

RESOLUTION OF THE CITY COUNCIL

No. 503

Approved November 26, 2019

RESOLVED, That the Members of the Providence City Council hereby Authorize Approval of the following Contract Award to Piggyback the State of RI MPA #395 by the Board of Contract and Supply, in accordance with Section 21-26 of the Code of Ordinances of the City of Providence.

Motorola Solutions, Inc.
(Public Property)

\$5,510,609.00

IN CITY COUNCIL

NOV 21 2019

READ AND PASSED

Sabrina Mates
PRES.

Tina L. Mastrosicani
ACTING CLERK

I HEREBY APPROVE.

[Signature]
Mayor

Date: 11/26/19

City Hall, Room 310
25 Dorrance Street
Providence, RI 02903
P: 401.421.7740, ext 577
F: 401.351.1056



Office of the Internal Auditor

October 23, 2019

Mr. Shawn Selleck
City Clerk's Office
City of Providence
25 Dorrance Street
Providence, RI 02903

Dear Shawn:

I am writing to request that the following requested contract awards be submitted to the City Council and the Finance Committee for approval:

- **Information Technology**
 - Request to pay **Asana** in the amount of **\$51,953.50** in accordance with the Code of Ordinance, Section 21-26 (b);
- **Public Property**
 - Request to piggyback the State of RI MPA #395 for the upgrade of APX Mobile and Portable Radios for Providence Police and Fire Departments in the amount of **\$5,510,609** with **Motorola Solutions, Inc.** in accordance with the Code of Ordinance, Section 21-26 (a).

Sincerely,

A handwritten signature in cursive script that reads "Gina M. Costa".

Gina M. Costa
Internal Auditor

Cc: James Silveria, Chief Information Officer
Michael Borg, Director of Public Property
Molly Hannon Associate Director of Purchasing
James J. Lombardi, III, Treasurer/Senior Advisor to City Council

Jorge O. Elorza
Mayor



Michael D. Borg
Director of Public Property

October 17, 2019

The Honorable Jorge O. Elorza
Chairman, Board of Contract & Supply
City Hall
Providence, RI 02903

RE: (#) Approval to piggyback the State of RI MPA #395 for the upgrade of APX Mobile and Portable Radios for Providence Police and Fire Departments.

ID: 26838

Dear Mayor Elorza,

The Department of Public Property respectfully requests permission to piggyback the State of Rhode Island MPA #395 for Public Safety Communications Equipment with Motorola Solutions Inc. of 123 Tice Blvd, Ste. 202, Woodcliff, NJ 07677 for the upgrades of the APX Mobile and Portable Radios and associated equipment for the Providence Police and Fire Departments.

Motorola Solutions is currently offering a promotion which will allow the departments to upgrade all of their current radios and associated equipment with significant savings to the City. This equipment will no longer have technical support and will have obtained life expectancy at the end of December 2019. The caveat to this is that a purchase order must be issued to Motorola Solutions prior to November 15th, 2019 to obtain these savings of \$814,246.

Funding in the total amount of **\$5,510,609** is contingent upon approval of the FY 2020 Master Lease Agreement.

Respectfully Submitted,

Director Michael Borg

Attachments

Jorge O. Elorza
Mayor



Michael D. Borg
Director of Public Property

October 17, 2019

The Honorable Jorge O. Elorza
Chairman, Board of Contract & Supply
City Hall
Providence, RI 02903

RE: (#) Approval to piggyback the State of RI MPA #395 for the upgrade of APX Mobile and Portable Radios for Providence Police and Fire Departments.

ID: 26838

Dear Mayor Elorza,

The Department of Public Property respectfully requests permission to piggyback the State of Rhode Island MPA #395 for Public Safety Communications Equipment with Motorola Solutions Inc. of 123 Tice Blvd, Ste. 202, Woodcliff, NJ 07677 for the upgrades of the APX Mobile and Portable Radios and associated equipment for the Providence Police and Fire Departments.

Motorola Solutions is currently offering a promotion which will allow the departments to upgrade all of their current radios and associated equipment with significant savings to the City. This equipment will no longer have technical support and will have obtained life expectancy at the end of December 2019. The caveat to this is that a purchase order must be issued to Motorola Solutions prior to November 15th, 2019 to obtain these savings of \$814,246.

Funding in the total amount of **\$5,510,609** is contingent upon approval of the FY 2020 Master Lease Agreement.

Respectfully Submitted,

Director Michael Borg

Attachments

Notice of Contract Purchase Agreement



State Of Rhode Island and Providence Plantations
Department of Administration
Division of Purchases
One Capitol Hill
Providence, RI 02908-5860

V E N D O R	MOTOROLA SOLUTIONS INC 123 TICE BLVD STE 202 WOODCLIFF, NJ 07677 United States
--	---

PUBLIC SAFETY COMMUNICATIONS EQUIPMENT- MOTOROLA (MPA-395)	
Award Number	3309688
Revision Number	16
Effective Period	19-FEB-2013 - 30-JUN-2021
Approved PO Date	28-JUN-2018
Vendor Number	1013-iSupplier

S H I P T O	MASTER PRICE AGREEMENT SEE BELOW RELEASE AGAINST, RI MPA United States
---	---

Type of Requisition	*OTHER
Requisition Number	
Change Order Requisition Number	
Solicitation Number	
Freight	Paid
Payment Terms	NET 30
Buyer	McGurn, Cheryl
Requester Name	-
Work Telephone	

This Purchase Order is issued pursuant to and in accordance with the terms and conditions of the solicitation and applicable federal, state, and local law, including the State of Rhode Island's purchasing regulations, available at www.purchasing.ri.gov.

CHANGE TO PO #3309688

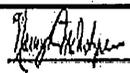
CHANGE EFFECTIVE PERIOD:
 FROM: 2/19/13 - 6/30/2018
 TO: 2/19/13 - 6/30/2021

CONTRACT DATE EXTENSION THROUGH 6/30/21 PER AGENCY.

PER THE ATTACHED SECOND AMENDMENT TO CONTRACT NO. 06913 DATED 2/20/18.

Reference Documents: 201806281326.pdf

INVOICE TO
The State of Rhode Island accepts electronic invoices via its supplier portal. To register and submit electronic invoices, visit the supplier portal at http://controller.admin.ri.gov/iSupplier/isup/index.php To submit paper invoices, mail to: Department of Administration Controller, One Capitol Hill, 4th Floor, Providence 02908.

STATE PURCHASING AGENT
 Nancy R. McIntyre

Contract Terms and Conditions

Table of Contents

Terms and Conditions.....3
PURCHASE ORDER STANDARD TERMS AND CONDITIONS3
TERMS AND CONDITIONS FOR THIS PURCHASE ORDER3
MULTI YEAR AWARD3
PURCHASE AGREEMENT AWARD3
AUTHORIZATION AND RELEASE3
BLANKET PAYMENT4
EQUAL OPPORTUNITY COMPLIANCE4
QUARTERLY REPORTS4
CAMPAIGN FINANCE COMPLIANCE4
TERMS AND CONDITIONS OF PRICING AGREEMENT4

Terms and Conditions

PURCHASE ORDER STANDARD TERMS AND CONDITIONS

TERMS AND CONDITIONS FOR THIS PURCHASE ORDER

MULTI YEAR AWARD

THIS IS A MULTI-YEAR BID/CONTRACT. PER RHODE ISLAND STATE LAW 37-2-33, CONTRACT OBLIGATIONS BEYOND THE CURRENT FISCAL YEAR ARE SUBJECT TO AVAILABILITY OF FUNDS. CONTINUATION OF THE CONTRACT BEYOND THE INITIAL FISCAL YEAR WILL BE AT THE DISCRETION OF THE STATE. TERMINATION MAY BE EFFECTED BY THE STATE BASED UPON DETERMINING FACTORS SUCH AS UNSATISFACTORY PERFORMANCE OR THE DETERMINATION BY THE STATE TO DISCONTINUE THE GOODS/SERVICES, OR TO REVISE THE SCOPE AND NEED FOR THE TYPE OF GOODS/SERVICES; ALSO MANAGEMENT OWNER DETERMINATIONS THAT MAY PRECLUDE THE NEED FOR GOODS/SERVICES.

PURCHASE AGREEMENT AWARD

THIS IS A NOTICE OF AWARD, NOT AN ORDER. Any quantity reference in the agreement or in the bid preceding it are estimates only and do not represent a commitment on the part of the state to any level of billing activity, other than for quantities or volumes specifically released during the term. No action is to be taken except as specifically authorized, as described herein under AUTHORIZATION AND RELEASE. ENTIRE AGREEMENT - This NOTICE OF AWARD, with all attachments, and any release(s) against it shall be subject to: (1) the specifications, terms and conditions set forth in the Request/Bid Number cited herein, (2) the General Terms and Conditions of Contracts for the State of Rhode Island and (3) all provisions of, and the Rules and Regulations promulgated pursuant to, Title 37, Chapter 2 of the General Laws of the State of Rhode Island. This NOTICE shall constitute the entire agreement between the State of Rhode Island and the Vendor. No assignment of rights or responsibility will be permitted except with the express written permission of the State Purchasing Agent or his designee. CANCELLATION, TERMINATION and EXTENSION - This Price Agreement shall automatically terminate as of the date(s) described under CONTRACT PERIOD unless this Price Agreement is altered by formal amendment by the State Purchasing Agent or his designee upon mutual agreement between the State and the Vendor.

AUTHORIZATION AND RELEASE

In no event shall the Vendor deliver goods or provide service until such time as a duly authorized release document is certified by the ordering Agency. A Direct Purchase Order (DPO) shall be created by the agency listing the items ordered, using the pricing and format set forth in the Master Blanket. All pricing shall be as described in the Master Blanket and is considered to be fixed and firm for the term of the Agreement, unless specifically noted to the contrary herein. All prices include prepaid freight. Freight, taxes, surcharges, or other additional charges will not be honored unless reflected in Master Blanket.

BLANKET PAYMENT

DELIVERY OF GOODS OR SERVICES AS REQUESTED BY AGENCY. PAYMENTS WILL BE AUTHORIZED UPON SUBMISSION OF PROPERLY RENDERED INVOICES NO MORE THAN MONTHLY TO THE RECEIVING AGENCY. ANY UNUSED BALANCE AT END OF BLANKET PERIOD IS AUTOMATICALLY CANCELLED.

EQUAL OPPORTUNITY COMPLIANCE

THIS PURCHASE ORDER IS AWARDED SUBJECT TO EQUAL OPPORTUNITY COMPLIANCE.

QUARTERLY REPORTS

REPORTS - The Vendor agrees to provide the State with quarterly reports describing activity against this Price Agreement. If this is a Master Price Agreement, such reports shall include usage by municipalities, quasi-public agencies, schools, etc. All reports shall contain the following data: (1) Billing volume in dollars and (2) quantity shipped for each line item in the price agreement. When there are no line items in the price agreement, vendor shall report volume by catalog order numbers, with a brief description of each order number. Reports must be submitted to the RI Division of Purchases to the attention BUYER named in this notice, identifying the Agreement number and the Reporting Period. Quarterly reports shall be due 45 calendar days after the end of each quarter. Failure to submit required reports shall be considered a breach of the contractor's obligations and may be considered, at the discretion of the State Purchasing Agent, sufficient cause for the termination of the agreement and other outstanding agreements and orders, and possible suspension from participation in additional State procurements.

CAMPAIGN FINANCE COMPLIANCE

EVERY PERSON OR BUSINESS ENTITY PROVIDING GOODS OR SERVICES AT A COST OF \$5000 CUMULATED VALUE IS REQUIRED TO FILE AN AFFIDAVIT REGARDING POLITICAL CAMPAIGN CONTRIBUTIONS WITH THE RI STATE BOARD OF ELECTIONS EVEN IF NO REPORTABLE CAMPAIGN CONTRIBUTIONS HAVE BEEN MADE. (RI GENERAL LAW 17-27) FORMS OBTAINED AT BOARD OF ELECTIONS, CAMPAIGN FINANCE DIVISION, 50 BRANCH AVENUE PROVIDENCE 02904 (401-222-2056).

ARRA SUPPLEMENTAL TERMS AND CONDITIONS

For contracts and sub-awards funded in whole or in part by the American Recovery and Reinvestment Act of 2009. Pub.L.No. 111-5 and any amendments thereto, such contracts and sub-awards shall be subject to the Supplemental Terms and Conditions For Contracts and Sub-awards Funded in Whole or in Part by the American Recovery and Reinvestment Act of 2009. Pub.L.No. 111-5 and any amendments thereto located on the Division of Purchases website at www.purchasing.ri.gov."

TERMS AND CONDITIONS OF PRICING AGREEMENT

SCOPE AND LIMITATIONS - This Agreement covers requirements as described herein, ordered by State agencies during the Agreement Period. No additional or alternative requirements are covered, unless added

to the Agreement by formal amendment by the State Purchasing Agent or his designee.

Under State Purchasing Law, 37-2-54, no purchase or contract shall be binding on the state or any agency thereof unless approved by the department [of administration] or made under general regulations which the chief purchasing officer may prescribe. Under State Purchasing Regulation 8.2.1.1.2, any alleged oral agreement or arrangements made by a bidder or contractor with any agency or an employee of the Office of Purchases may be disregarded and shall not be binding on the state.

PRODUCT ACCEPTANCE - All merchandise offered or otherwise provided shall be new, of prime manufacture, and of first quality unless otherwise specified by the State. The State reserves the right to reject all nonconforming goods, and to cause their return for credit or replacement, at the State's option.

a) Failure by the state to discover latent defect(s) or concealed damage or non-conformance shall not foreclose the State's right to subsequently reject the goods in question.

b) Formal or informal acceptance by the State of non-conforming goods shall not constitute a precedent for successive receipts or procurements.

Where the vendor fails to cure the defect promptly or replace the goods, the State reserves the right to cancel the Release, contract with a different vendor, and to invoice the original vendor for any differential in price over the original contract price.

ORDER AUTHORIZATION AND RELEASE AGAINST PRICING AGREEMENT

In no event shall the Vendor deliver goods or provide service until such time as a duly authorized release document is certified by the ordering Agency.

State Agencies shall request release as follows: All releases shall reference the Price Agreement number, the Contract Issue number, the item(s) covered, and the unit pricing in the same format as described herein.

A Department Purchase Order (DPO) listing the items ordered shall be created by the agency. The agency may mail or fax a copy of the order to the Vendor. In some cases the agency may request delivery by telephone, but must provide the Vendor with a DPO Order Number reference for billing purposes. Vendors are encouraged to require written orders to assure payments are processed accurately and promptly.

DELIVERY If this is an MPA, Vendor will obtain "ship to" information from each participating agency. This information will be contained in the DPO. APA delivery information will be contained in the Notice of Award.

PRICING - All pricing shall be as described herein, and is considered to be fixed and firm for the term of the Agreement, unless specifically noted to the contrary herein. All prices include prepaid freight. Freight, taxes, surcharges, or other additional charges will not be honored unless reflected herein.

INVOICING All invoices shall reference the DPO Order Number(s), Price Agreement number, the Contract Issue number, the item(s) covered, and the unit pricing in the same format as described herein. If this is an MPA, Vendor will obtain "bill to" information from each participating agency. This information will be contained in the DPO. APA billing information will be contained in the Notice of Award.

PAYMENT - Invoices for items not received, not priced according to contract or for work not yet performed will not be honored. No payment will be processed to any vendor for whom there is no IRS W-9 on file with the State Controller.

State of Washington Contracts, Procurement, & Risk Management Division Department of Enterprise Services P.O. Box 41411 Olympia, WA 98504-1411	MASTER AGREEMENT AMENDMENT	
	Contract No.:	06913
Motorola Solutions, Inc. 24000 35 th Ave SE Bothell, WA 98021-0000	Amendment No.:	2
	Effective Date:	July 1, 2018

SECOND AMENDMENT
TO
CONTRACT No. 06913
NASPO VALUEPOINT PUBLIC SAFETY COMMUNICATIONS EQUIPMENT

This Second Amendment ("Amendment") to Contract No. 06913 is made and entered into by and between the State of Washington acting by and through the Department of Enterprise Services, a Washington State governmental agency ("State") and Motorola Solutions, Inc., a Delaware corporation ("Contractor") and is dated as of July 1, 2018.

RECITALS

- A. State and Contractor (collectively the "Parties") entered into that certain NASPO ValuePoint Master Agreement No. 06913 for Public Safety Communications Equipment dated effective as of October 30, 2015 ("Contract").
- B. The Parties previously amended the Contract 06913 as follows:
 - a. Amendment No. 1 dated effective July 1, 2016 extended the Master Agreement term through June 30, 2018.
- C. The Parties intend to amend the Contract to extend the Master Agreement term an additional three (3) years.
- D. The Amendment set forth herein is within the scope of the Contract.
- E. The Parties now desire to amend the Contract as set forth herein.

AGREEMENT

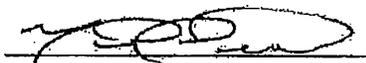
NOW THEREFORE, in consideration of the mutual covenants and agreements set forth herein, the Parties hereby agree to amend the Contract, as previously amended, as follows:

- 1. **CONTRACT EXTENSION.** The Parties mutually agree to extend NASPO ValuePoint Master Agreement 06913 through June 30, 2021.

2. NO CHANGE OTHER THAN AMENDMENT. Except as amended herein, the Contract is unaffected and remains in full force and effect.
3. INTEGRATED AGREEMENT; MODIFICATION. This Amendment constitutes the entire agreement and understanding of the Parties with respect to the subject matter and supersedes all prior negotiations and representations. In the event of any conflict between this Amendment and the Contract or any earlier amendment, this Amendment shall control and govern. This Amendment may not be modified except in writing signed by the Parties.
4. AUTHORITY. Each party to this Amendment, and each individual signing on behalf of each party, hereby represents and warrants to the other that it has full power and authority to enter into this Amendment and that its execution, delivery, and performance of this Amendment has been fully authorized and approved, and that no further approvals or consents are required to bind such party.
5. ELECTRONIC SIGNATURES. A signed copy of this Amendment or any other ancillary agreement transmitted by facsimile, email, or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original executed copy of this Amendment or such other ancillary agreement for all purposes.
6. COUNTERPARTS. This Amendment may be executed in one or more counterparts, each of which shall be deemed an original, and all of which counterparts together shall constitute the same instrument which may be sufficiently evidenced by one counterpart. Execution of this Amendment at different times and places by the parties shall not affect the validity thereof so long as all the parties hereto execute a counterpart of this Amendment.

EXECUTED AND EFFECTIVE as of the day and date first above written.

MOTOROLA SOLUTIONS, INC.
A DELAWARE CORPORATION

By: 
Name: Micah Applewhite
Title: MSSSI Vice President
Date: January 31, 2018

STATE OF WASHINGTON
DEPARTMENT OF ENTERPRISE SERVICES

By: 
Name: Scott Smith
Title: IT Contracts Manager
Date: 2/20/2018

PRICING

Equipment and Services	Total
APX Mobile and Portable Subscriber Upgrade for City of Providence Fire and Police per RI MPA 395 Pricing.	\$6,243,817.00
ASTRO GPS Solution and IP Upgrade Hardware per RI MPA 395 Pricing	\$1,126,449.00
Installation and Integration costs per RI MPA 395 Including: -Engineering -Installation Services -System Integration Services -Project Management Services -24 x & 7 First Year Warranty	\$895,524.00
800 MHz In Band DVRS	\$13,179.00
*Motorola Solutions Training Bank	\$100,000
<u>Total</u>	<u>\$8,378,969.00</u>
System Discount	-\$1,239,868.00
**Additional Discount for purchase order prior to November 15, 2019	-\$814,246.00
***Additional Discount for customer agreement of equipment shipment no later than December 1, 2019	-\$814,246.00
****Subscriber and GPS Upgrade as Detailed Including all Discounts as described above:	\$5,510,609.00

*Motorola Solutions Training Bank is a discounted, pre-paid, non-expiring debit account that allows for agencies to budget up front training needs. Training Banks can be applied towards all training options including, Instructor-Led Tailored Field Courses.

**Additional discount for purchase order issued to Motorola Solutions prior to November 15, 2019.

***The City of Providence must agree to allow for all equipment to ship on or before December 1, 2019 for additional discount listed.

****Final System and subscriber price only valid if both subscribers and GPS/IP Upgrade are procured and implemented as one complete project.

4.1 PAYMENT TERMS

Motorola has provided the suggested payment terms for consideration by the City of Providence. The City Providence agrees to make payments to Motorola within thirty (30) days after the date of

each invoice. The City of Providence will make payments when due in the form of a check, cashier's check, or wire transfer drawn on a U.S. financial institution and in accordance with the following milestones:

1. 25% of the Contract Price upon execution of the contract;
2. 60% of the Contract Price upon Shipment of Equipment to the customer designated location;
3. 10% of the Contract Price upon Completion of Installation; and
4. 5% of the Contract Price upon System Acceptance
5. If Subscribers are purchased, 100% of the Subscriber Contract Price will be invoiced upon shipment (as shipped).

