addition, Motorola shall invoice for installations completed on a site-by-site basis or when professional services are completed, when applicable. The value of the equipment shipped/services performed will be determined by the value shipped/services performed as a percentage of the total milestone value. Unless otherwise specified, contract discounts are based upon all items proposed and overall system package. For invoicing purposes only, discounts will be applied proportionately to the FNE and Subscriber equipment values to total contract price. Overdue invoices will bear simple interest at the maximum allowable rate by state law.

Section 8

Contractual Documentation

Motorola Solutions, Inc. ("Motorola") is providing separate proposals to three agencies: Los Angeles Port Police ("LAPP"), Los Angeles World Airports ("LAWA"), and Los Angeles Police Department ("LAPD"), to connect all three via ISSI. The three proposals are interdependent and will enable ISSI automatic roaming amongst the three City agencies. Since ISSI automatic roaming functionality relies on mutual agency agreements and participation, each proposal is conditioned on *all three agencies* entering into their respective contracts with Motorola and Motorola's full performance of all services to be provided under all three proposals.

Motorola's proposal to LAPP is subject to the terms and conditions of the Eligible Purchaser Order and issuance of a change order or amendment thereunder incorporating this proposal. In the event of a conflict between the terms of the Eligible Purchaser Order and this proposal, the terms of the Eligible Purchaser Order shall take precedence.

Additionally, a termination of any interdependent agreement by LAPP, LAWA, and LAPD for Motorola's Inter-RF Subsystem Interface 8000 (ISSI 8000) solution will necessitate an immediate termination of this Agreement. Customer shall pay Motorola for the conforming products delivered and all services performed up to the date of termination