Motorola reserves the right to make partial shipments of equipment and to request payment upon shipment of such equipment. In addition, Motorola reserves the right to invoice for installations completed on a site-by-site basis, when applicable.

SERVICE/WARRANTY

Motorola has over 90 years of experience supporting mission critical communications for public safety and public service agencies. Motorola's technical and service professionals use a structured approach to life cycle service delivery and provide comprehensive maintenance and support throughout the life of the system. The value of support is measured by system availability, which is optimized through the use of proactive processes, such as preventive maintenance, fault monitoring and active response management. System availability is a function of having in place a support plan delivered by highly skilled support professionals, backed by proven processes, tools, and continuous training.

Whether it's a routine service call, or a disaster situation, Motorola understands its responsibility and takes pride in its commitment to deliver proven response service to the public safety community. Motorola has the capability to provide the technical, administrative, consultative, and maintenance repair services needed to support, enhance, and maintain the effectiveness of your communications network. Motorola's goal is to provide City of Providence with the qualified resources, to maintain and improve system operation and availability, and to deliver world-class service support.

Warranty and Post Warranty Service support services for the proposed ASTRO 25 Fixed end equipment to be delivered are outlined in Table 3-1.

Table 3-1: Warranty and Post Warranty Service Overview

Warranty and Post Warranty Service Overview	Warranty Year
Dispatch Service	✓
On Site Infrastructure Response	✓



Table 1	
Network Preventative Maintenance	✓
Infrastructure Repair with Advanced Replacement	✓
Technical Support Service	✓
Network Monitoring Service	✓



SECTION 7

CONTRACTUAL DOCUMENTATION

This proposal is subject to the terms and conditions included in the Communications Systems and Services Agreement, together with its Exhibits.



Communications System and Services Agreement

Motorola Solutions, Inc. ("Motorola") and City of Providence, RI ("Customer") enter into this "Agreement," pursuant to which Customer will purchase and Motorola will sell the System and Services, as described below. Motorola and Customer may be referred to individually as a "Party" and collectively as the "Parties." For good and valuable consideration, the Parties agree as follows:

Section 1 ATTACHMENTS

1.1. EXHIBITS. The Exhibits listed below are exhibits related to the System sale and implementation. These Exhibits are incorporated into and made a part of this Agreement.

Exhibit A "Motorola Software License Agreement"

Exhibit B "Payment"

Exhibit C Technical and Implementation Documents

C-1 "New Dispatch System" dated 08/03/2019

C-2 "Pricing Summary & Equipment List" dated 08/03/2019

C-3 "Implementation Statement of Work" dated _____

C-4 "Acceptance Test Plan" or "ATP" dated _____

C-5 "Performance Schedule" dated _____

Exhibit D "System Acceptance Certificate"

Exhibit E "Insurance Requirements"

1.2. ADDENDUM (ADDENDA). Customer may elect to purchase professional or subscription services in addition to the System and related services. Any such services will be governed by the terms in the main body of the Agreement and an applicable Addendum containing terms specific to such service. Such Addendums will be labeled with the name of the service being purchased.

1.3 ORDER OF PRECEDENCE. In interpreting this Agreement and resolving any ambiguities: 1) the main body of this Agreement takes precedence over the exhibits (unless otherwise specified in an exhibit), and any inconsistency between Exhibits A through D will be resolved in their listed order, and 2) The applicable service Addendum will take precedence over the main body of the Agreement and the Exhibits.

Section 2 DEFINITIONS

Capitalized terms used in this Agreement have the following meanings:

"Acceptance Tests" means those tests described in the Acceptance Test Plan.

"Addendum (Addenda)" is the title of the document(s) containing a specific set of terms and conditions applicable to a particular service or other offering beyond the Communication System and System implementation services. The terms in the Addendum are applicable only to the specific service or offering described therein.

"Administrative User Credentials" means an account that has total access over the operating system, files, and user accounts and passwords at either the System level or box level. Customer's personnel with access to the Administrative User Credentials may be referred to as the Administrative User.

"Beneficial Use" means when Customer first uses the System or a Subsystem for operational purposes (excluding training or testing).

"Confidential Information" means all information consistent with the fulfillment of this Agreement that is (i) disclosed under this Agreement in oral, written, graphic, machine recognizable, and/or sample form,

being clearly designated, labeled or marked as confidential or its equivalent or (ii) obtained by examination, testing or analysis of any hardware, software or any component part thereof provided by discloser to recipient. The nature and existence of this Agreement are considered Confidential Information. Confidential Information that is disclosed orally must be identified as confidential at the time of disclosure and confirmed by the discloser by submitting a written document to the recipient within thirty (30) days after such disclosure. The written document must contain a summary of the Confidential Information disclosed with enough specificity for identification purpose and must be labeled or marked as confidential or its equivalent.

“Contract Price” means the price for the System and implementation Services, excluding applicable sales or similar taxes and freight charges. Further, unless otherwise stated in Exhibit B, “Payment” or the pricing pages of the proposal, recurring fees for maintenance, SUA, or subscription services are not included in the Contract Price.

“Deliverables” means all written information (such as reports, specifications, designs, plans, drawings, analytics, Solution Data, or other technical or business information) that Motorola prepares for Customer in the performance of the Services and is obligated to provide to Customer under this Agreement. The Deliverables, if any, are more fully described in the Statement of Work.

“Derivative Proprietary Materials” means derivatives of the Proprietary Materials that Motorola may from time to time, including during the course of providing the Services, develop and/or use and/or to which Motorola provides Customer access.

“Effective Date” means that date upon which the last Party executes this Agreement.

“Equipment” means the hardware components of the Solution that Customer purchases from Motorola under this Agreement. Equipment that is part of the System is described in the Equipment List.

“Feedback” means comments or information, in oral or written form, given to Motorola by Customer in connection with or relating to Equipment or Services, during the term of this Agreement.

“Force Majeure” means an event, circumstance, or act that is beyond a Party's reasonable control, such as an act of God, an act of the public enemy, an act of a government entity, strikes, other labor disturbances, supplier performance, hurricanes, earthquakes, fires, floods, epidemics, embargoes, war, riots, or any other similar cause.

“Motorola Software” means software that Motorola or its affiliated companies owns.

“Non-Motorola Software” means software that a party other than Motorola or its affiliated companies owns.

“Open Source Software” (also called “freeware” or “shareware”) means software with either freely obtainable source code, license for modification, or permission for free distribution.

“Proprietary Materials” means certain software tools and/or other technical materials, including, but not limited to, data, modules, components, designs, utilities, subsets, objects, program listings, models, methodologies, programs, systems, analysis frameworks, leading practices and specifications which Motorola has developed prior to, or independently from, the provision of the Services and/or which Motorola licenses from third parties.

“Proprietary Rights” means the patents, patent applications, inventions, copyrights, trade secrets, trademarks, trade names, mask works, know-how, and other intellectual property rights in and to the Equipment and Software, including those created or produced by Motorola under this Agreement and any corrections, bug fixes, enhancements, updates or modifications to or derivative works from the Software whether made by Motorola or another party.

"Services" means system implementation, maintenance, support, subscription, or other professional services provided under this Agreement, which may be further described in the applicable Addendum and/or SOW.

"Software" (i) means proprietary software in object code format, and adaptations, translations, de-compilations, disassemblies, emulations, or derivative works of such software; (ii) means any modifications, enhancements, new versions and new releases of the software provided by Motorola; and (iii) may contain one or more items of software owned by a third party supplier. The term "Software" does not include any third party software provided under separate license or third party software not licensable under the terms of this Agreement.

"Software Support Policy" ("SwSP") means the policy set forth at <http://www.motorolasolutions.com/softwarepolicy> describing the specific technical support that will be provided to Customers under the Warranty Period and during any paid maintenance support period for Motorola Software. This policy may be modified from time to time at Motorola's discretion.

"Solution" means the combination of the System(s) and Services provided by Motorola under this Agreement.

"Solution Data" means Customer data that is transformed, altered, processed, aggregated, correlated or operated on by Motorola, its vendors or other data sources and data that has been manipulated or retrieved using Motorola know-how to produce value-added content to data consumers, including customers or citizens which is made available to Customer with the Solution and Services.

"Specifications" means the functionality and performance requirements that are described in the Technical and Implementation Documents.

"SUA" or "SUA II" means Motorola's Software Upgrade Agreement program.

"Subsystem" means a major part of the System that performs specific functions or operations. Subsystems are described in the Technical and Implementation Documents.

"System" means the Equipment, including incidental hardware and materials, Software, and design, installation and implementation services that are combined together into an integrated system; the System(s) is (are) described in the Technical and Implementation Documents.

"System Acceptance" means the Acceptance Tests have been successfully completed.

"System Data" means data created by, in connection with or in relation to Equipment or the performance of Services under this Agreement.

"Warranty Period" for System Hardware, Software, or services related to system implementation means one (1) year from the date of System Acceptance or Beneficial Use, whichever occurs first. Unless otherwise stated in the applicable Addendum, Warranty Period for other Services means ninety (90) days from performance of the Service.

Section 3 SCOPE OF AGREEMENT AND TERM

3.1. **SCOPE OF WORK.** Motorola will provide, install and test the System(s), and perform its other contractual responsibilities to provide the Solution, all in accordance with this Agreement. Customer will perform its contractual responsibilities in accordance with this Agreement.

3.2. **CHANGE ORDERS.** Either Party may request changes within the general scope of this Agreement. If a requested change causes an increase or decrease in the cost or time required to

perform this Agreement, the Parties will agree to an equitable adjustment of the Contract Price or applicable subscription fees, Performance Schedule, or both, and will reflect the adjustment in a change order or Addendum. Neither Party is obligated to perform requested changes unless both Parties execute a written change order.

3.3. TERM. Unless terminated in accordance with other provisions of this Agreement or extended by mutual agreement of the Parties, the term of this Agreement begins on the Effective Date and continues until the date of Final Project Acceptance or expiration of the Warranty Period, or completion of the Services, whichever occurs last. The term and the effective date of recurring Services will be set forth in the applicable Addendum.

3.4. ADDITIONAL EQUIPMENT OR SOFTWARE. For three (3) years after the expiration date of the Agreement, Customer may order additional Equipment or Software, if it is then available. Each purchase order must refer to this Agreement, the expiration date of the Agreement, and must specify the pricing and delivery terms. The Parties agree that, notwithstanding expiration of the Agreement, the applicable provisions of this Agreement (except for pricing, delivery, passage of title and risk of loss to Equipment, warranty commencement, and payment terms) will govern the purchase and sale of the additional Equipment or Software. Additional or contrary terms in the purchase order will be inapplicable, unless signed by both parties. Title and risk of loss to additional Equipment will pass at shipment, warranty will commence upon delivery, and payment is due within thirty (30) days after the invoice date. Motorola will send Customer an invoice as the additional Equipment is shipped or Software is licensed. Alternatively, Customer may register with and place orders through Motorola Online ("MOL"), and this Agreement will be the "Underlying Agreement" for those MOL transactions rather than the MOL On-Line Terms and Conditions of Sale. MOL registration and other information may be found at <https://businessonline.motorolasolutions.com> and the MOL telephone number is (800) 814-0601.

3.5. MOTOROLA SOFTWARE. Any Motorola Software, including subsequent releases, is licensed to Customer solely in accordance with the Motorola Software License Agreement in Exhibit A ("Software License Agreement"). Customer hereby accepts and agrees to abide by all of the terms and restrictions of the Software License Agreement.

3.6. NON-MOTOROLA SOFTWARE. Any Non-Motorola Software is licensed to Customer in accordance with the standard license, terms, and restrictions of the copyright owner on the Effective Date unless the copyright owner has granted to Motorola the right to sublicense the Non-Motorola Software pursuant to the Software License Agreement, in which case it applies and the copyright owner will have all of Licensor's rights and protections under the Software License Agreement. Motorola makes no representations or warranties of any kind regarding Non-Motorola Software. Non-Motorola Software may include Open Source Software.

3.7. SUBSTITUTIONS. At no additional cost to Customer, Motorola may substitute any Equipment, Software, or services to be provided by Motorola, if the substitute meets or exceeds the Specifications and is of equivalent or better quality to the Customer. Any substitution will be reflected in a change order.

3.8. OPTIONAL EQUIPMENT OR SOFTWARE. This paragraph applies only if a "Priced Options" exhibit is shown in Section 1, or if the parties amend this Agreement to add a Priced Options exhibit. During the term of the option as stated in the Priced Options exhibit (or if no term is stated, then for one (1) year after the Effective Date), Customer has the right and option to purchase the equipment, software, and related services that are described in the Priced Options exhibit. Customer may exercise this option by giving written notice to Seller which must designate what equipment, software, and related services Customer is selecting (including quantities, if applicable). To the extent they apply, the terms and conditions of this Agreement will govern the transaction; however, the parties acknowledge that certain provisions must be agreed upon, and they agree to negotiate those in good faith promptly after Customer delivers the option exercise notice. Examples of provisions that may need to be negotiated are: specific lists of deliverables, statements of work, acceptance test plans, delivery and implementation schedules, payment terms, maintenance and support provisions, additions to or modifications of the Software

License Agreement, hosting terms, and modifications to the acceptance and warranty provisions.

Section 4 SERVICES

4.1. If Customer desires and Motorola agrees to continue Services beyond the Term, Customer's issuance and Motorola's acceptance of a purchase order for Services will serve as an automatic extension of the Agreement for purposes of the continuing Services. Only the terms and conditions applicable to the performance of Services will apply to the extended Agreement.

4.2. During the Warranty Period, in addition to warranty services, Motorola will provide maintenance Services for the Equipment and support for the Motorola Software pursuant to the applicable maintenance and support Statements of Work. Support for the Motorola Software will be in accordance with Motorola's established Software Support Policy. Copies of the SwSP can be found at <http://www.motorolasolutions.com/softwarepolicy> and will be sent by mail, email or fax to Customer upon written request. Maintenance Services and support during the Warranty Period are included in the Contract Price. Unless already included in the Contract Price, if Customer wishes to purchase 1) additional maintenance or software support services during the Warranty Period; or 2) continue or expand maintenance, software support, installation, and/or SUA services after the Warranty Period, Motorola will provide the description of and pricing for such services in a separate proposal document. Unless otherwise agreed by the parties in writing, the terms and conditions in this Agreement applicable to maintenance, support, installation, and/or SUA Services, will be included in the Maintenance and Support Addendum, SUA Addendum, the applicable Statements of Work, and the proposal, (if applicable). These collective terms will govern the provision of such Services.

To obtain any such additional Services, Customer will issue a purchase order referring to this Agreement and the separate proposal document. Omission of reference to this Agreement in Customer's purchase order will not affect the applicability of this Agreement. Motorola's proposal may include a cover page entitled "Service Agreement" or "Installation Agreement", as applicable, and other attachments. These cover pages and other attachments are incorporated into this Agreement by this reference

4.3. PROFESSIONAL AND SUBSCRIPTION SERVICES. If Customer purchases professional or subscription Services as part of the Solution, additional or different terms specific to such Service will be included in the applicable Addendum and will apply to those Services. Customer may purchase additional professional or subscription services by issuing a purchase order referencing this Agreement and Motorola's proposal for such additional services.

4.4. Any information in the form of specifications, drawings, reprints, technical information or otherwise furnished to Customer in providing Services under this Agreement or Motorola data viewed, accessed, will remain Motorola's property, will be deemed proprietary, Confidential Information. This Confidential Information will be promptly returned at Motorola's request.

4.5. TOOLS. All tools, equipment, dies, gauges, models, drawings or other materials paid for or furnished by Motorola for the purpose of providing Services under this Agreement will be and remain the sole property of Motorola. Customer will safeguard all such property while it is in Customer's custody or control, be liable for any loss or damage to this property, and return it to Motorola upon request. This property will be held by Customer for Motorola's use without charge and may be removed from Customer's premises by Motorola at any time without restriction. Upon termination of the contract for any reason, Customer shall return to Motorola all equipment delivered to Customer.

4.6. COVENANT NOT TO EMPLOY. During the term of this Agreement and continuing for a period of two (2) years thereafter, Customer will not hire, engage on contract, solicit the employment of, or recommend employment to any third party of any employee of Motorola or its subcontractors without the prior written authorization of Motorola. This provision applies only to those employees of Motorola or its subcontractors who are responsible for rendering Services under this Agreement. If this provision is found to be overly broad under applicable law, it will be modified as necessary to conform to applicable law.

4.7. CUSTOMER OBLIGATIONS. If the applicable Statement of Work or Addendum contains assumptions that affect the Services or Deliverables, Customer will verify that they are accurate and complete. Any information that Customer provides to Motorola concerning the Services or Deliverables will be accurate and complete in all material respects. Customer will make timely decisions and obtain any required management approvals that are reasonably necessary for Motorola to perform the Services and its other duties under this Agreement. Unless the Statement of Work states the contrary, Motorola may rely upon and is not required to evaluate, confirm, reject, modify, or provide advice concerning any assumptions and Customer-provided information, decisions and approvals described in this paragraph.

4.8. ASSUMPTIONS. If any assumptions or conditions contained in this Agreement, applicable Addenda or Statements of Work prove to be incorrect or if Customer's obligations are not performed, Motorola's ability to perform under this Agreement may be impacted and changes to the Contract Price, subscription fees, project schedule, Deliverables, or other changes may be necessary.

4.9. NON-PRECLUSION. If, as a result of the Services performed under this Agreement, Motorola recommends that Customer purchase products or other services, nothing in this Agreement precludes Motorola from participating in a future competitive bidding process or otherwise offering or selling the recommended products or other services to Customer. Customer represents that this paragraph does not violate its procurement or other laws, regulations, or policies.

4.10. PROPRIETARY MATERIALS. Customer acknowledges that Motorola may use and/or provide Customer with access to Proprietary Materials and Derivative Proprietary Materials. The Proprietary Materials and the Derivative Proprietary Materials are the sole and exclusive property of Motorola and Motorola retains all right, title and interest in and to the Proprietary Materials and Derivative Proprietary Materials.

4.11. ADDITIONAL SERVICES. Any services performed by Motorola outside the scope of this Agreement at the direction of Customer will be considered to be additional Services which are subject to additional charges. Any agreement to perform additional Services will be reflected in a written and executed change order, Addendum or amendment to this Agreement.

Section 5 PERFORMANCE SCHEDULE

The Parties will perform their respective responsibilities in accordance with the Performance Schedule. By executing this Agreement, Customer authorizes Motorola to proceed with contract performance.

Section 6 CONTRACT PRICE, PAYMENT AND INVOICING

6.1. Customer affirms that a purchase order or notice to proceed is not required for contract performance or for subsequent years of service, if any, and that sufficient funds have been appropriated in accordance with applicable law. The Customer will pay all invoices as received from Motorola and any changes in scope will be subject to the change order process as described in this Agreement. At the time of execution of this Agreement, the Customer will provide all necessary reference information to include on invoices for payment in accordance with this Agreement.

6.2. CONTRACT PRICE. The Contract Price in U.S. dollars is \$ 319,254.00. If applicable, a pricing summary is included with the Payment schedule in Exhibit B. Motorola has priced

the Services, Software, and Equipment as an integrated System. A change in Software or Equipment quantities, or Services, may affect the overall Contract Price, including discounts if applicable. Fees for professional, SUA, and/or subscription services which are not included in the Contract Price may be listed in Exhibit B, the pricing pages of the proposal, or the applicable Addendum.

6.3. **INVOICING AND PAYMENT.** Motorola will submit invoices to Customer according to the Payment schedule in Exhibit B. 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 wire transfer, check, or cashier's check from a U.S. financial institution. Overdue invoices will bear simple interest at the maximum allowable rate. For reference, the Federal Tax Identification Number for Motorola is 36-1115800.

6.4. **FREIGHT, TITLE, AND RISK OF LOSS.** Motorola will pre-pay and add all freight charges to the invoices. Title and risk of loss to the Equipment will pass to Customer upon shipment. Title to Software will not pass to Customer at any time. Motorola will pack and ship all Equipment in accordance with good commercial practices.

6.5. **INVOICING AND SHIPPING ADDRESSES.** Invoices will be sent to the Customer at the following address:
Name: _____
Address: _____
Phone: _____
Email: _____

The address which is the ultimate destination where the Equipment will be delivered to Customer is:
Name: _____
Address: _____

The Equipment will be shipped to the Customer at the following address (insert if this information is known):
Name: _____
Address: _____
Phone: _____

Customer may change this information by giving written notice to Motorola.

Section 7 SITES AND SITE CONDITIONS

7.1. **ACCESS TO SITES.** In addition to its responsibilities described elsewhere in this Agreement, Customer will provide a designated project manager; all necessary construction and building permits, zoning variances, licenses, and any other approvals that are necessary to develop or use the sites and mounting locations; and access to the worksites or vehicles identified in the Technical and Implementation Documents as reasonably requested by Motorola so that it may perform its duties in accordance with the Performance Schedule and Statement of Work. If the Statement of Work so indicates, Motorola may assist Customer in the local building permit process.

7.2. **SITE CONDITIONS.** Customer will ensure that all work sites it provides will be safe, secure, and in compliance with all applicable industry and OSHA standards. To the extent applicable and unless the Statement of Work states to the contrary, Customer will ensure that these work sites have adequate: physical space; air conditioning and other environmental conditions; adequate and appropriate electrical power outlets, distribution, equipment and connections; and adequate telephone or other communication lines (including modem access and adequate interfacing networking capabilities), all for the installation, use and maintenance of the System. Before installing the Equipment or Software at a work site, Motorola may inspect the work site and advise Customer of any apparent deficiencies or non-conformities with the requirements of this Section. This Agreement is predicated upon normal soil conditions as defined by the version of E.I.A. standard RS-222 in effect on the Effective Date.

7.3. **SITE ISSUES.** If a Party determines that the sites identified in the Technical and Implementation Documents are no longer available or desired, or if subsurface, structural, adverse environmental or latent conditions at any site differ from those indicated in the Technical and Implementation Documents, the Parties will promptly investigate the conditions and will select replacement sites or adjust the installation plans and specifications as necessary. If change in sites or adjustment to the installation plans and specifications causes a change in the cost or time to perform, the Parties will equitably amend the Contract Price, Performance Schedule, or both, by a change order.

Section 8 TRAINING

Any training to be provided by Motorola to Customer will be described in the applicable Statement of Work. Customer will notify Motorola immediately if a date change for a scheduled training program is required. If Motorola incurs additional costs because Customer reschedules a training program less than thirty (30) days before its scheduled start date, Motorola may recover these additional costs.

Section 9 SYSTEM ACCEPTANCE

9.1. **COMMENCEMENT OF ACCEPTANCE TESTING.** Motorola will provide to Customer at least ten (10) days notice before the Acceptance Tests commence. System testing will occur only in accordance with the Acceptance Test Plan.

9.2. **SYSTEM ACCEPTANCE.** System Acceptance will occur upon successful completion of the Acceptance Tests. Upon System Acceptance, the Parties will memorialize this event by promptly executing a System Acceptance Certificate. If the Acceptance Test Plan includes separate tests for individual Subsystems or phases of the System, acceptance of the individual Subsystem or phase will occur upon the successful completion of the Acceptance Tests for the Subsystem or phase, and the Parties will promptly execute an acceptance certificate for the Subsystem or phase. If Customer believes the System has failed the completed Acceptance Tests, Customer will provide to Motorola a written notice that includes the specific details of the failure. If Customer does not provide to Motorola a failure notice within thirty (30) days after completion of the Acceptance Tests, System Acceptance will be deemed to have occurred as of the completion of the Acceptance Tests. Minor omissions or variances in the System that do not materially impair the operation of the System as a whole will not postpone System Acceptance or Subsystem acceptance, but will be corrected according to a mutually agreed schedule.

9.3. **BENEFICIAL USE.** Customer acknowledges that Motorola's ability to perform its implementation and testing responsibilities may be impeded if Customer begins using the System before System Acceptance. Therefore, Customer will not commence Beneficial Use before System Acceptance without Motorola's prior written authorization, which will not be unreasonably withheld. Motorola is not responsible for System performance deficiencies that occur during unauthorized Beneficial Use. Upon commencement of Beneficial Use, Customer assumes responsibility for the use and operation of the System.

9.4. **FINAL PROJECT ACCEPTANCE.** Final Project Acceptance will occur after System Acceptance when all deliverables and other work have been completed. When Final Project Acceptance occurs, the

parties will promptly memorialize this final event by so indicating on the System Acceptance Certificate.

Section 10 REPRESENTATIONS AND WARRANTIES

10.1. **SYSTEM FUNCTIONALITY.** Motorola represents that the System will perform in accordance with the Specifications in all material respects. Upon System Acceptance or Beneficial Use, whichever occurs first, this System functionality representation is fulfilled. Motorola is not responsible for System performance deficiencies that are caused by ancillary equipment not furnished by Motorola which is attached to or used in connection with the System or for reasons or parties beyond Motorola's control, such as natural causes; the construction of a building that adversely affects the microwave path reliability or radio frequency (RF) coverage; the addition of frequencies at System sites that cause RF interference or intermodulation; or Customer changes to load usage or configuration outside the Specifications.

10.2. **EQUIPMENT WARRANTY.** During the Warranty Period, Motorola warrants that the Equipment under normal use and service will be free from material defects in materials and workmanship. If System Acceptance is delayed beyond six (6) months after shipment of the Equipment by events or causes beyond Motorola's control, this warranty expires eighteen (18) months after the shipment of the Equipment.

10.3. **SOFTWARE WARRANTY.** Except as described in the SwSP and unless otherwise stated in the Software License Agreement, during the Warranty Period, Motorola warrants the Software in accordance with the warranty terms set forth in the Software License Agreement and the provisions of this Section that are applicable to the Software. If System Acceptance is delayed beyond six (6) months after shipment of the Motorola Software by events or causes beyond Motorola's control, this warranty expires eighteen (18) months after the shipment of the Motorola Software. **Nothing in this Warranty provision is intended to conflict or modify the Software Support Policy. In the event of an ambiguity or conflict between the Software Warranty and Software Support Policy, the Software Support Policy governs.**

10.4. **EXCLUSIONS TO EQUIPMENT AND SOFTWARE WARRANTIES.** These warranties do not apply to: (i) defects or damage resulting from: use of the Equipment or Software in other than its normal, customary, and authorized manner; accident, liquids, neglect, or acts of God; testing, maintenance, disassembly, repair, installation, alteration, modification, or adjustment not provided or authorized in writing by Motorola; Customer's failure to comply with all applicable industry and OSHA standards; (ii) breakage of or damage to antennas unless caused directly by defects in material or workmanship; (iii) Equipment that has had the serial number removed or made illegible; (iv) batteries (because they carry their own separate limited warranty) or consumables; (v) freight costs to ship Equipment to the repair depot; (vi) scratches or other cosmetic damage to Equipment surfaces that does not affect the operation of the Equipment; and (vii) normal or customary wear and tear.

10.5. **SERVICE WARRANTY.** During the Warranty Period, Motorola warrants that the Services will be provided in a good and workmanlike manner and will conform in all material respects to the applicable Statement of Work. Services will be free of defects in materials and workmanship for a period of ninety (90) days from the date the performance of the Services are completed. Customer acknowledges that the Deliverables may contain recommendations, suggestions or advice from Motorola to Customer (collectively, "recommendations"). Motorola makes no warranties concerning those recommendations, and Customer alone accepts responsibility for choosing whether and how to implement the recommendations and the results to be realized from implementing them.

10.6. **WARRANTY CLAIMS.** To assert a warranty claim, Customer must notify Motorola in writing of the claim before the expiration of the Warranty Period. Upon receipt of this notice, Motorola will investigate the warranty claim. If this investigation confirms a valid Equipment or Software warranty claim, Motorola will (at its option and at no additional charge to Customer) repair the defective Equipment or Motorola Software, replace it with the same or equivalent product, or refund the price of the defective Equipment or Motorola Software. These actions will be the full extent of Motorola's liability for the

warranty claim. In the event of a valid Services warranty claim, Customer's sole remedy is to require Motorola to re-perform the non-conforming Service or to refund, on a pro-rata basis, the fees paid for the non-conforming Service. If this investigation indicates the warranty claim is not valid, then Motorola may invoice Customer for responding to the claim on a time and materials basis using Motorola's then current labor rates. Repaired or replaced product is warranted for the balance of the original applicable warranty period. All replaced products or parts will become the property of Motorola.

10.7. ORIGINAL END USER IS COVERED. These express limited warranties are extended by Motorola to the original user purchasing the System or Services for commercial, industrial, or governmental use only, and are not assignable or transferable.

10.8. DISCLAIMER OF OTHER WARRANTIES. THESE WARRANTIES ARE THE COMPLETE WARRANTIES FOR THE EQUIPMENT AND MOTOROLA SOFTWARE PROVIDED UNDER THIS AGREEMENT AND ARE GIVEN IN LIEU OF ALL OTHER WARRANTIES. MOTOROLA DISCLAIMS ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY, NON-INFRINGEMENT, AND FITNESS FOR A PARTICULAR PURPOSE.

Section 11 DELAYS

11.1. FORCE MAJEURE. Neither Party will be liable for its non-performance or delayed performance if caused by a Force Majeure. A Party that becomes aware of a Force Majeure that will significantly delay performance will notify the other Party promptly (but in no event later than fifteen days) after it discovers the Force Majeure. If a Force Majeure occurs, the Parties will execute a change order to extend the Performance Schedule or applicable Addenda for a time period that is reasonable under the circumstances.

11.2. PERFORMANCE SCHEDULE DELAYS CAUSED BY CUSTOMER. If Customer (including its other contractors) delays the Performance Schedule, it will make the promised payments according to the Payment schedule as if no delay occurred; and the Parties will execute a change order to extend the Performance Schedule and, if requested, compensate Motorola for all reasonable charges incurred because of the delay. Delay charges may include costs incurred by Motorola or its subcontractors for additional freight, warehousing and handling of Equipment; extension of the warranties; travel; suspending and re-mobilizing the work; additional engineering, project management, and standby time calculated at then current rates; and preparing and implementing an alternative implementation plan.

Section 12 DISPUTES

The Parties will use the following procedure to address any dispute arising under this Agreement (a "Dispute").

12.1. GOVERNING LAW. This Agreement will be governed by and construed in accordance with the laws of the State in which the System is installed.

12.2. NEGOTIATION. Either Party may initiate the Dispute resolution procedures by sending a notice of Dispute ("Notice of Dispute"). The Parties will attempt to resolve the Dispute promptly through good faith negotiations including 1) timely escalation of the Dispute to executives who have authority to settle the Dispute and who are at a higher level of management than the persons with direct responsibility for the matter and 2) direct communication between the executives. If the Dispute has not been resolved within ten (10) days from the Notice of Dispute, the Parties will proceed to mediation.

12.3. MEDIATION. The Parties will choose an independent mediator within thirty (30) days of a notice to mediate from either Party ("Notice of Mediation"). Neither Party may unreasonably withhold consent to the selection of a mediator. If the Parties are unable to agree upon a mediator, either Party may request that American Arbitration Association nominate a mediator. Each Party will bear its own costs of

mediation, but the Parties will share the cost of the mediator equally. Each Party will participate in the mediation in good faith and will be represented at the mediation by a business executive with authority to settle the Dispute.

12.4. LITIGATION, VENUE and JURISDICTION. If a Dispute remains unresolved for sixty (60) days after receipt of the Notice of Mediation, either Party may then submit the Dispute to a court of competent jurisdiction in the state in which the System is installed. Each Party irrevocably agrees to submit to the exclusive jurisdiction of the courts in such state over any claim or matter arising under or in connection with this Agreement.

12.5. CONFIDENTIALITY. All communications pursuant to subsections 12.2 and 12.3 will be treated as compromise and settlement negotiations for purposes of applicable rules of evidence and any additional confidentiality protections provided by applicable law. The use of these Dispute resolution procedures will not be construed under the doctrines of laches, waiver or estoppel to affect adversely the rights of either Party.

Section 13 DEFAULT AND TERMINATION

13.1. DEFAULT BY A PARTY. If either Party fails to perform a material obligation under this Agreement, the other Party may consider the non-performing Party to be in default (unless a Force Majeure causes the failure) and may assert a default claim by giving the non-performing Party a written and detailed notice of default. Except for a default by Customer for failing to pay any amount when due under this Agreement which must be cured immediately, the defaulting Party will have thirty (30) days after receipt of the notice of default to either cure the default or, if the default is not curable within thirty (30) days, provide a written cure plan. The defaulting Party will begin implementing the cure plan immediately after receipt of notice by the other Party that it approves the plan. If Customer is the defaulting Party, Motorola may stop work on the project until it approves the Customer's cure plan.

13.2. FAILURE TO CURE. If a defaulting Party fails to cure the default as provided above in Section 13.1, unless otherwise agreed in writing, the non-defaulting Party may terminate any unfulfilled portion of this Agreement. In the event of termination for default, the defaulting Party will promptly return to the non-defaulting Party any of its Confidential Information. If Customer is the non-defaulting Party, terminates this Agreement as permitted by this Section, and completes the System through a third Party, Customer may as its exclusive remedy recover from Motorola reasonable costs incurred to complete the System to a capability not exceeding that specified in this Agreement less the unpaid portion of the Contract Price. Customer will mitigate damages and provide Motorola with detailed invoices substantiating the charges. In the event Customer elects to terminate this Agreement for any reason other than default, Customer shall pay Motorola for the conforming Equipment and/or Software delivered and all services performed.

Section 14 INDEMNIFICATION

14.1. GENERAL INDEMNITY BY Motorola. Motorola will indemnify and hold Customer harmless from any and all liability, expense, judgment, suit, cause of action, or demand for personal injury, death, or direct damage to tangible property which may accrue against Customer to the extent it is caused by the negligence of Motorola, its subcontractors, or their employees or agents, while performing their duties under this Agreement, if Customer gives Motorola prompt, written notice of any claim or suit. Customer will cooperate with Motorola in its defense or settlement of the claim or suit. This Section sets forth the full extent of Motorola's general indemnification of Customer from liabilities that are in any way related to Motorola's performance under this Agreement.

14.2. GENERAL INDEMNITY BY CUSTOMER. Customer will indemnify and hold Motorola harmless from any and all liability, expense, judgment, suit, cause of action, or demand for personal injury, death, or direct damage to tangible property which may accrue against Motorola to the extent it is caused by the negligence of Customer, its other contractors, or their employees or agents, while performing their duties under this Agreement, if Motorola gives Customer prompt, written notice of any the claim or suit.

Motorola will cooperate with Customer in its defense or settlement of the claim or suit. This Section sets forth the full extent of Customer's general indemnification of Motorola from liabilities that are in any way related to Customer's performance under this Agreement.

14.3. PATENT AND COPYRIGHT INFRINGEMENT.

14.3.1. Motorola will defend at its expense any suit brought against Customer to the extent it is based on a third-party claim alleging that the Equipment manufactured by Motorola or the Motorola Software ("Motorola Product") directly infringes a United States patent or copyright ("Infringement Claim"). Motorola's duties to defend and indemnify are conditioned upon: Customer promptly notifying Motorola in writing of the Infringement Claim; Motorola having sole control of the defense of the suit and all negotiations for its settlement or compromise; and Customer providing to Motorola cooperation and, if requested by Motorola, reasonable assistance in the defense of the Infringement Claim. In addition to Motorola's obligation to defend, and subject to the same conditions, Motorola will pay all damages finally awarded against Customer by a court of competent jurisdiction for an Infringement Claim or agreed to, in writing, by Motorola in settlement of an Infringement Claim.

14.3.2 If an Infringement Claim occurs, or in Motorola's opinion is likely to occur, Motorola may at its option and expense: (a) procure for Customer the right to continue using the Motorola Product; (b) replace or modify the Motorola Product so that it becomes non-infringing while providing functionally equivalent performance; or (c) accept the return of the Motorola Product and grant Customer a credit for the Motorola Product, less a reasonable charge for depreciation. The depreciation amount will be calculated based upon generally accepted accounting standards.

14.3.3 Motorola will have no duty to defend or indemnify for any Infringement Claim that is based upon: (a) the combination of the Motorola Product with any software, apparatus or device not furnished by Motorola; (b) the use of ancillary equipment or software not furnished by Motorola and that is attached to or used in connection with the Motorola Product; (c) Motorola Product designed or manufactured in accordance with Customer's designs, specifications, guidelines or instructions, if the alleged infringement would not have occurred without such designs, specifications, guidelines or instructions; (d) a modification of the Motorola Product by a party other than Motorola; (e) use of the Motorola Product in a manner for which the Motorola Product was not designed or that is inconsistent with the terms of this Agreement; or (f) the failure by Customer to install an enhancement release to the Motorola Software that is intended to correct the claimed infringement. In no event will Motorola's liability resulting from its indemnity obligation to Customer extend in any way to royalties payable on a per use basis or the Customer's revenues, or any royalty basis other than a reasonable royalty based upon revenue derived by Motorola from Customer from sales or license of the infringing Motorola Product.

14.3.4. This Section 14 provides Customer's sole and exclusive remedies and Motorola's entire liability in the event of an Infringement Claim. Customer has no right to recover and Motorola has no obligation to provide any other or further remedies, whether under another provision of this Agreement or any other legal theory or principle, in connection with an Infringement Claim. In addition, the rights and remedies provided in this Section 14 are subject to and limited by the restrictions set forth in Section 15.

Section 15 LIMITATION OF LIABILITY

Except for personal injury or death, Motorola's total liability, whether for breach of contract, warranty, negligence, strict liability in tort, indemnification, or otherwise, will be limited to the direct damages recoverable under law, but not to exceed the price of the Equipment, Software, or implementation and other one time Services with respect to which losses or damages are claimed. With respect to all subscription or other ongoing Services and unless as otherwise provided under the applicable Addenda, Motorola's total liability will be limited to the direct damages recoverable under law, but not to exceed the price of twelve (12) months of Services preceding the incident giving rise to the claim. **ALTHOUGH THE PARTIES ACKNOWLEDGE THE POSSIBILITY OF SUCH LOSSES OR DAMAGES, THEY AGREE THAT MOTOROLA WILL NOT BE LIABLE FOR ANY COMMERCIAL LOSS, INCONVENIENCE, LOSS**

OF USE, LOSS TIME, DATA, GOODWILL, REVENUES, PROFITS OR SAVINGS; OR OTHER SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES IN ANY WAY RELATED TO OR ARISING FROM THIS AGREEMENT, THE SALE OR USE OF THE EQUIPMENT OR SOFTWARE, OR THE PERFORMANCE OF SERVICES BY MOTOROLA PURSUANT TO THIS AGREEMENT. This limitation of liability provision survives the expiration or termination of the Agreement and applies notwithstanding any contrary provision. No action for contract breach or otherwise relating to the transactions contemplated by this Agreement may be brought more than one (1) year after the accrual of the cause of action, except for money due upon an open account.

Section 16 CONFIDENTIALITY AND PROPRIETARY RIGHTS

16.1. CONFIDENTIAL INFORMATION.

16.1.1. Each party is a disclosing party ("Discloser") and a receiving party ("Recipient") under this Agreement. All Deliverables will be deemed to be Motorola's Confidential Information. During the term of this Agreement and for a period of three (3) years from the expiration or termination of this Agreement, Recipient will (i) not disclose Confidential Information to any third party; (ii) restrict disclosure of Confidential Information to only those employees (including, but not limited to, employees of any wholly owned subsidiary, a parent company, any other wholly owned subsidiaries of the same parent company), agents or consultants who must be directly involved with the Confidential Information for the purpose and who are bound by confidentiality terms substantially similar to those in this Agreement; (iii) not copy, reproduce, reverse engineer, decompile, or disassemble any Confidential Information; (iv) use the same degree of care as for its own information of like importance, but at least use reasonable care, in safeguarding against disclosure of Confidential Information; (v) promptly notify Discloser upon discovery of any unauthorized use or disclosure of the Confidential Information and take reasonable steps to regain possession of the Confidential Information and prevent further unauthorized actions or other breach of this Agreement; and (vi) only use the Confidential Information as needed to fulfill this Agreement.

16.1.2. Recipient is not obligated to maintain as confidential, Confidential Information that Recipient can demonstrate by documentation (i) is now available or becomes available to the public without breach of this agreement; (ii) is explicitly approved for release by written authorization of Discloser; (iii) is lawfully obtained from a third party or parties without a duty of confidentiality; (iv) is known to the Recipient prior to such disclosure; or (v) is independently developed by Recipient without the use of any of Discloser's Confidential Information or any breach of this Agreement.

16.1.3. All Confidential Information remains the property of the Discloser and will not be copied or reproduced without the express written permission of the Discloser, except for copies that are absolutely necessary in order to fulfill this Agreement. Within ten (10) days of receipt of Discloser's written request, Recipient will return all Confidential Information to Discloser along with all copies and portions thereof, or certify in writing that all such Confidential Information has been destroyed. However, Recipient may retain one (1) archival copy of the Confidential Information that it may use only in case of a dispute concerning this Agreement. No license, express or implied, in the Confidential Information is granted other than to use the Confidential Information in the manner and to the extent authorized by this Agreement. The Discloser warrants that it is authorized to disclose any Confidential Information it discloses pursuant to this Agreement.

16.2. **PRESERVATION OF MOTOROLA'S PROPRIETARY RIGHTS.** Motorola, the third party manufacturer of any Equipment, and the copyright owner of any Non-Motorola Software own and retain all of their respective Proprietary Rights in the Equipment and Software, and nothing in this Agreement is intended to restrict their Proprietary Rights. All intellectual property developed, originated, or prepared by Motorola in connection with providing to Customer the Equipment, Software, or related services remain vested exclusively in Motorola, and this Agreement does not grant to Customer any shared development rights of intellectual property. Except as explicitly provided in the Software License Agreement, Motorola does not grant to Customer, either directly or by implication, estoppel, or otherwise, any right, title or interest in Motorola's Proprietary Rights. Customer will not modify, disassemble, peel components,

decompile, otherwise reverse engineer or attempt to reverse engineer, derive source code or create derivative works from, adapt, translate, merge with other software, reproduce, distribute, sublicense, sell or export the Software, or permit or encourage any third party to do so. The preceding sentence does not apply to Open Source Software which is governed by the standard license of the copyright owner.

16.3 VOLUNTARY DISCLOSURE. Except as required to fulfill its obligations under this Agreement, Motorola will have no obligation to provide Customer with access to its Confidential Information and/or proprietary information. Under no circumstances will Motorola be required to provide any data related to cost and pricing.

16.4 DATA AND FEEDBACK.

16.4.1 To the extent permitted by law, Customer owns all right, title and interest in System Data created solely by it or its agents (hereafter, "Customer Data"), and grants to Motorola the right to use, host, cache, store, reproduce, copy, modify, combine, analyze, create derivatives from, communicate, transmit, publish, display, and distribute such Customer Data.

16.4.2 Motorola owns all right, title and interest in data resulting from System Data that is or has been transformed, altered, processed, aggregated, correlated or operated on (hereafter, "Derivative Data").

16.4.3 Any Feedback given by Customer is and will be entirely voluntary and, even if designated as confidential, will not create any confidentiality obligation for Motorola. Motorola will be free to use, reproduce, license or otherwise distribute and exploit the Feedback without any obligation to Customer. Customer acknowledges that Motorola's receipt of the Feedback does not imply or create recognition by Motorola of either the novelty or originality of any idea. The parties further agree that all fixes, modifications and improvements made to Motorola products or services conceived of or made by Motorola that are based, either in whole or in part, on the Feedback are the exclusive property of Motorola and all right, title and interest in and to such fixes, modifications or improvements to the Motorola product or service will vest solely in Motorola.

Section 17 GENERAL

17.1. TAXES. The Contract Price does not include any excise, sales, lease, use, property, or other taxes, assessments or duties, all of which will be paid by Customer except as exempt by law. If Motorola is required to pay any of these taxes, Motorola will send an invoice to Customer and Customer will pay to Motorola the amount of the taxes (including any interest and penalties) within thirty (30) days after the date of the invoice. Customer will be solely responsible for reporting the Equipment for personal property tax purposes, and Motorola will be solely responsible for reporting taxes on its income or net worth.

17.2. ASSIGNABILITY AND SUBCONTRACTING. Except as provided herein, neither Party may assign this Agreement or any of its rights or obligations hereunder without the prior written consent of the other Party, which consent will not be unreasonably withheld. Any attempted assignment, delegation, or transfer without the necessary consent will be void. Notwithstanding the foregoing, Motorola may assign this Agreement to any of its affiliates or its right to receive payment without the prior consent of Customer. In addition, in the event Motorola separates one or more of its businesses (each a "Separated Business"), whether by way of a sale, establishment of a joint venture, spin-off or otherwise (each a "Separation Event"), Motorola may, without the prior written consent of the other Party and at no additional cost to Motorola, assign this Agreement such that it will continue to benefit the Separated Business and its affiliates (and Motorola and its affiliates, to the extent applicable) following the Separation Event.

Motorola may subcontract any of the work, but subcontracting will not relieve Motorola of its duties under this Agreement.

17.3. **WAIVER.** Failure or delay by either Party to exercise a right or power under this Agreement will not be a waiver of the right or power. For a waiver of a right or power to be effective, it must be in a writing signed by the waiving Party. An effective waiver of a right or power will not be construed as either a future or continuing waiver of that same right or power, or the waiver of any other right or power.

17.4. **SEVERABILITY.** If a court of competent jurisdiction renders any part of this Agreement invalid or unenforceable, that part will be severed and the remainder of this Agreement will continue in full force and effect.

17.5. **INDEPENDENT CONTRACTORS.** Each Party will perform its duties under this Agreement as an independent contractor. The Parties and their personnel will not be considered to be employees or agents of the other Party. Nothing in this Agreement will be interpreted as granting either Party the right or authority to make commitments of any kind for the other. This Agreement will not constitute, create, or be interpreted as a joint venture, partnership or formal business organization of any kind.

17.6. **HEADINGS AND SECTION REFERENCES.** The section headings in this Agreement are inserted only for convenience and are not to be construed as part of this Agreement or as a limitation of the scope of the particular section to which the heading refers. This Agreement will be fairly interpreted in accordance with its terms and conditions and not for or against either Party.

17.7. **NOTICES.** Notices required under this Agreement to be given by one Party to the other must be in writing and either personally delivered or sent to the address provided by the other Party by certified mail, return receipt requested and postage prepaid (or by a recognized courier service, such as Federal Express, UPS, or DHL), or by facsimile with correct answerback received, and will be effective upon receipt.

17.8. **COMPLIANCE WITH APPLICABLE LAWS.** Each Party will comply with all applicable federal, state, and local laws, regulations and rules concerning the performance of this Agreement or use of the System. Customer will obtain and comply with all Federal Communications Commission ("FCC") licenses and authorizations required for the installation, operation and use of the System before the scheduled installation of the Equipment. Although Motorola might assist Customer in the preparation of its FCC license applications, neither Motorola nor any of its employees is an agent or representative of Customer in FCC or other matters.

17.9 **FUTURE REGULATORY REQUIREMENTS.** The Parties acknowledge and agree that this is an evolving technological area and therefore, laws and regulations regarding Services and use of Solution may change. Changes to existing Services or the Solution required to achieve regulatory compliance may be available for an additional fee. Any required changes may also impact the price for Services.

17.10. **AUTHORITY TO EXECUTE AGREEMENT.** Each Party represents that it has obtained all necessary approvals, consents and authorizations to enter into this Agreement and to perform its duties under this Agreement; the person executing this Agreement on its behalf has the authority to do so; upon execution and delivery of this Agreement by the Parties, it is a valid and binding contract, enforceable in accordance with its terms; and the execution, delivery, and performance of this Agreement does not violate any bylaw, charter, regulation, law or any other governing authority of the Party.

17.11. ADMINISTRATOR LEVEL ACCOUNT ACCESS. If applicable to the type of System purchased by Customer, Motorola will provide Customer with Administrative User Credentials. Customer agrees to only grant access to the Administrative User Credentials to those personnel with the training and experience to correctly use them. Customer is responsible for protecting Administrative User Credentials from disclosure and maintaining Credential validity by, among other things, updating passwords when required. Customer may be asked to provide valid Administrative User Credentials when in contact with Motorola System support personnel. Customer understands that changes made as the Administrative User can significantly impact the performance of the System. Customer agrees that it will be solely responsible for any negative impact on the System or its users by any such changes. System issues occurring as a result of changes made using the Administrative User Credentials may impact Motorola's ability to perform Services or other obligations under the Agreement. In such cases, a revision to the appropriate provisions of the Agreement, including the Statement of Work, may be necessary. To the extent Motorola provides assistance to correct any issues caused by or arising out of the use of or failure to maintain Administrative User Credentials, Motorola will be entitled to bill Customer and Customer will pay Motorola on a time and materials basis for resolving the issue.

17.12. SURVIVAL OF TERMS. The following provisions will survive the expiration or termination of this Agreement for any reason: Section 3.5 (Motorola Software); Section 3.6 (Non-Motorola Software); if any payment obligations exist, Sections 6.2 and 6.3 (Contract Price and Invoicing and Payment); Subsection 10.8 (Disclaimer of Implied Warranties); Section 12 (Disputes); Section 15 (Limitation of Liability); and Section 16 (Confidentiality and Proprietary Rights); and all of the General provisions in Section 17.

17.13. ENTIRE AGREEMENT. This Agreement, including all Exhibits, constitutes the entire agreement of the Parties regarding the subject matter of the Agreement and supersedes all previous agreements, proposals, and understandings, whether written or oral, relating to this subject matter. This Agreement may be executed in multiple counterparts, and shall have the same legal force and effect as if the Parties had executed it as a single document. The Parties may sign in writing, or by electronic signature, including by email. An electronic signature, or a facsimile copy or computer image, such as a PDF or tiff image, of a signature, shall be treated as and shall have the same effect as an original signature. In addition, an electronic signature, a true and correct facsimile copy or computer image of this Agreement shall be treated as and shall have the same effect as an original signed copy of this document. This Agreement may be amended or modified only by a written instrument signed by authorized representatives of both Parties. The preprinted terms and conditions found on any Customer purchase or purchase order, acknowledgment or other form will not be considered an amendment or modification of this Agreement, even if a representative of each Party signs that document.

The Parties hereby enter into this Agreement as of the Effective Date.

Motorola Solutions, Inc.

City of Providence

By: _____

By: _____

Name: _____

Name: _____

Title: _____

Title: _____

Date: _____

Date: _____

Exhibit A

MOTOROLA SOFTWARE LICENSE AGREEMENT

This Exhibit A Motorola Software License Agreement ("Agreement") is between Motorola Solutions, Inc., ("Motorola"), and City of Providence, RI ("Licensee").

For good and valuable consideration, the parties agree as follows:

Section 1 DEFINITIONS

1.1 "Designated Products" means products provided by Motorola to Licensee with which or for which the Software and Documentation is licensed for use.

1.2 "Documentation" means product and software documentation that specifies technical and performance features and capabilities, and the user, operation and training manuals for the Software (including all physical or electronic media upon which such information is provided).

1.3 "Open Source Software" means software with either freely obtainable source code, license for modification, or permission for free distribution.

1.4 "Open Source Software License" means the terms or conditions under which the Open Source Software is licensed.

1.5 "Primary Agreement" means the agreement to which this exhibit is attached.

1.6 "Security Vulnerability" means a flaw or weakness in system security procedures, design, implementation, or internal controls that could be exercised (accidentally triggered or intentionally exploited) and result in a security breach such that data is compromised, manipulated or stolen or the system damaged.

1.7 "Software" (i) means proprietary software in object code format, and adaptations, translations, de-compilations, disassemblies, emulations, or derivative works of such software; (ii) means any modifications, enhancements, new versions and new releases of the software provided by Motorola; and (iii) may contain one or more items of software owned by a third party supplier. The term "Software" does not include any third party software provided under separate license or third party software not licensable under the terms of this Agreement.

Section 2 SCOPE

Motorola and Licensee enter into this Agreement in connection with Motorola's delivery of certain proprietary software or products containing embedded or pre-loaded proprietary software, or both. This Agreement contains the terms and conditions of the license Motorola is providing to Licensee, and Licensee's use of the proprietary software and affiliated documentation.

Section 3 GRANT OF LICENSE

3.1. Subject to the provisions of this Agreement and the payment of applicable license fees, Motorola grants to Licensee a personal, limited, non-transferable (except as permitted in Section 7) and non-exclusive license under Motorola's copyrights and Confidential Information (as defined in the Primary Agreement) embodied in the Software to use the Software, in object code form, and the Documentation solely in connection with Licensee's use of the Designated Products. This Agreement does not grant any rights to source code.

3.2. If the Software licensed under this Agreement contains or is derived from Open Source Software, the terms and conditions governing the use of such Open Source Software are in the Open Source Software Licenses of the copyright owner and not this Agreement. If there is a conflict between the terms and conditions of this Agreement and the terms and conditions of the Open Source Software Licenses governing Licensee's use of the Open Source Software, the terms and conditions of the license grant of the applicable Open Source Software Licenses will take precedence over the license grants in this Agreement. If requested by Licensee, Motorola will use commercially reasonable efforts to: (i) determine whether any Open Source Software is provided under this Agreement; and (ii) identify the Open Source Software (or specify where that license may be found).

3.3 TO THE EXTENT, IF ANY, THAT THERE IS A SEPARATE LICENSE AGREEMENT PACKAGED WITH, OR PROVIDED ELECTRONICALLY WITH, A PARTICULAR PRODUCT THAT BECOMES EFFECTIVE ON AN ACT OF ACCEPTANCE BY THE END USER, THEN THAT AGREEMENT SUPERSEDES THE SOFTWARE LICENSE AGREEMENT AS TO THE END USER OF EACH SUCH PRODUCT.

Section 4 LIMITATIONS ON USE

4.1. Licensee may use the Software only for Licensee's internal business purposes and only in accordance with the Documentation. Any other use of the Software is strictly prohibited. Without limiting the general nature of these restrictions, Licensee will not make the Software available for use by third parties on a "time sharing," "application service provider," or "service bureau" basis or for any other similar commercial rental or sharing arrangement.

4.2. Licensee will not, and will not allow or enable any third party to: (i) reverse engineer, disassemble, peel components, decompile, reprogram or otherwise reduce the Software or any portion to a human perceptible form or otherwise attempt to recreate the source code; (ii) modify, adapt, create derivative works of, or merge the Software; (iii) copy, reproduce, distribute, lend, or lease the Software or Documentation to any third party, grant any sublicense or other rights in the Software or Documentation to any third party, or take any action that would cause the Software or Documentation to be placed in the public domain; (iv) remove, or in any way alter or obscure, any copyright notice or other notice of Motorola's proprietary rights; (v) provide, copy, transmit, disclose, divulge or make the Software or Documentation available to, or permit the use of the Software by any third party or on any machine except as expressly authorized by this Agreement; or (vi) use, or permit the use of, the Software in a manner that would result in the production of a copy of the Software solely by activating a machine containing the Software. Licensee may make one copy of Software to be used solely for archival, back-up, or disaster recovery purposes; *provided* that Licensee may not operate that copy of the Software at the same time as the original Software is being operated. Licensee may make as many copies of the Documentation as it may reasonably require for the internal use of the Software.

4.3. Unless otherwise authorized by Motorola in writing, Licensee will not, and will not enable or allow any third party to: (i) install a licensed copy of the Software on more than one unit of a Designated Product; or (ii) copy onto or transfer Software installed in one unit of a Designated Product onto one other device. Licensee may temporarily transfer Software installed on a Designated Product to another device if the Designated Product is inoperable or malfunctioning, if Licensee provides written notice to Motorola of the temporary transfer and identifies the device on which the Software is transferred. Temporary transfer of the Software to another device must be discontinued when the original Designated Product is returned to operation and the Software must be removed from the other device. Licensee must provide prompt written notice to Motorola at the time temporary transfer is discontinued.

4.4 Licensee will maintain, during the term of this Agreement and for a period of two years thereafter, accurate records relating to this license grant to verify compliance with this Agreement. Motorola or an independent third party ("Auditor") may inspect Licensee's premises, books and records, upon reasonable prior notice to Licensee, during Licensee's normal business hours and subject to Licensee's facility and

security regulations. Motorola is responsible for the payment of all expenses and costs of the Auditor. Any information obtained by Motorola and the Auditor will be kept in strict confidence by Motorola and the Auditor and used solely for the purpose of verifying Licensee's compliance with the terms of this Agreement.

Section 5 OWNERSHIP AND TITLE

Motorola, its licensors, and its suppliers retain all of their proprietary rights in any form in and to the Software and Documentation, including, but not limited to, all rights in patents, patent applications, inventions, copyrights, trademarks, trade secrets, trade names, and other proprietary rights in or relating to the Software and Documentation (including any corrections, bug fixes, enhancements, updates, modifications, adaptations, translations, de-compilations, disassemblies, emulations to or derivative works from the Software or Documentation, whether made by Motorola or another party, or any improvements that result from Motorola's processes or, provision of information services). No rights are granted to Licensee under this Agreement by implication, estoppel or otherwise, except for those rights which are expressly granted to Licensee in this Agreement. All intellectual property developed, originated, or prepared by Motorola in connection with providing the Software, Designated Products, Documentation or related services, remains vested exclusively in Motorola, and Licensee will not have any shared development or other intellectual property rights.

Section 6 LIMITED WARRANTY; DISCLAIMER OF WARRANTY

6.1. Unless otherwise stated in the Primary Agreement, the commencement date and the term of the Software warranty will be a period of ninety (90) days from Motorola's shipment of the Software (the "Warranty Period"). If Licensee is not in breach of any of its obligations under this Agreement, Motorola warrants that the unmodified Software, when used properly and in accordance with the Documentation and this Agreement, will be free from a reproducible defect that eliminates the functionality or successful operation of a feature critical to the primary functionality or successful operation of the Software. Whether a defect occurs will be determined by Motorola solely with reference to the Documentation. Motorola does not warrant that Licensee's use of the Software or the Designated Products will be uninterrupted, error-free, completely free of Security Vulnerabilities, or that the Software or the Designated Products will meet Licensee's particular requirements. Motorola makes no representations or warranties with respect to any third party software included in the Software. Notwithstanding, any warranty provided by a copyright owner in its standard license terms will flow through to Licensee for third party software provided by Motorola.

6.2 Motorola's sole obligation to Licensee and Licensee's exclusive remedy under this warranty is to use reasonable efforts to remedy any material Software defect covered by this warranty. These efforts will involve either replacing the media or attempting to correct significant, demonstrable program or documentation errors or Security Vulnerabilities. If Motorola cannot correct the defect within a reasonable time, then at Motorola's option, Motorola will replace the defective Software with functionally-equivalent Software, license to Licensee substitute Software which will accomplish the same objective, or terminate the license and refund the Licensee's paid license fee.

6.3. Warranty claims are described in the Primary Agreement.

6.4. The express warranties set forth in this Section 6 are in lieu of, and Motorola disclaims, any and all other warranties (express or implied, oral or written) with respect to the Software or Documentation, including, without limitation, any and all implied warranties of condition, title, non-infringement, merchantability, or fitness for a particular purpose or use by Licensee (whether or not Motorola knows, has reason to know, has been advised, or is otherwise aware of any such purpose or use), whether arising by law, by reason of custom or usage of trade, or by course of dealing. In addition, Motorola disclaims any warranty to any person other than Licensee with respect to the Software or Documentation.

Section 7 TRANSFERS

Licensee will not transfer the Software or Documentation to any third party without Motorola's prior written consent. Motorola's consent may be withheld at its discretion and may be conditioned upon transferee paying all applicable license fees and agreeing to be bound by this Agreement. If the Designated Products are Motorola's radio products and Licensee transfers ownership of the Motorola radio products to a third party, Licensee may assign its right to use the Software (other than CPS and Motorola's FLASHport® software) which is embedded in or furnished for use with the radio products and the related Documentation; *provided* that Licensee transfers all copies of the Software and Documentation to the transferee, and Licensee and the transferee sign a transfer form to be provided by Motorola upon request, obligating the transferee to be bound by this Agreement.

Section 8 TERM AND TERMINATION

8.1 Licensee's right to use the Software and Documentation will begin when the Primary Agreement is signed by both parties and will continue for the life of the Designated Products with which or for which the Software and Documentation have been provided by Motorola, unless Licensee breaches this Agreement, in which case this Agreement and Licensee's right to use the Software and Documentation may be terminated immediately upon notice by Motorola.

8.2 Within thirty (30) days after termination of this Agreement, Licensee must certify in writing to Motorola that all copies of the Software have been removed or deleted from the Designated Products and that all copies of the Software and Documentation have been returned to Motorola or destroyed by Licensee and are no longer in use by Licensee.

8.3 Licensee acknowledges that Motorola made a considerable investment of resources in the development, marketing, and distribution of the Software and Documentation and that Licensee's breach of this Agreement will result in irreparable harm to Motorola for which monetary damages would be inadequate. If Licensee breaches this Agreement, Motorola may terminate this Agreement and be entitled to all available remedies at law or in equity (including immediate injunctive relief and repossession of all non-embedded Software and associated Documentation unless Licensee is a Federal agency of the United States Government).

Section 9 Commercial Computer Software

9.1 *This Section 9 only applies to U.S. Government end users.* The Software, Documentation and updates are commercial items as that term is defined at 48 C.F.R. Part 2.101, consisting of "commercial computer software" and "computer software documentation" as such terms are defined in 48 C.F.R. Part 252.227-7014(a)(1) and 48 C.F.R. Part 252.227-7014(a)(5), and used in 48 C.F.R. Part 12.212 and 48 C.F.R. Part 227.7202, as applicable. Consistent with 48 C.F.R. Part 12.212, 48 C.F.R. Part 252.227-7015, 48 C.F.R. Part 227.7202-1 through 227.7202-4, 48 C.F.R. Part 52.227-19, and other relevant sections of the Code of Federal Regulations, as applicable, the Software, Documentation and Updates are distributed and licensed to U.S. Government end users: (i) only as commercial items, and (ii) with only those rights as are granted to all other end users pursuant to the terms and conditions contained herein.

9.2 If Licensee is licensing Software for end use by the United States Government or a United States Government agency, Licensee may transfer such Software license, but only if: (i) Licensee transfers all copies of such Software and Documentation to such United States Government entity or interim transferee, and (ii) Licensee has first obtained from the transferee (if applicable) and ultimate end user an enforceable end user license agreement containing restrictions substantially identical to the ones contained in this Agreement. Except as stated in the foregoing, Licensee and any transferee(s) authorized by this subsection 9.2 may not otherwise use or transfer or make available any Motorola software to any third party nor permit any party to do so.

Section 10 CONFIDENTIALITY

Licensee acknowledges that the Software and Documentation contain Motorola's valuable proprietary and Confidential Information and are Motorola's trade secrets, and that the provisions in the Primary Agreement concerning Confidential Information apply.

Section 11 LIMITATION OF LIABILITY

The Limitation of Liability provision is described in the Primary Agreement.

Section 12 NOTICES

Notices are described in the Primary Agreement.

Section 13 GENERAL

13.1. COPYRIGHT NOTICES. The existence of a copyright notice on the Software will not be construed as an admission or presumption of publication of the Software or public disclosure of any trade secrets associated with the Software.

13.2. COMPLIANCE WITH LAWS. Licensee acknowledges that the Software is subject to the laws and regulations of the United States and Licensee will comply with all applicable laws and regulations, including export laws and regulations of the United States. Licensee will not, without the prior authorization of Motorola and the appropriate governmental authority of the United States, in any form export or re-export, sell or resell, ship or reship, or divert, through direct or indirect means, any item or technical data or direct or indirect products sold or otherwise furnished to any person within any territory for which the United States Government or any of its agencies at the time of the action, requires an export license or other governmental approval. Violation of this provision is a material breach of this Agreement.

13.3 FUTURE REGULATORY REQUIREMENTS. The Parties acknowledge and agree that this is an evolving technological area and therefore, laws and regulations regarding Services and use of Solution may change. Changes to existing Services or the Solution required to achieve regulatory compliance may be available for an additional fee. Any required changes may also impact the price for Services.

13.4. ASSIGNMENTS AND SUBCONTRACTING. Motorola may assign its rights or subcontract its obligations under this Agreement, or encumber or sell its rights in any Software, without prior notice to or consent of Licensee.

13.5. GOVERNING LAW. This Agreement is governed by the laws of the United States to the extent that they apply and otherwise by the internal substantive laws of the State to which the Software is shipped if Licensee is a sovereign government entity, or the internal substantive laws of the State of Illinois if Licensee is not a sovereign government entity. The terms of the U.N. Convention on Contracts for the International Sale of Goods do not apply. In the event that the Uniform Computer Information Transaction Act, any version of this Act, or a substantially similar law (collectively "UCITA") becomes applicable to a party's performance under this Agreement, UCITA does not govern any aspect of this Agreement or any license granted under this Agreement, or any of the parties' rights or obligations under this Agreement. The governing law will be that in effect prior to the applicability of UCITA.

13.6. **THIRD PARTY BENEFICIARIES.** This Agreement is entered into solely for the benefit of Motorola and Licensee. No third party has the right to make any claim or assert any right under this Agreement, and no third party is deemed a beneficiary of this Agreement. Notwithstanding the foregoing, any licensor or supplier of third party software included in the Software will be a direct and intended third party beneficiary of this Agreement.

13.7. **SURVIVAL.** Sections 4, 5, 6.4, 7, 8, 9, 10, 11 and 13 survive the termination of this Agreement.

13.8. **ORDER OF PRECEDENCE.** In the event of inconsistencies between this Exhibit and the Primary Agreement, the parties agree that this Exhibit prevails, only with respect to the specific subject matter of this Exhibit, and not the Primary Agreement or any other exhibit as it applies to any other subject matter.

13.9. **SECURITY.** Motorola uses reasonable means in the design and writing of its own Software and the acquisition of third party Software to limit Security Vulnerabilities. While no software can be guaranteed to be free from Security Vulnerabilities, if a Security Vulnerability is discovered, Motorola will take the steps set forth in Section 6 of this Agreement.

**Exhibit B
PAYMENT**

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 (excluding Subscribers, if applicable)

1. 25% of the Contract Price due upon contract execution (due upon effective date);
2. 60% of the Contract Price due upon shipment of equipment from Staging;
3. 10% of the Contract Price due upon installation of equipment; and
4. 5% of the Contract Price due upon Final Acceptance.

If Subscribers are purchased, 100% of the Subscriber Contract Price will be invoiced upon shipment (as shipped).

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.

For Lifecycle Support Plan and Subscription Based Services:

Motorola will invoice Customer annually in advance of each year of the plan.

The chart below outlines the hourly labor rates for Motorola System Integration resources to be used. The staffing requirements shall be multiplied by the appropriate rate per resource in the table below. The hourly labor rates are fully burdened. The hourly rates per resource type and level are listed in Table 1.

Levels	Resource Types			
	Project Management	System Engineering	System Technologist	Project Administration
4	\$ 290.00	\$ 300.00	\$ 280.00	\$ 200.00
3	\$ 240.00	\$ 250.00	\$ 240.00	\$ 180.00
2	\$ 220.00	\$ 220.00	\$ 220.00	\$ 170.00
1	\$ 190.00	\$ 210.00	\$ 210.00	\$ 160.00

Table 1 - Hourly Rates

These rates apply to ordinary days and times (Monday to Friday during the hours 8am to 5pm). Additional surcharges may apply to work done outside these timeframes. The minimum charge for any resource will be 4 hours. Travel expenses are not included in these rates and may be charged separately. The qualifications of each type and level of resource are defined in the tables found at <https://www.motorolasolutions.com/content/dam/msi/secure/services/labor-rates-exhibit-160408.pdf>. All Motorola System Integration personnel assigned to this project will be classified according these levels. Project Administrative roles are varied and their specific duties and qualifications will be determined by the complexity and requirements of each project.

EXHIBIT D

System Acceptance Certificate

Customer Name: _____

Project Name: _____

This System Acceptance Certificate memorializes the occurrence of System Acceptance. Motorola and Customer acknowledge that:

1. The Acceptance Tests set forth in the Acceptance Test Plan have been successfully completed.
2. The System is accepted.

Customer Representative:

Motorola Representative:

Signature: _____
Print Name: _____
Title: _____
Date: _____

Signature: _____
Print Name: _____
Title: _____
Date: _____

FINAL PROJECT ACCEPTANCE:

Motorola has provided and Customer has received all deliverables, and Motorola has performed all other work required for Final Project Acceptance.

Customer Representative:

Motorola Representative:

Signature: _____
Print Name: _____
Title: _____
Date: _____

Signature: _____
Print Name: _____
Title: _____
Date: _____

**EXHIBIT E
INSURANCE REQUIREMENTS**

[To be inserted once finalized]



CITY OF PROVIDENCE

SUBSCRIBER UPGRADE AND GPS

AUGUST 26, 2019

The design, technical, and price information furnished with this proposal is proprietary information of Motorola Solutions, Inc. (Motorola). Such information is submitted with the restriction that it is to be used only for the evaluation of the proposal, and is not to be disclosed publicly or in any manner to anyone other than those required to evaluate the proposal, without the express written permission of Motorola Solutions, Inc.

MOTOROLA, MOTO, MOTOROLA SOLUTIONS, and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. All other trademarks are the property of their respective owners. © 2019 Motorola Solutions, Inc. All rights reserved.
PS-000094054



Motorola Solutions, Inc.
1303 E. Algonquin Rd.
Schaumburg, IL 60196
USA

Tel. + 1 847 576 5000
Fax + 1 847 538 6020

26, August 2019

Director Carolyn Bourbeau
City of Providence, RI
One Communications Place
Providence, RI 02903

Subject: GPS - LOCATION ON ENHANCED DATA

Dear Director Bourbeau:

Motorola Solutions, Inc. ("Motorola") is pleased to have the opportunity to provide City of Providence, RI with quality communications equipment and services. The Motorola project team has taken great care to propose a solution that will meet your needs and provide unsurpassed value.

To best meet the functional and operational specifications of this City of Providence, the Motorola solution includes a combination of hardware, software, and services. Specifically, this solution provides:

- APX Mobile and Portable Subscriber Upgrade for Providence Fire
- APX Portable Subscriber Upgrade for Providence Police
- ASTRO GPS Solution leveraging APX subscriber
- ASTRO System Simulcast IP Upgrade

This proposal consists of this cover letter and the Communications System Agreement (CSA), together with its Exhibits. This proposal shall remain valid for a period of 90 days from the date of this cover letter. City of Providence, RI may accept the proposal by delivering to Motorola the CSA signed by the City of Providence. Alternatively, Motorola would be pleased to address any concerns Customer may have regarding the proposal. Any questions can be directed to your Motorola Account Executive, Jon Lamoureux at 617-699-2749.

We thank you for the opportunity to furnish City of Providence, RI 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.

A handwritten signature in black ink, appearing to read 'Roy Kirchner'.

Roy Kirchner
MSSI Vice President

TABLE OF CONTENTS

Section 1

System Description	1-1
1.1 System Overview	1-1
1.1.1 IP Simulcast Upgrade Components	1-1
1.1.2 Aruba 2930F 24G Switch	1-2
1.1.3 GCM 8000 Comparators	1-2
1.1.4 GCP 8000 Controller	1-3
1.2 MPLS Routing System	1-4
1.2.1 Nokia 7705 SAR MPLS Router Overview	1-4
1.3 Enhanced Data	1-5
1.3.1 Mapping Options	1-6
1.4 Design Notes and Considerations.....	1-7
1.5 Project 25 User Radios	1-8
1.6 APX 8000H and APX 8000HXE Radio.....	1-11
1.7 APX 6000 Portable Radio	1-12
1.8 APX 6500 Mobile Radio	1-13

Section 2

Equipment List	2-1
2.1 Proposed Equipment List	2-1
2.2 Proposed Subscribers Equipment List	2-6

Section 3

Statement of Work	3-1
3.1 Overview	3-1
3.2 Assumptions.....	3-1

Section 4

Acceptance Test Plan.....	4-1
4.1 Overview	4-1
4.1.1 Talkgroup Call	4-1
4.1.2 Continuous Assignment Updating	4-2
4.1.3 Multigroup Call in Wait Mode	4-3
4.1.4 Call Alert.....	4-4
4.1.5 Private Call.....	4-5
4.1.6 Audio Interrupt/Interrupt Never Mode.....	4-6
4.1.7 Emergency Alarm and Call with Top of Queue	4-7
4.1.8 Enhanced Data Context Activation.....	4-8
4.1.9 Preemption of Unprotected Data Channels for Voice	4-9
4.1.10 Protected P25 Data Channels.....	4-10

4.1.11 Protected Data Channels Emergency Alarm and Call with Top of Queue4-11

Section 5
Service/Warranty5-1

Section 6
Pricing Summary.....6-1
6.1 Payment Terms.....6-1

Section 7
Contractual Documentation7-1



SECTION 1

SYSTEM DESCRIPTION

1.1 SYSTEM OVERVIEW

The current City of Providence ASTRO 25 system is a Circuit based, twelve (12) channel 800MHz trunking simulcast system with five (5) remote simulcast sites.

Motorola Solutions has prepared this design for City of Providence to install a GPS Outdoor Location solution. Per discussion with the City, the GPS solution will involve two dedicated data channels with Cadence based location. The GPS solution proposed is an ASTRO 25 system enhancement option known as *Location on Enhanced Data*. Enhanced Data utilizes the existing City radio system infrastructure and is administered on the system's data channel.

The Location on Enhanced Data enhancement option is available beginning in the ASTRO 25 M-Core release 7.14. The current release of the City of Providence system is 7.16 but the RISON core will be upgraded to 7.17.3 later this year.

The GPS Location solution includes the addition of a Customer Enterprise Network (CEN) to be added to the existing M2 Core and located at the Providence Dispatch facility. Networking equipment and an Intelligent Middleware (IMW) Server will be added as part of the solution.

The GPS Location solution requires a mapping solution and Motorola has included Compasscom mapping application option for the City.

The GPS Location solution requires that the subscribers are APX radios with the IV&D option and GPS capability enabled. Additionally, this solution requires the sites to have G series devices with GCM8000 comparators; therefore, the City's current simulcast cell will have to be upgraded to IP Simulcast (from the current circuit switched setup).

1.1.1 IP Simulcast Upgrade Components

The hardware for the IP simulcast upgrade for Providence consists of the following major network components:

- Aruba 2930F 24G Switch (Prime Backhaul & LAN)
- GGM8000 Router (Prime & Access)
- GCM8000 Comparator (Prime)
- GCP8000 Controller (Prime)
- GGM8000 (Prime Sub Site Router)
- Aruba 2930F 24G (Prime Sub Site Backhaul Switches)

The other components in the system will be reused:

- GTR stations (software upgrades to IP Simulcast included)
- TRAK units



The following components will be removed once the cutover is complete:

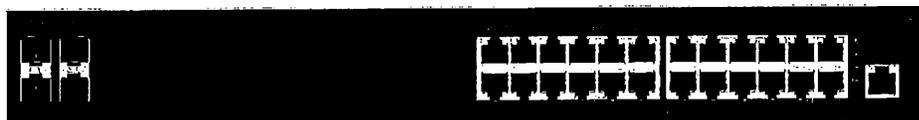
- Astro-TAC 9600 Comparators
- HP 2620- 24 Switch (Prime Backhaul & Prime LAN)
- HP 2626-24 Switch (Sub site backhaul)
- S6000 Router (Prime)
- S2500 Router (Sub Site)

Table 1-1: Recommended Spares

QTY	NOMENCLATURE	DESCRIPTION
2	SQM01SUM0205	GGM 8000 GATEWAY
2	CA01616AA	ADD: AC POWER
2	CLN1868	2930F 24-PORT SWITCH
1	CLN1869	2930F 48-PORT SWITCH
2	DSTRAK91061	FOUR PORT DDM

1.1.2 Aruba 2930F 24G Switch

Motorola Solutions is proposing the Aruba 2930F 24G Switch to act as the backhaul switches for the Prime site and Sub site. These are necessary for Ethernet site link operation. The Aruba 2930F switch does not support clear protocols (Telnet/TFTP). SSH connection is supported. The 2930F 24G switch includes twenty-four (24) 10/100/1000BASE-T ports and four (4) SFP+ slots for 1/10Gigabit Ethernet uplink connectivity. With IPv4/IPv6 static and RIP routing, robust security and management features, the HP 2930F 24G switch is a cost-effective solution for City who are building converged enterprise edge networks.



©2017 Hewlett-Packard Development Company, L.P. Reproduced with permission.

Figure 1-1: Aruba 2930F 24G

1.1.3 GCM 8000 Comparators

Motorola Solutions is proposing GCM 8000 Comparators to replace the existing Astro-TAC comparators. The GCM 8000 Comparator features a state-of-the-art digital voting methodology: Frame Diversity Reception. The GCM 8000 Comparator votes on segments of each signal based upon certain digital signal parameters. As the comparator receives the various signals, it looks at each of the data frames and compares the BER. The comparator then selects the data frame or signals with the lowest BER and forwards it. By using the best pieces (code words) of each input

signal, the result is often a better output signal than any one signal being received at the comparator.

The GCM 8000 Comparator is designed to accommodate two comparator modules per chassis with each module handling one 12.5 kHz channel. The power supplies in the comparator chassis can be daisy-chained together to eliminate single points of failure.

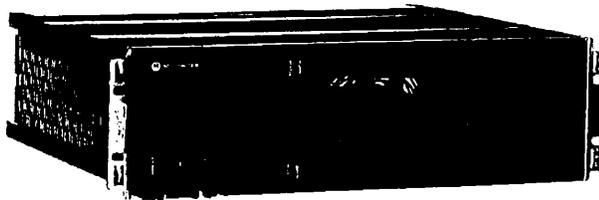


Figure 1-2: GCM Comparator Front View

1.1.4 GCP 8000 Controller

The following are general information on the GCP 8000 Controllers.

The GCP 8000 Site Controller is the control interface between the IP simulcast subsystem and the zone controller. The site controller performs the following functions:

- Translates mobility and call service control messages received from the channels into the protocol required for interfacing to the zone controller.
- Translates mobility and call service control messages received from the zone controller into the protocol required for interfacing to the channels.
- Maintains a mobility database uploaded to the zone controller as part of the recovery process when the site transits from Site Trunking to Wide Area Trunking.
- Supervises subsystem resources that include determining channel status and remote site status based on status information received from the channels and reported to the Unified Event Manager (UEM) and also indicates to the zone controller the capabilities of the channels at the site. The zone controller uses the channel capabilities for resource allocation.
- Performs trunked data call processing while in Site Trunking.
- Supports Site Trunking and Failsoft failure modes.
- Receives the 1PPS from the TRAK 9100 Simulcast Site Reference and Global Positioning Satellite and then provides a unique launch time reference for the comparators and base radios.



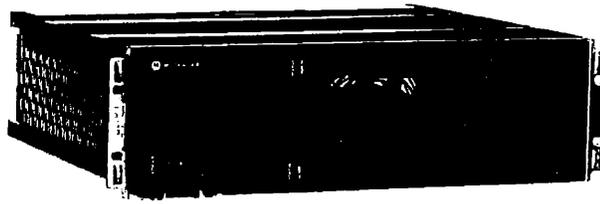


Figure 1-3: GCP Controller Front View

1.2 MPLS ROUTING SYSTEM

Motorola proposes a Nokia MPLS network, which will provide a highly reliable system of service routers and management software to deliver a wide range of Ethernet and TDM services to support any network requirements of the owner or their partner agencies. The MPLS system will use the proposed Ceragon's microwave system.

The MPLS transport system uses all COTS equipment designed for use with microwave in a public safety grade network. Based on the network topology and port requirements, Nokia SAR-8 routers have been quoted at the following sites:

- Public Safety
- Providence College
- Brown University
- RIPTA
- Hartford Ave.

1.2.1 Nokia 7705 SAR MPLS Router Overview

Nokia's MPLS 7705 Service Aggregation Router (SAR) is a cost optimized aggregation router that supports multiple Layer 1, 2 and 3 services over MPLS. The 7705 SAR has the ability to aggregate multiple media and transport protocols onto a normalized, economical packet transport infrastructure. A wide variety of interfaces and traffic sources are accommodated. The 7705 Service Aggregation Router (SAR) proposed in the design has plenty of room for growth to accommodate future fiber or microwave backbone additions or customer Ethernet or TDM circuit requirements.

The 7705 allows for multiple GigE (Gigabit Ethernet) and Ethernet connections in an extremely small form factor. Strong QoS capabilities deliver customer satisfaction and the ability to differentiate service levels. The 7705 can be used to support many different applications including microwave backhaul or using for fiber connectivity. This reduces the amount of required spares and technical training to staff to support the network over time.

The 7705 SAR is available in a range of models to suit a broad range of applications depending on the port capacity and redundancy options required.



7705 SAR-8

Figure 1-4: Nokia 7705 SAR-8

NOTE: The proposal includes MPLS routers at all of the existing sites with Ethernet capability.

1.3 ENHANCED DATA

IMPROVES P25 SHORT DATA PERFORMANCE BY 12X

Enhanced Data introduces a new type of data channel to support short, periodic inbound messages on APX subscribers, such as GPS location. The ASTRO 25 Enhanced Data option can provide up to 12 times the capacity of a P25 standard data channel. Enhanced Data provides for optimized data services such as outdoor tracking, increasing the safety of field users. Dispatchers use these inbound messages to track the radio users' status and location with a mapping application.

Enhanced Data coverage is equal to your ASTRO 25 voice system, overcoming limited coverage of a broadband carrier.

Converting P25 FDMA channels to TDMA makes room for additional channels for voice and data. Channels can be dedicated to data to optimize throughput and access times – but emergency voice traffic can automatically take priority.

For agencies using carriers for broadband traffic, Enhanced Data moves the short-burst inbound traffic to the ASTRO 25 network, avoiding carrier charges and coverage limitations.

Enhanced Data enables several data-driven applications (e.g. SCADA, geofencing, telemetry, biometrics, etc.) over the ASTRO 25 system. When supporting a variety of special-purpose applications, Enhanced Data can help provide a more timely and detailed view of resource locations and conditions.

**DATA TRAFFIC DYNAMICALLY
ADJUSTS
TO EMERGENCY VOICE NEEDS**

LOCATION ECOSYSTEM PROVIDES ENHANCED DATA DELIVERY

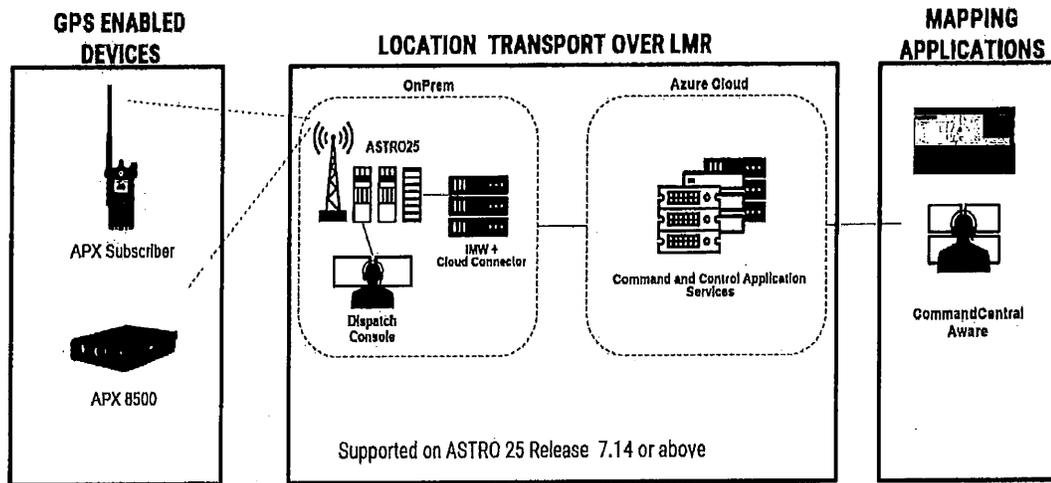


Figure 1-5: Location on Enhanced Data

1.3.1 Mapping Options

Motorola Solutions has included the CompassCom mapping solution for the GPS Location design. CompassCom empowers on-premise real-time tracking with Motorola ASTRO 25 radio networks. CompassCom is an authorized partner and provider of real time GPS tracking and fleet management solutions. This enterprise software solution is configured as a Common Operational Picture and is integrated with Motorola infrastructure to track both in-vehicle terminals, and GPS-enabled portable and mobile radios. Real-time vehicle, handset and sensor information is viewed with the CompassTrac browser based application. CompassTrac7 is web-based software that shows real-time location, status and the state of your mobile assets. CompassReports, based on SQL Server Reports, is an easy way to get accurate information on fleet or vehicle use, performance, history or after action accountability. CompassReports provides Standard, Customized or Scheduled Reports. The CompassCom solution enables supervisors, field managers and commanders to make meaningful decisions that save lives, improves customer service, ensure worker accountability and drives more efficient operations while leveraging their investment in Motorola Solutions technology.

CompassCom

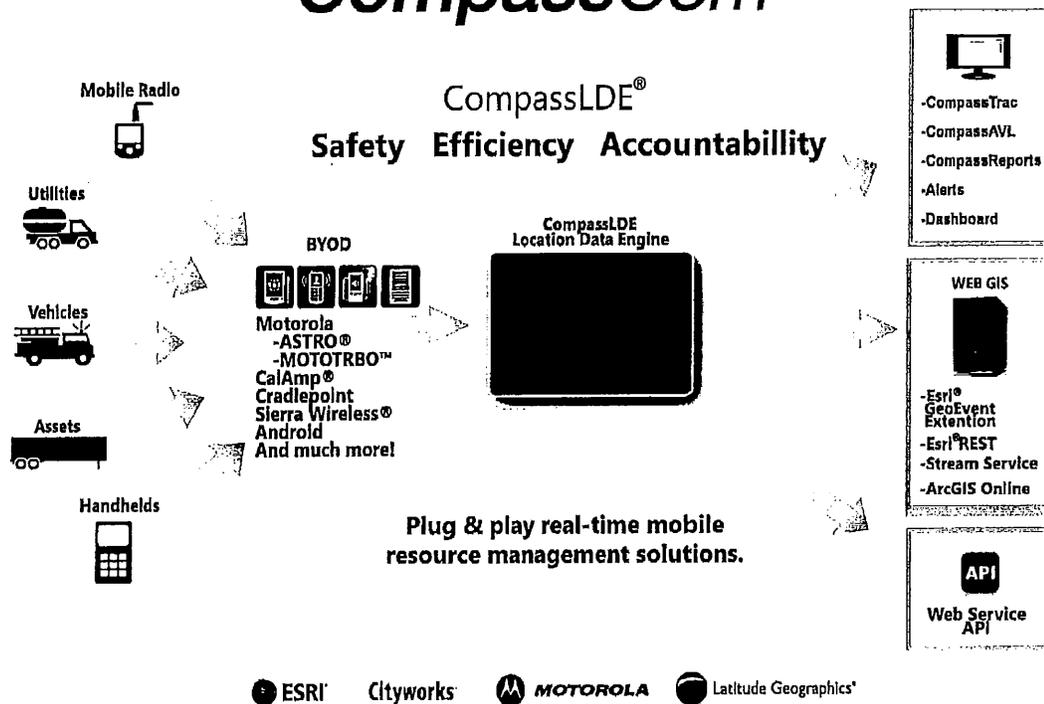


Figure 1-6: CompassCom Overview

1.4 DESIGN NOTES AND CONSIDERATIONS

Below are some design notes that are pertinent to the proposal:

- No UPS systems have been included with this design. The City will be responsible to supply a UPS, if one does not exist.
- One (1) new 7.5-foot rack for the CEN equipment will be installed at the Dispatch site.
- Software updates to APX subscribers will be installed via Motorola preferred shop.
- APX Subscribers are still being added to the Providence system.
- A new Intelligent Middleware (IMW) Server, one Border router, and one CEN Network switch will be installed at the existing Providence 911 Dispatch facility into new rack.
 - Six (6) Rack Units of space will be required.
- The new CEN located at the Providence 911 Dispatch will interface back to the Core at City of Providence via the City provided IP backhaul.
- The City is responsible for IP transport between each of the remote RF sites, dispatch site and the Master site.

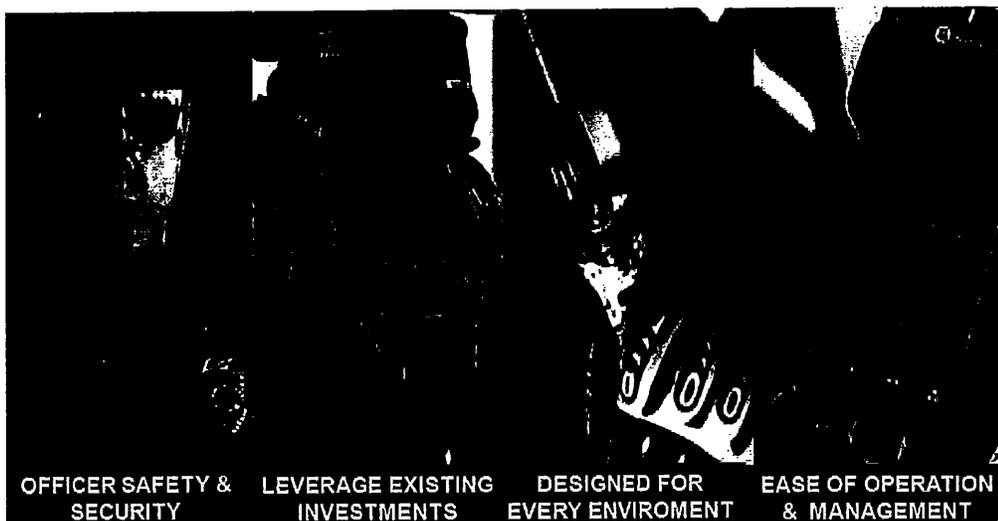
- The City is responsible for providing sufficient AC power, grounding, and physical space at the Providence 911 Dispatch facility. This includes the required outlets for the new equipment at this location.
- Two (2) new AC Edge 120 PDU will replace two existing OP8 at the Prime site.
 - Four (4) 60A circuits need to be installed by electrician.
- Two (2) new KVMs will replace two existing KVMs at the Providence 911 Dispatch.
- Recommended spares have been included.
- The design provides GPS Location on Enhanced Data using dedicated data channels for polling or Cadence location.
- The GPS Location on Enhanced Data solution is designed for the City's Police portable radio units. Our understanding is that there are 825 APX radios and 157 mobiles for the City's public safety users.

1.5 PROJECT 25 USER RADIOS

With a rugged, easy-to-operate form factor and advanced voice and data features, Motorola Solutions' IP-enabled APX radios offer reliable, two-way communications for City of Providence's users in any type of environment. Every APX radio includes the following advanced software, hardware, and future-ready capabilities:

- Support for Project 25 (P25) and legacy infrastructures.
- Extreme audio profiles for chaotic, high-noise environments.
- Intuitive audio-visual signaling to increase personnel safety.
- Functions to enable easy operation.
- Easy radio programming.
- Rugged and robust testing standards.

When developing the APX platform, Motorola Solutions' product engineers met with personnel from public safety and law enforcement agencies to identify and design the specific functionality essential for mission-critical communications. Through that research and collaboration, every feature in the APX line has been designed with its users in mind—from the ruggedized form factor to the loudest, clearest audio.



Motorola Solutions' IP-enabled APX radios offer a full array of features and progressive technologies, and are the most sophisticated interoperable and rugged two-way radios on the market. Every APX radio includes the following advanced software, hardware, and future-ready features:

Support for Project 25 and Legacy Infrastructures

All APX radios are compatible with P25 Phase 1 and Phase 2 standards for analog and digital trunking, and support the P25 interoperability features from both Motorola Solutions and other manufacturers. They also operate on analog conventional, Project 25 conventional, and Project 25 trunking systems, as well as systems using Motorola Solutions Project 16 analog trunking, SMARTNET, and SmartZone technologies.

Extreme Audio Profiles for Chaotic, High-Noise Environments

APX two-way radios possess intelligent 2- microphone noise reduction software and the latest AMBE vocoder technology used for audio to dynamically adjust for rapidly changing, high-noise environments. When combined with the microphones and speakers in our APX portables and control heads, these components and software enable the loudest, clearest two-way radio audio available.

Intuitive Audio-Visual Signaling to Increase Personnel Safety

Every APX radio includes auditory and visual alerts to improve user awareness and reduce response time. Digital Tone Signaling instantly alerts on/off duty responders of emergency events. Intelligent Lighting uses color alerts to notify users of the radio mode, potential emergencies, or specific events. These audio-visual alerting mechanisms can be configured on both a radio and a fleet basis, enabling each user and agency to customize audio, lighting, and tone alerts to meet their needs in specific work conditions.

Functions to Enable Easy Operation

The APX platform includes features to allow personnel to communicate quickly and easily in the midst of chaotic situations and extreme environments. Each radio can be configured to announce channels, talkgroups, and zones while the user navigates through the radio's available options—saving valuable time and eliminating the need for the user to look at the radio while operating it. All information associated with each contact in the radio can be consolidated into one unified call list, reducing the time needed to navigate the radio's software.

Easy Radio Programming

The APX platform includes easy-to-use Customer Programming Software (CPS), a Windows-based application with drag-and-drop, clone wizard, and programming over IP capabilities. This software drastically decreases the time needed to configure and update radio programming, and simplifies the addition of new software and future enhancements. All APX radios can be configured with Motorola Solutions' Programming Over P25 (POP25) over-the-air programming functionality, which enables radios to be programmed over the air via the ASTRO 25 system while remaining in the field without needing to be brought in from the field. POP25 functionality reduces the time, effort, and costs needed to update radio functionality by allowing radios' configuration to be accessed and updated over the air.



Rugged and Robust Testing Standards

APX radios undergo testing for extreme conditions and physical treatment to ensure that they will remain operational even years of wear and tear in the field. These tests include include temperature shock, temperature cycling, drop, display impact, vibration, blowing rain, dust, salt fog, UV exposure and Electro-Static discharge (ESD). The basic test procedures replicate those conducted by the military for field equipment, and APX radios exceed the applicable Military Specification 810 C, D, E, F, and G. Motorola Solutions has supplemented the MIL-STD testing process with an internal testing process that reuses the same test unit for all environmental tests, rather than testing a new unit each time. This ensures that the radios perform to specification regardless of the amount and type of abuse they receive.

Emergency Call Termination

APX radios allow users to remotely clear an emergency status, keeping operations efficient by quickly dealing with accidental activation or the late clearing of emergencies. This allows City of Providence's users to stay focused on other critical tasks instead of getting distracted or interrupted with continued emergencies.

Data Modem Tethering over Wi-Fi

This feature allows City of Providence's APX radios to route data through an LTE modem, speeding up data transmissions and offloading data traffic from the network. Voice and data are carried faster over an LTE network, allowing users to experience a higher quality of service for daily operations. This feature is available to the APX 8500 mobile radio and all Wi-Fi capable portable radios.

APX Instant Recall

The Instant Recall feature allows City of Providence's users to replay their last received voice call, increasing system efficiency and reducing repeat transmissions. Calls containing detailed information (such as addresses, license plates, or phone numbers) will be stored on the APX device (up to 60 seconds) to be replayed whenever necessary.



1.6 APX 8000H AND APX 8000HXE RADIO

The APX 8000H & HXE are Motorola Solutions' flagship all-band radios designed specifically to keep officers and their communities safe in hazardous conditions. Certified to the Div 1 HazLoc standard, the APX 8000H & HXE keep officers connected and informed in dangerous areas where reliable communication is critical.

These 4-in-1 user radios offer all-band interoperability, with an adaptive audio engine that provides the clearest and loudest audio on the market. With four RF bands and multi-mode system access, the APX 8000H & HXE enable users to communicate across 700 MHz, 800MHz, VHF and UHF Bands 1 and 2. The radios offer backward and forward compatibility (FDMA and TDMA) and integrated GPS for outdoor location tracking.

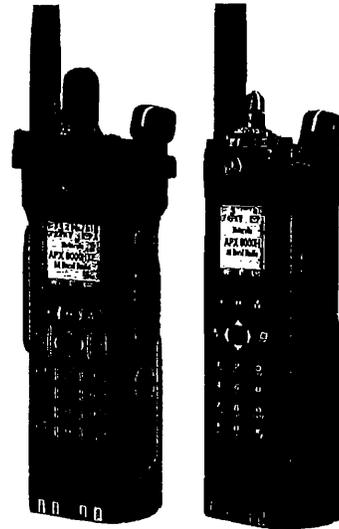
These radios are built to withstand tough operation and unforgiving conditions, with intuitive controls for easy gloved use and a dual-microphone to cancel out distracting background noise. Built on a secure COTS platform, City of Providence's information is protected with a single-key ADP encryption.

For public safety officers, the APX 8000H radio is available with a black color scheme and two keypad variants: limited and full.

For fire and rescue, the APX 8000HXE features an ergonomic control top and a larger Push-to-Talk (PTT) button for easier gloved use in extreme conditions. The radio is available with a green color scheme and two keypad variants: limited and full.

Standard features and benefits of the APX 8000H & HXE also include the following:

- **UL Div 1 HazLoc Standard** – Better equip officers to complete their mission when faced with dangerous concentrations of flammable gasses, vapors, liquids, or combustible dust. These user radios are approved to the TIA-4950 standard for use in: Division 2, Class I, Groups C, D, Class II, Groups E, F, G, and Class III hazardous locations. The user radios provide additional testing for saltwater immersion.
- **Ergonomic Build** – Top display, intelligent lighting, and one-touch/status allow for trouble-free operation in harsh environments, meaning officers can focus on the mission at hand. The APX 8000H & HXE have an IP68 rating and meets the rigorous MIL 810 specifications.
- **Accessories** – All-band antenna and the 3100 MAH IMPRES 2 battery included standard.



APX 8000H (pictured right) and the APX 8000HXE (pictured left).

- **FIPS 140-2 Level 3 Validation** – Federal Information Processing Standard (FIPS) 140-2 Level 3 validation enhances the security for voice and data and ensures that critical data is only accessible by authorized personnel. Features include: Tamper Detection and Response Mechanisms, Secured Keyfill, high-level design assurance, and physical port separation.

1.7 APX 6000 PORTABLE RADIO

Motorola Solutions designed the APX 6000 fourth generation P25 portable with direct input from first responders. Engineered with high performance technology and utilizing innovative designs, the APX 6000 provides users with an ergonomic and rugged device that delivers superior audio performance with real-time information in a smaller package. The APX 6000 is easy to use, allowing personnel to focus on their job at hand, rather than the technology. In addition, the APX 6000 equips first responders with the clearest audio of any Motorola Solutions portable on the market.



The APX 6000 is Motorola Solutions' fourth-generation, P25 Phase 2 capable portable radio, created specifically for public safety first responders who need to communicate on Project 25 Phase 2 systems. It offers outstanding performance in a compact, ruggedly reliable design, with the clearest audio of any Motorola Solutions portable on the market. With Wi-Fi access enables, the APX 6000 can to quickly receive new codeplugs, firmware, and software features, in order to redeploying the radio fleet with ease as users continue talking without interruption. The APX 6000 improves public safety and emergency response times by incorporating innovative technology and design features developed based on direct input from first responder radio users.

Some of the standard features and benefits of the APX 6000 include:

- **Improved Efficiency and Safety** – Supports Integrated Voice and Data (IV&D) capabilities to enhance the efficiency and safety of City of Providence's users through various data applications (Over-the-Air Programming (POP25) and Text Messaging).
- **Advanced Audio Features Ensure Intelligibility in High-Noise Environments** – 3 Watt speaker deliver superior intelligibility by producing louder sound and more accurately reproducing voice transmissions. An adaptive audio engine and ultra-loud 3 Watt speaker enable the radio to automatically adjust to consistently produce the loudest and clearest audio in any environment. Dual-sided two-microphone noise-canceling technology ensures clear audio through noise suppression technology that locates the talker and cancels out any background noise in their environment. An AMBE digital voice vocoder provides unmatched speed and voice quality, while reducing costs by requiring less data, memory, and power consumption.
- **Discreet Communication between Radio Users** – Cutting-edge design features in a small size enable public safety radio users, such as police officers, with the ability to communicate with team members without being detected in dangerous situations. The T-Grip design offers a secure grip and easy handling.



The full bitmap monochromatic LCD Top Displays allow users to quickly read messages at a glance, and a high-contrast color display screen ensures easy viewing in difficult lighting conditions or when viewing at an angle. The enhanced grooves of the Push-to-Talk (PTT) button allow users to easily locate by "touch".

- **Rugged Design Features** – Heavy-duty design features provide additional durability. Because it meets Submersible IP68 standards with the option to upgrade to a rugged housing (2 meters, 2 hours), the APX 6000 will function even when immersed in water. Meets all applicable MIL-STD-810C, D, E, F and G standards for withstanding dust, heat, shock, and drops, making it the most reliable portable radio in any situation.

1.8 APX 6500 MOBILE RADIO

The Motorola Solutions APX 6500 includes exceptional flexibility and innovative safety features, providing mission-critical first responders with a mobile radio that is easy to operate and intuitive to use. The APX 6500 P25 mobile allows users to choose from five control heads, mid and high-power models, and multiple installation configurations in an easy-to-install design. Innovative standard safety features such as GPS location tracking, intelligent lighting, and one-touch controls help keep first responders safer than ever before.



The APX 6500 has been created specifically to give first responders and other public safety personnel the ability to decide what will best support their operational needs. Its flexible platform enables the ability to choose from a selection of five interchangeable control heads, dual control head support, and two transceiver options.

Some of its standard features and benefits include:

- **P25 and Legacy Interoperability** – Available in 700/800 MHz, VHF, UHF R1 and UHF R2 frequency bands, and compatible with both P25 Phase 1 and Phase 2 infrastructure. The APX 6500 enables seamless communications for mission-critical first responders.
- **Multiple Control Head Options** – The APX 6500 mobile radio can be controlled by multiple control heads, with four different wired locations. There are five control heads available for the APX 6500: the O2 Rugged Control Head, O3 Handheld Control Head, O5 Standard Control Head, O7 Enhanced Control Head, and O9 Integrated Control Head. Dual control head support is offered for the O2, O5, and O7 control heads.
- **Easy to Install** – The APX 6500's Mid-Power Model has been designed to fit into any existing Motorola Solutions XTL footprint, so no further installation is necessary. The High-Power Model has been designed with a trunion design that secures the mobile while enabling it to be removed without also removing connecting cables.
- **Options to Meet Radio Users' Needs** – The APX 6500 is compatible with the following optional advanced features and data applications: Programming over



Project 25 (POP25), Text Messaging Over-the-Air Rekeying (OTAR), 12-character RF ID asset tracking, Tactical OTAR, Siren and Light Interface Module.



SECTION 2

EQUIPMENT LIST

2.1 PROPOSED EQUIPMENT LIST

This section lists the equipment necessary for the proposed solution.

SUB SYS ID	SUB SYS	QTY	NOMENCLATURE	DESCRIPTION
RISCON	CORE	1	SQM01SUM0273	MASTER SITE CONFIGURATION
RISCON	CORE	1	CA02629AC	ADD: EXPAND 7.17 M CORE
RISCON	CORE	4	CA01316AA	ADD: UNC ADDTL DEVICE LIC (QTY 10)
RISCON	CORE	1	T8343	GSERIES SOFTWARE LICENSING
RISCON	CORE	60	UA00400AA	ADD: GSERIES BR-P25 TRNK MS IP
Prime	GCM8000	1	T7321	GCM 8000 COMPARATOR
Prime	GCM8000	2	CA01183AA	GCM 8000 COMPARATOR
Prime	GCM8000	2	CA00717AA	ADD: ASTRO SYSTEM RELEASE 7.17
Prime	GCM8000	1	X153AW	ADD: RACK MOUNT HARDWARE
Prime	GCM8000	2	CA01185AA	ADD: IP BASED MULTISITE OPERATION
Prime	GCM8000	1	T7321	GCM 8000 COMPARATOR
Prime	GCM8000	2	CA01183AA	GCM 8000 COMPARATOR
Prime	GCM8000	2	CA00717AA	ADD: ASTRO SYSTEM RELEASE 7.17
Prime	GCM8000	1	X153AW	ADD: RACK MOUNT HARDWARE
Prime	GCM8000	2	CA01185AA	ADD: IP BASED MULTISITE OPERATION
Prime	GCM8000	1	T7321	GCM 8000 COMPARATOR
Prime	GCM8000	2	CA01183AA	GCM 8000 COMPARATOR
Prime	GCM8000	2	CA00717AA	ADD: ASTRO SYSTEM RELEASE 7.17
Prime	GCM8000	1	X153AW	ADD: RACK MOUNT HARDWARE
Prime	GCM8000	2	CA01185AA	ADD: IP BASED MULTISITE OPERATION
Prime	GCM8000	1	T7321	GCM 8000 COMPARATOR
Prime	GCM8000	2	CA01183AA	GCM 8000 COMPARATOR
Prime	GCM8000	2	CA00717AA	ADD: ASTRO SYSTEM RELEASE 7.17
Prime	GCM8000	1	X153AW	ADD: RACK MOUNT HARDWARE
Prime	GCM8000	2	CA01185AA	ADD: IP BASED MULTISITE OPERATION

Subscriber Upgrade and GPS

Use or disclosure of this proposal is subject to the restrictions on the cover page.

SUB SYS ID	SUB SYS	QTY	NOMENCLATURE	DESCRIPTION
Prime	GCM8000	1	T7321	GCM 8000 COMPARATOR
Prime	GCM8000	2	CA01183AA	GCM 8000 COMPARATOR
Prime	GCM8000	2	CA00717AA	ADD: ASTRO SYSTEM RELEASE 7.17
Prime	GCM8000	1	X153AW	ADD: RACK MOUNT HARDWARE
Prime	GCM8000	2	CA01185AA	ADD: IP BASED MULTISITE OPERATION
Prime	GCM8000	1	T7321	GCM 8000 COMPARATOR
Prime	GCM8000	2	CA01183AA	GCM 8000 COMPARATOR
Prime	GCM8000	2	CA00717AA	ADD: ASTRO SYSTEM RELEASE 7.17
Prime	GCM8000	1	X153AW	ADD: RACK MOUNT HARDWARE
Prime	GCM8000	2	CA01185AA	ADD: IP BASED MULTISITE OPERATION
Prime	GCP8000	1	T7140	G-SERIES SOFTWARE UPGRADE
Prime	GCP8000	1	CA00717AA	ADD: ASTRO SYSTEM RELEASE 7.17
Prime	GCP8000	1	CA01196AA	ADD: IP BASED MULTISITE SITE CONTROLLER SOFTWARE UPGRADE
Prime	GCP8000	1	T7140	G-SERIES SOFTWARE UPGRADE
Prime	GCP8000	1	CA00717AA	ADD: ASTRO SYSTEM RELEASE 7.17
Prime	GCP8000	1	CA01196AA	ADD: IP BASED MULTISITE SITE CONTROLLER SOFTWARE UPGRADE
Prime Backhaul	SWITCH	2	CLN1868	2930F 24-PORT SWITCH
Prime LAN	SWITCH	2	CLN1869	2930F 48-PORT SWITCH
Prime	CORE	2	DSTRAK91061	FOUR PORT DDM
Prime	ROUTER	2	SQM01SUM0205	GGM 8000 GATEWAY
Prime	ROUTER	2	CA01616AA	ADD: AC POWER
Prime access	ROUTER	2	SQM01SUM0205	GGM 8000 GATEWAY
Prime access	ROUTER	2	CA01616AA	ADD: AC POWER
Prime	SURGE	2	DS11011188	PDU, 120/240 SPLIT PH OR N+1 REDUNDANT, 60A MAX PER PHASE, SIX DEDICAT
Prime	SURGE	2	DSTSJADP	RACK MOUNT GROUND BAR, 19 IN FOR TSJ AND WPH SERIES DATA SPDS
Prime	SURGE	24	DS3750297	BREAKER, 15 AMP, CB UL 489 LISTED FOR AC EDGE II (1101-1188)



SUB SYS ID	SUB SYS	QTY	NOMENCLATURE	DESCRIPTION
Remote	ROUTER	5	SQM01SUM0205	GGM 8000 GATEWAY
Remote	ROUTER	5	CA01616AA	ADD: AC POWER
Remote	GTR8000	1	T7140	G-SERIES SOFTWARE UPGRADE
Remote	GTR8000	1	CA00717AA	ADD: ASTRO SYSTEM RELEASE 7.17
Remote	GTR8000	60	CA01195AA	ADD: IP BASED MULTISITE BASE RADIO SOFTWARE UPGRADE
Remote	SWITCH	10	CLN1868	2930F 24-PORT SWITCH
Providence	SPARE	2	SQM01SUM0205	GGM 8000 GATEWAY
Providence	SPARE	2	CA01616AA	ADD: AC POWER
Providence	SPARE	2	CLN1868	2930F 24-PORT SWITCH
Providence	SPARE	1	CLN1869	2930F 48-PORT SWITCH
Providence	SPARE	2	DSTRAK91061	FOUR PORT DDM
PUBLIC SAFETY	Router	2	DSMW3HE06791AA	SAR-8 SHELF V2
PUBLIC SAFETY	Router	4	DSMW3HE02774AB	CONTROL SWITCH MODULE V2 (CSMV2) 48V
PUBLIC SAFETY	Router	2	DSMW3HE02784KA	SAR RELEASE 8.0 BASIC OS LICENSE
PUBLIC SAFETY	Router	2	DSMW3HE06792EA	FAN MODULE (SAR-8 SHELF V2) EXT TEMP -48VDC
PUBLIC SAFETY	Router	4	DSMW3HEPMC4SFP	PMC CARD WITH 4 SFP BUNDLE (6 RJ45 TOTAL)
PUBLIC SAFETY	Router	2	DSMW3HE02775AB	16 PORT T1/E1 ASAP CARD V2 (-48/+24 VDC)
PUBLIC SAFETY	Router	2	DSMW3HE03397AA	T1/E1 CABLE FOR DISTRIBUTION PANEL 1M
PUBLIC SAFETY	Router	1	DSMW3HE03394AA	32 PORT T1/E1 RJ45 PANEL
PUBLIC SAFETY	Router	4	DSMW3HE11904AA	SFP - GIGE BASE-T RJ45 R6/6 DDM -40/85C
PUBLIC SAFETY	SFP	4	DSMW3HE00027CA	SFP - GIGE SX - LC ROHS 6/6 DDM -40/85C
PUBLIC SAFETY	Fiber Patch	2	DSPLACEHOLDERFIBER SX	MULTIMODE FIBER DUPLEX ZIP LC-LC PATCH CORD 1M
PROV COLLEGE	Router	1	DSMW3HE06791AA	SAR-8 SHELF V2
PROV COLLEGE	Router	2	DSMW3HE02774AB	CONTROL SWITCH MODULE V2 (CSMV2) 48V
PROV COLLEGE	Router	2	DSMW3HE02784KA	SAR RELEASE 8.0 BASIC OS LICENSE
PROV COLLEGE	Router	1	DSMW3HE06792EA	FAN MODULE (SAR-8 SHELF V2) EXT TEMP -48VDC



SUB SYS ID	SUB SYS	QTY	NOMENCLATURE	DESCRIPTION
PROV COLLEGE	Router	2	DSMW3HEPMC4SFP	PMC CARD WITH 4 SFP BUNDLE (6 RJ45 TOTAL)
PROV COLLEGE	SFP	4	DSMW3HE00027CA	SFP - GIGE SX - LC ROHS 6/6 DDM -40/85C
BROWN U	Router	1	DSMW3HE06791AA	SAR-8 SHELF V2
BROWN U	Router	2	DSMW3HE02774AB	CONTROL SWITCH MODULE V2 (CSMV2) 48V
BROWN U	Router	2	DSMW3HE02784KA	SAR RELEASE 8.0 BASIC OS LICENSE
BROWN U	Router	1	DSMW3HE06792EA	FAN MODULE (SAR-8 SHELF V2) EXT TEMP -48VDC
BROWN U	Router	2	DSMW3HEPMC4SFP	PMC CARD WITH 4 SFP BUNDLE (6 RJ45 TOTAL)
RIPTA	Router	1	DSMW3HE06791AA	SAR-8 SHELF V2
RIPTA	Router	2	DSMW3HE02774AB	CONTROL SWITCH MODULE V2 (CSMV2) 48V
RIPTA	Router	2	DSMW3HE02784KA	SAR RELEASE 8.0 BASIC OS LICENSE
RIPTA	Router	1	DSMW3HE06792EA	FAN MODULE (SAR-8 SHELF V2) EXT TEMP -48VDC
RIPTA	Router	2	DSMW3HEPMC4SFP	PMC CARD WITH 4 SFP BUNDLE (6 RJ45 TOTAL)
HARTFORD AVE	Router	1	DSMW3HE06791AA	SAR-8 SHELF V2
HARTFORD AVE	Router	2	DSMW3HE02774AB	CONTROL SWITCH MODULE V2 (CSMV2) 48V
HARTFORD AVE	Router	2	DSMW3HE02784KA	SAR RELEASE 8.0 BASIC OS LICENSE
HARTFORD AVE	Router	1	DSMW3HE06792EA	FAN MODULE (SAR-8 SHELF V2) EXT TEMP -48VDC
HARTFORD AVE	Router	2	DSMW3HEPMC4SFP	PMC CARD WITH 4 SFP BUNDLE (6 RJ45 TOTAL)
SPARE	Router	1	DSMW3HE06791AA	SAR-8 SHELF V2
SPARE	Router	1	DSMW3HE02774AB	CONTROL SWITCH MODULE V2 (CSMV2) 48V
SPARE	Router	1	DSMW3HE02784KA	SAR RELEASE 8.0 BASIC OS LICENSE
SPARE	Router	1	DSMW3HE06792EA	FAN MODULE (SAR-8 SHELF V2) EXT TEMP -48VDC
SPARE	Router	1	DSMW3HEPMC4SFP	PMC CARD WITH 4 SFP BUNDLE (6 RJ45 TOTAL)
SPARE	Router	1	DSMW3HE02775AB	16 PORT T1/E1 ASAP CARD V2 (-48/+24 VDC)



SUB SYS ID	SUB SYS	QTY	NOMENCLATURE	DESCRIPTION
SPARE	SFP	1	DSMW3HE00027CA	SFP - GIGE SX - LC ROHS 6/6 DDM -40/85C
SPARE	SFP	4	DSMW3HE11904AA	SFP - GIGE BASE-T RJ45 R6/6 DDM -40/85C
CHOPMIST	Router	2	DSMW3HE02775AB	16 PORT T1/E1 ASAP CARD V2 (-48/+24 VDC)
CHOPMIST	Router	2	DSMW3HE03397AA	T1/E1 CABLE FOR DISTRIBUTION PANEL 1M
Providence	CORE UPG	1	SQM01SUM0273	MASTER SITE CONFIGURATION
Providence	CORE UPG	1	CA02629AC	ADD: EXPAND 7.17 M CORE
Providence	CORE UPG	1	CA02389AA	ENH: TRUNKED ENHANCED DATA
Providence	CORE UPG	2	CA02473AA	ENH: 500 ENHANCED TRUNKED DATA USER LICENSES
Providence	CORE UPG	5	UA00408AA	ADD: ENHANCED DATA-P25 TRNK SITE
Providence	CORE UPG	2	CA03008AA	ADD:ST RPTR SC SW UPGRD IV&D+ENDATA
Providence	CORE UPG	2	UA00482AA	ADD : LOCATION ON PTT 500 USER LICENSE
Providence	IMW	1	SQM01SUM0257	INTELLIGENT MIDDLEWARE
Providence	IMW	1	CA02384AE	ADD: UNIFIED NETWORK SERVICES SOFTWARE
Providence	IMW	1	CA02354AA	ADD: ASTRO NETWORK APPLICATION INTERFACE
Providence	IMW	2	CA02362AE	ADD: MCAFEE STANDALONE ANTI VIRUS SOFTWARE
Providence	IMW	1	CA03062AA	ADD: IMW HIGH TIER/NON-REDUNDANT
Providence	IMW	1	UA00015AA	ADD: 501-1000 RESOURCES FOR LOCATION
Providence	IMW	1	UA00056AA	ADD: 1001-5000 RESOURCES FOR PRESENCE
Providence	IMW	1	CA02053AE	ADD: SUPPLEMENTAL CD IA (IMW)
Providence	Compasscom	67	DSCCREMOTESUPPORT	COMPASSCOM REMOTE SUPPORT PER HOUR
Providence	Compasscom	138	DSREMPOSTINSTALL	COMPASSCOM REMOTE POST INSTALL SUPPORT
Providence	Compasscom	4	DSCCONSITESUPPORT	COMPASSCOM ONSITE SUPPORT PER DAY
Providence	Compasscom	1	DSCCOMPASSLDE	COMPASSLDE SERVER SOFTWARE
Providence	Compasscom	1	DSCCASTROLOCATION	COMPASSLDE ASTRO OUTDOOR LOCATION SERVER INTERFACE

SUB SYS ID	SUB SYS	QTY	NOMENCLATURE	DESCRIPTION
Providence	Compasscom	1	DSDL360G10SQL17CC	HPE DL360 GEN10 8SFF SVR WINSVR 2016 R2 MS SQLCAL 2017
Providence	Compasscom	982	DSCOMPLDE1011000	COMPASSLDE PER ASTRO RADIO WITH INT GPS NO SENSOR SUP 101-1000 RADIOS
Providence	Compasscom	10	DSCCWKSTESRI	COMPASSTRAC V6 JAVASCRIPT (BROWSER) WITH ESRI ELA
Providence	REMOTE CEN	2	CLN1868	2930F 24-PORT SWITCH
Providence	REMOTE CEN	1	SQM01SUM0205	GGM 8000 GATEWAY
Providence	REMOTE CEN	1	CA01616AA	ADD: AC POWER
Providence	Compasscom	10	DSTG191B	TECH GLOBAL EVOLUTION SERIES 19INCH NON TOUCH
Providence	Compasscom	10	TT3492	Z2 G4 MINI WORKSTATION NON RETURNAB
Providence	Compasscom	2	DSF2B56AA	USB EXTERNAL DVD DRIVE
Providence	Dispatch	1	THN1013	RACK 7.5' OPEN
Providence	Dispatch	4	0784469Y02	BRKT, CBL SUPPORT
Providence	Dispatch	1	0310909C91	SCR LCK M6X1X13 STARPAN STL
Providence	Dispatch	1	3182602Y06	GROUNDING BUS BAR
Providence		2	DSCL5808N	ATEN : 8 PORT LCD KVM

2.2 PROPOSED SUBSCRIBERS EQUIPMENT LIST

This section lists the equipment necessary for the subscribers as part of the proposed solution.

SUB SYS ID	SUB SYS	QTY	NOMENCLATURE	DESCRIPTION
Fire Portable	APX8000XE	25	H91TGD9PW8 N	APX 8000H ALL BAND PORTABLE MODEL 2.5
Fire Portable	APX8000XE	25	QA02006	ENH: APX8000HXE RUGGED RADIO
Fire Portable	APX8000XE	25	Q806	ADD: ASTRO DIGITAL CAI OPERATION
Fire Portable	APX8000XE	25	H38	ADD: SMARTZONE OPERATION
Fire Portable	APX8000XE	25	Q361	ADD: P25 9600 BAUD TRUNKING
Fire Portable	APX8000XE	25	QA01427	ALT:APX 8000 HOUSING GREEN
Fire Portable	APX8000XE	25	QA00580	ADD: TDMA OPERATION
Fire Portable	APX8000XE	25	QA03399	ADD: ENHANCED DATA
Fire Portable	APX8000XE	25	QA09001	ADD: WIFI CAPABILITY



SUB SYS ID	SUB SYS	QTY	NOMENCLATURE	DESCRIPTION
Fire Portable	APX8000XE	25	QA09007	ADD: OUT OF THE BOX WIFI PROVISIONING
Fire Portable	APX8000XE	25	Q629	ENH: AES ENCRYPTION
Fire Portable	APX8000XE	25	H869	ENH: MULTIKEY
Fire Portable	APX8000XE	25	Q58	ADD: 3Y ESSENTIAL SERVICE
Fire Portable	APX8000XE	50	H91TGD9PW8 N	APX 8000H ALL BAND PORTABLE MODEL 2.5
Fire Portable	APX8000XE	50	QA02006	ENH: APX8000HXE RUGGED RADIO
Fire Portable	APX8000XE	50	Q806	ADD: ASTRO DIGITAL CAI OPERATION
Fire Portable	APX8000XE	50	H38	ADD: SMARTZONE OPERATION
Fire Portable	APX8000XE	50	Q361	ADD: P25 9600 BAUD TRUNKING
Fire Portable	APX8000XE	50	QA00580	ADD: TDMA OPERATION
Fire Portable	APX8000XE	50	QA03399	ADD: ENHANCED DATA
Fire Portable	APX8000XE	50	QA09001	ADD: WIFI CAPABILITY
Fire Portable	APX8000XE	50	QA09007	ADD: OUT OF THE BOX WIFI PROVISIONING
Fire Portable	APX8000XE	50	Q629	ENH: AES ENCRYPTION
Fire Portable	APX8000XE	50	H869	ENH: MULTIKEY
Fire Portable	APX8000XE	50	Q58	ADD: 3Y ESSENTIAL SERVICE
Fire Portable	APX8000XE	50	H91TGD9PW8 N	APX 8000H ALL BAND PORTABLE MODEL 2.5
Fire Portable	APX8000XE	50	QA02006	ENH: APX8000HXE RUGGED RADIO
Fire Portable	APX8000XE	50	Q806	ADD: ASTRO DIGITAL CAI OPERATION
Fire Portable	APX8000XE	50	H38	ADD: SMARTZONE OPERATION
Fire Portable	APX8000XE	50	Q361	ADD: P25 9600 BAUD TRUNKING
Fire Portable	APX8000XE	50	QA00580	ADD: TDMA OPERATION
Fire Portable	APX8000XE	50	QA03399	ADD: ENHANCED DATA
Fire Portable	APX8000XE	50	QA09001	ADD: WIFI CAPABILITY
Fire Portable	APX8000XE	50	QA09007	ADD: OUT OF THE BOX WIFI PROVISIONING
Fire Portable	APX8000XE	50	Q629	ENH: AES ENCRYPTION
Fire Portable	APX8000XE	50	H869	ENH: MULTIKEY
Fire Portable	APX8000XE	50	Q58	ADD: 3Y ESSENTIAL SERVICE
Fire Portable	APX8000XE	50	H91TGD9PW8 N	APX 8000H ALL BAND PORTABLE MODEL 2.5
Fire Portable	APX8000XE	50	QA02006	ENH: APX8000HXE RUGGED RADIO

SUB SYS ID	SUB SYS	QTY	NOMENCLATURE	DESCRIPTION
Fire Portable	APX8000XE	50	Q806	ADD: ASTRO DIGITAL CAI OPERATION
Fire Portable	APX8000XE	50	H38	ADD: SMARTZONE OPERATION
Fire Portable	APX8000XE	50	Q361	ADD: P25 9600 BAUD TRUNKING
Fire Portable	APX8000XE	50	QA00580	ADD: TDMA OPERATION
Fire Portable	APX8000XE	50	QA03399	ADD: ENHANCED DATA
Fire Portable	APX8000XE	50	QA09001	ADD: WIFI CAPABILITY
Fire Portable	APX8000XE	50	QA09007	ADD: OUT OF THE BOX WIFI PROVISIONING
Fire Portable	APX8000XE	50	Q629	ENH: AES ENCRYPTION
Fire Portable	APX8000XE	50	H869	ENH: MULTIKEY
Fire Portable	APX8000XE	50	Q58	ADD: 3Y ESSENTIAL SERVICE
Fire Portable	APX8000XE	50	H91TGD9PW8 N	APX 8000H ALL BAND PORTABLE MODEL 2.5
Fire Portable	APX8000XE	50	QA02006	ENH: APX8000HXE RUGGED RADIO
Fire Portable	APX8000XE	50	Q806	ADD: ASTRO DIGITAL CAI OPERATION
Fire Portable	APX8000XE	50	H38	ADD: SMARTZONE OPERATION
Fire Portable	APX8000XE	50	Q361	ADD: P25 9600 BAUD TRUNKING
Fire Portable	APX8000XE	50	QA00580	ADD: TDMA OPERATION
Fire Portable	APX8000XE	50	QA03399	ADD: ENHANCED DATA
Fire Portable	APX8000XE	50	QA09001	ADD: WIFI CAPABILITY
Fire Portable	APX8000XE	50	QA09007	ADD: OUT OF THE BOX WIFI PROVISIONING
Fire Portable	APX8000XE	50	Q629	ENH: AES ENCRYPTION
Fire Portable	APX8000XE	50	H869	ENH: MULTIKEY
Fire Portable	APX8000XE	50	Q58	ADD: 3Y ESSENTIAL SERVICE
Fire Portable	APX8000XE	25	H91TGD9PW8 N	APX 8000H ALL BAND PORTABLE MODEL 2.5
Fire Portable	APX8000XE	25	QA02006	ENH: APX8000HXE RUGGED RADIO
Fire Portable	APX8000XE	25	Q806	ADD: ASTRO DIGITAL CAI OPERATION
Fire Portable	APX8000XE	25	H38	ADD: SMARTZONE OPERATION
Fire Portable	APX8000XE	25	Q361	ADD: P25 9600 BAUD TRUNKING
Fire Portable	APX8000XE	25	QA00580	ADD: TDMA OPERATION
Fire Portable	APX8000XE	25	QA03399	ADD: ENHANCED DATA
Fire Portable	APX8000XE	25	QA09001	ADD: WIFI CAPABILITY
Fire Portable	APX8000XE	25	QA09007	ADD: OUT OF THE BOX WIFI PROVISIONING

Subscriber Upgrade and GPS

Use or disclosure of this proposal is subject to the restrictions on the cover page.



Motorola Solutions Confidential Restricted

Equipment List 2-8

SUB SYS ID	SUB SYS	QTY	NOMENCLATURE	DESCRIPTION
Fire Portable	APX8000XE	25	Q629	ENH: AES ENCRYPTION
Fire Portable	APX8000XE	25	H869	ENH: MULTIKEY
Fire Portable	APX8000XE	25	Q58	ADD: 3Y ESSENTIAL SERVICE
Fire Acc	APX8000XE	75	PMNN4547A	BATT IMPRES 2 LIION TIA4950 R IP68 3100T
Fire Acc	APX8000XE	250	PMMN4106A	AUDIO ACCESSORY-AUDIO ADAPTER,NEXT GEN FIRE RSM MODEL 1
Fire Acc	APX8000XE	250	NNTN8863A	CHARGER, SINGLE-UNIT, IMPRES 2, 3A, 100-240VAC, US/NA PLUG
Fire Acc	APX8000XE	12	NNTN8844A	CHARGER, MULTI-UNIT, IMPRES 2, 6-DISP, NA/LA-PLUG, ACC USB CHGR
Fire Acc	APX8000XE	250	PMLN7903A	LEATHER CARRY CASE WITH 3" FIXED BELT LOOP
Fire Acc	APX8000XE	250	RLN6486A	ACCESSORY KIT,FIREMAN'S RADIO STRAP
Fire Acc	APX8000XE	250	RLN6488A	ACCESSORY KIT,ANTI-SWAY STRAP
Police Portable	APX6000	50	H98UCF9PW6BN	APX6000 700/800 MODEL 2.5 PORTABLE
Police Portable	APX6000	50	Q806	ADD: ASTRO DIGITAL CAI OPERATION
Police Portable	APX6000	50	H38	ADD: SMARTZONE OPERATION
Police Portable	APX6000	50	Q361	ADD: P25 9600 BAUD TRUNKING
Police Portable	APX6000	50	QA00580	ADD: TDMA OPERATION
Police Portable	APX6000	50	QA03399	ADD: ENHANCED DATA
Police Portable	APX6000	50	H869	ENH: MULTIKEY
Police Portable	APX6000	50	QA09001	ADD: WIFI CAPABILITY
Police Portable	APX6000	50	QA09007	ADD: OUT OF THE BOX WIFI PROVISIONING
Police Portable	APX6000	50	QA05570	ALT: LI-ION IMPRES 2 IP68 3400 MAH
Police Portable	APX6000	50	Q629	ENH: AES ENCRYPTION
Police Portable	APX6000	50	Q58	ADD: 3Y ESSENTIAL SERVICE
Police Portable	APX6000	50	H98UCF9PW6BN	APX6000 700/800 MODEL 2.5 PORTABLE

Subscriber Upgrade and GPS

Use or disclosure of this proposal is subject to the restrictions on the cover page.

SUB SYS ID	SUB SYS	QTY	NOMENCLATURE	DESCRIPTION
Police Portable	APX6000	50	Q806	ADD: ASTRO DIGITAL CAI OPERATION
Police Portable	APX6000	50	H38	ADD: SMARTZONE OPERATION
Police Portable	APX6000	50	Q361	ADD: P25 9600 BAUD TRUNKING
Police Portable	APX6000	50	QA00580	ADD: TDMA OPERATION
Police Portable	APX6000	50	QA03399	ADD: ENHANCED DATA
Police Portable	APX6000	50	H869	ENH: MULTIKEY
Police Portable	APX6000	50	QA09001	ADD: WIFI CAPABILITY
Police Portable	APX6000	50	QA09007	ADD: OUT OF THE BOX WIFI PROVISIONING
Police Portable	APX6000	50	QA05570	ALT: LI-ION IMPRES 2 IP68 3400 MAH
Police Portable	APX6000	50	Q629	ENH: AES ENCRYPTION
Police Portable	APX6000	50	Q58	ADD: 3Y ESSENTIAL SERVICE
Police Portable	APX6000	50	H98UCF9PW6BN	APX6000 700/800 MODEL 2.5 PORTABLE
Police Portable	APX6000	50	Q806	ADD: ASTRO DIGITAL CAI OPERATION
Police Portable	APX6000	50	H38	ADD: SMARTZONE OPERATION
Police Portable	APX6000	50	Q361	ADD: P25 9600 BAUD TRUNKING
Police Portable	APX6000	50	QA00580	ADD: TDMA OPERATION
Police Portable	APX6000	50	QA03399	ADD: ENHANCED DATA
Police Portable	APX6000	50	H869	ENH: MULTIKEY
Police Portable	APX6000	50	QA09001	ADD: WIFI CAPABILITY
Police Portable	APX6000	50	QA09007	ADD: OUT OF THE BOX WIFI PROVISIONING
Police Portable	APX6000	50	QA05570	ALT: LI-ION IMPRES 2 IP68 3400 MAH
Police Portable	APX6000	50	Q629	ENH: AES ENCRYPTION

Subscriber Upgrade and GPS

Use or disclosure of this proposal is subject to the restrictions on the cover page.



Motorola Solutions Confidential Restricted

Equipment List 2-10

SUB SYS ID	SUB SYS	QTY	NOMENCLATURE	DESCRIPTION
Police Portable	APX6000	50	Q58	ADD: 3Y ESSENTIAL SERVICE
Police Portable	APX6000	50	H98UCF9PW6BN	APX6000 700/800 MODEL 2.5 PORTABLE
Police Portable	APX6000	50	Q806	ADD: ASTRO DIGITAL CAI OPERATION
Police Portable	APX6000	50	H38	ADD: SMARTZONE OPERATION
Police Portable	APX6000	50	Q361	ADD: P25 9600 BAUD TRUNKING
Police Portable	APX6000	50	QA00580	ADD: TDMA OPERATION
Police Portable	APX6000	50	QA03399	ADD: ENHANCED DATA
Police Portable	APX6000	50	H869	ENH: MULTIKEY
Police Portable	APX6000	50	QA09001	ADD: WIFI CAPABILITY
Police Portable	APX6000	50	QA09007	ADD: OUT OF THE BOX WIFI PROVISIONING
Police Portable	APX6000	50	QA05570	ALT: LI-ION IMPRES 2 IP68 3400 MAH
Police Portable	APX6000	50	Q629	ENH: AES ENCRYPTION
Police Portable	APX6000	50	Q58	ADD: 3Y ESSENTIAL SERVICE
Police Portable	APX6000	50	H98UCF9PW6BN	APX6000 700/800 MODEL 2.5 PORTABLE
Police Portable	APX6000	50	Q806	ADD: ASTRO DIGITAL CAI OPERATION
Police Portable	APX6000	50	H38	ADD: SMARTZONE OPERATION
Police Portable	APX6000	50	Q361	ADD: P25 9600 BAUD TRUNKING
Police Portable	APX6000	50	QA00580	ADD: TDMA OPERATION
Police Portable	APX6000	50	QA03399	ADD: ENHANCED DATA
Police Portable	APX6000	50	H869	ENH: MULTIKEY
Police Portable	APX6000	50	QA09001	ADD: WIFI CAPABILITY
Police Portable	APX6000	50	QA09007	ADD: OUT OF THE BOX WIFI PROVISIONING



SUB SYS ID	SUB SYS	QTY	NOMENCLATURE	DESCRIPTION
Police Portable	APX6000	50	QA05570	ALT: LI-ION IMPRES 2 IP68 3400 MAH
Police Portable	APX6000	50	Q629	ENH: AES ENCRYPTION
Police Portable	APX6000	50	Q58	ADD: 3Y ESSENTIAL SERVICE
Police Portable	APX6000	50	H98UCF9PW6BN	APX6000 700/800 MODEL 2.5 PORTABLE
Police Portable	APX6000	50	Q806	ADD: ASTRO DIGITAL CAI OPERATION
Police Portable	APX6000	50	H38	ADD: SMARTZONE OPERATION
Police Portable	APX6000	50	Q361	ADD: P25 9600 BAUD TRUNKING
Police Portable	APX6000	50	QA00580	ADD: TDMA OPERATION
Police Portable	APX6000	50	QA03399	ADD: ENHANCED DATA
Police Portable	APX6000	50	H869	ENH: MULTIKEY
Police Portable	APX6000	50	QA09001	ADD: WIFI CAPABILITY
Police Portable	APX6000	50	QA09007	ADD: OUT OF THE BOX WIFI PROVISIONING
Police Portable	APX6000	50	QA05570	ALT: LI-ION IMPRES 2 IP68 3400 MAH
Police Portable	APX6000	50	Q629	ENH: AES ENCRYPTION
Police Portable	APX6000	50	Q58	ADD: 3Y ESSENTIAL SERVICE
Police Portable	APX6000	50	H98UCF9PW6BN	APX6000 700/800 MODEL 2.5 PORTABLE
Police Portable	APX6000	50	Q806	ADD: ASTRO DIGITAL CAI OPERATION
Police Portable	APX6000	50	H38	ADD: SMARTZONE OPERATION
Police Portable	APX6000	50	Q361	ADD: P25 9600 BAUD TRUNKING
Police Portable	APX6000	50	QA00580	ADD: TDMA OPERATION
Police Portable	APX6000	50	QA03399	ADD: ENHANCED DATA
Police Portable	APX6000	50	H869	ENH: MULTIKEY



SUB SYS ID	SUB SYS	QTY	NOMENCLATURE	DESCRIPTION
Police Portable	APX6000	50	QA09001	ADD: WIFI CAPABILITY
Police Portable	APX6000	50	QA09007	ADD: OUT OF THE BOX WIFI PROVISIONING
Police Portable	APX6000	50	QA05570	ALT: LI-ION IMPRES 2 IP68 3400 MAH
Police Portable	APX6000	50	Q629	ENH: AES ENCRYPTION
Police Portable	APX6000	50	Q58	ADD: 3Y ESSENTIAL SERVICE
Police Portable	APX6000	50	H98UCF9PW6BN	APX6000 700/800 MODEL 2.5 PORTABLE
Police Portable	APX6000	50	Q806	ADD: ASTRO DIGITAL CAI OPERATION
Police Portable	APX6000	50	H38	ADD: SMARTZONE OPERATION
Police Portable	APX6000	50	Q361	ADD: P25 9600 BAUD TRUNKING
Police Portable	APX6000	50	QA00580	ADD: TDMA OPERATION
Police Portable	APX6000	50	QA03399	ADD: ENHANCED DATA
Police Portable	APX6000	50	H869	ENH: MULTIKEY
Police Portable	APX6000	50	QA09001	ADD: WIFI CAPABILITY
Police Portable	APX6000	50	QA09007	ADD: OUT OF THE BOX WIFI PROVISIONING
Police Portable	APX6000	50	QA05570	ALT: LI-ION IMPRES 2 IP68 3400 MAH
Police Portable	APX6000	50	Q629	ENH: AES ENCRYPTION
Police Portable	APX6000	50	Q58	ADD: 3Y ESSENTIAL SERVICE
Police Portable	APX6000	50	H98UCF9PW6BN	APX6000 700/800 MODEL 2.5 PORTABLE
Police Portable	APX6000	50	Q806	ADD: ASTRO DIGITAL CAI OPERATION
Police Portable	APX6000	50	H38	ADD: SMARTZONE OPERATION
Police Portable	APX6000	50	Q361	ADD: P25 9600 BAUD TRUNKING
Police Portable	APX6000	50	QA00580	ADD: TDMA OPERATION

Subscriber Upgrade and GPS

Use or disclosure of this proposal is subject to the restrictions on the cover page.



Motorola Solutions Confidential Restricted

Equipment List 2-13

SUB SYS ID	SUB SYS	QTY	NOMENCLATURE	DESCRIPTION
Police Portable	APX6000	50	QA03399	ADD: ENHANCED DATA
Police Portable	APX6000	50	H869	ENH: MULTIKEY
Police Portable	APX6000	50	QA09001	ADD: WIFI CAPABILITY
Police Portable	APX6000	50	QA09007	ADD: OUT OF THE BOX WIFI PROVISIONING
Police Portable	APX6000	50	QA05570	ALT: LI-ION IMPRES 2 IP68 3400 MAH
Police Portable	APX6000	50	Q629	ENH: AES ENCRYPTION
Police Portable	APX6000	50	Q58	ADD: 3Y ESSENTIAL SERVICE
Police Portable	APX6000	50	H98UCF9PW6BN	APX6000 700/800 MODEL 2.5 PORTABLE
Police Portable	APX6000	50	Q806	ADD: ASTRO DIGITAL CAI OPERATION
Police Portable	APX6000	50	H38	ADD: SMARTZONE OPERATION
Police Portable	APX6000	50	Q361	ADD: P25 9600 BAUD TRUNKING
Police Portable	APX6000	50	QA00580	ADD: TDMA OPERATION
Police Portable	APX6000	50	QA03399	ADD: ENHANCED DATA
Police Portable	APX6000	50	H869	ENH: MULTIKEY
Police Portable	APX6000	50	QA09001	ADD: WIFI CAPABILITY
Police Portable	APX6000	50	QA09007	ADD: OUT OF THE BOX WIFI PROVISIONING
Police Portable	APX6000	50	QA05570	ALT: LI-ION IMPRES 2 IP68 3400 MAH
Police Portable	APX6000	50	Q629	ENH: AES ENCRYPTION
Police Portable	APX6000	50	Q58	ADD: 3Y ESSENTIAL SERVICE
Police Portable	APX6000	50	H98UCF9PW6BN	APX6000 700/800 MODEL 2.5 PORTABLE
Police Portable	APX6000	50	Q806	ADD: ASTRO DIGITAL CAI OPERATION
Police Portable	APX6000	50	H38	ADD: SMARTZONE OPERATION

SUB SYS ID	SUB SYS	QTY	NOMENCLATURE	DESCRIPTION
Police Portable	APX6000	50	Q361	ADD: P25 9600 BAUD TRUNKING
Police Portable	APX6000	50	QA00580	ADD: TDMA OPERATION
Police Portable	APX6000	50	QA03399	ADD: ENHANCED DATA
Police Portable	APX6000	50	H869	ENH: MULTIKEY
Police Portable	APX6000	50	QA09001	ADD: WIFI CAPABILITY
Police Portable	APX6000	50	QA09007	ADD: OUT OF THE BOX WIFI PROVISIONING
Police Portable	APX6000	50	QA05570	ALT: LI-ION IMPRES 2 IP68 3400 MAH
Police Portable	APX6000	50	Q629	ENH: AES ENCRYPTION
Police Portable	APX6000	50	Q58	ADD: 3Y ESSENTIAL SERVICE
Police Portable	APX6000	25	H98UCF9PW6BN	APX6000 700/800 MODEL 2.5 PORTABLE
Police Portable	APX6000	25	Q806	ADD: ASTRO DIGITAL CAI OPERATION
Police Portable	APX6000	25	H38	ADD: SMARTZONE OPERATION
Police Portable	APX6000	25	Q361	ADD: P25 9600 BAUD TRUNKING
Police Portable	APX6000	25	QA00580	ADD: TDMA OPERATION
Police Portable	APX6000	25	QA03399	ADD: ENHANCED DATA
Police Portable	APX6000	25	H869	ENH: MULTIKEY
Police Portable	APX6000	25	QA09001	ADD: WIFI CAPABILITY
Police Portable	APX6000	25	QA09007	ADD: OUT OF THE BOX WIFI PROVISIONING
Police Portable	APX6000	25	QA05570	ALT: LI-ION IMPRES 2 IP68 3400 MAH
Police Portable	APX6000	25	Q629	ENH: AES ENCRYPTION
Police Portable	APX6000	25	Q58	ADD: 3Y ESSENTIAL SERVICE
Police Acc	APX8000XE	575	NNTN8863A	CHARGER, SINGLE-UNIT, IMPRES 2, 3A, 100-240VAC, US/NA PLUG



SUB SYS ID	SUB SYS	QTY	NOMENCLATURE	DESCRIPTION
Police Acc	APX8000XE	575	PMMN4059B	PSM IP55 WITH 3.5MM JACK RX 18IN
Police Acc	APX8000XE	150	PMNN4486	BATT IMPRES 2 LIION R IP68 3400T
Police Acc	APX8000XE	575	PMLN7903A	LEATHER CARRY CASE WITH 3" FIXED BELT LOOP
Single Head	APX6500	45	M25URS9PW1 N	APX6500 7/800 MHZ MID POWER MOBILE
Single Head	APX6500	45	G806	ADD: ASTRO DIGITAL CAI OPERATION
Single Head	APX6500	45	G51	ENH: SMARTZONE OPERATION APX6500
Single Head	APX6500	45	G361	ENH: P25 TRUNKING SOFTWARE APX
Single Head	APX6500	45	GA00580	ADD: TDMA OPERATION APX
Single Head	APX6500	45	QA03399	ADD: ENHANCED DATA
Single Head	APX6500	45	QA00631	ADD: DVRS PSU ACTIVATION
Single Head	APX6500	45	G442	ADD: O5 CONTROL HEAD
Single Head	APX6500	45	G444	ADD: APX CONTROL HEAD SOFTWARE
Single Head	APX6500	45	G67	ADD: REMOTE MOUNT MID POWER
Single Head	APX6500	45	G335	ADD: ANT 1/4 WAVE 762-870 MHZ
Single Head	APX6500	45	W22	ADD: STD PALM MICROPHONE APX
Single Head	APX6500	45	G831	ADD: SPKR 15W WATER RESISTANT
Single Head	APX6500	45	GA00226	ADD: GPS ANTENNA
Single Head	APX6500	45	G78	ADD: 3Y ESSENTIAL SERVICE
Single Head	APX6500	45	W969	ADD: MULTIPLE KEY ENCRYPTION OPERATION
Single Head	APX6500	45	G843	ADD: AES ENCRYPTION APX
Dual Head	APX6500	12	M25URS9PW1 N	APX6500 7/800 MHZ MID POWER MOBILE
Dual Head	APX6500	12	G806	ADD: ASTRO DIGITAL CAI OPERATION
Dual Head	APX6500	12	G51	ENH: SMARTZONE OPERATION APX6500
Dual Head	APX6500	12	G361	ENH: P25 TRUNKING SOFTWARE APX
Dual Head	APX6500	12	GA00580	ADD: TDMA OPERATION APX
Dual Head	APX6500	12	QA03399	ADD: ENHANCED DATA
Dual Head	APX6500	12	QA00631	ADD: DVRS PSU ACTIVATION

Subscriber Upgrade and GPS

Use or disclosure of this proposal is subject to the restrictions on the cover page.

SUB SYS ID	SUB SYS	QTY	NOMENCLATURE	DESCRIPTION
Dual Head	APX6500	12	G442	ADD: O5 CONTROL HEAD
Dual Head	APX6500	12	G444	ADD: APX CONTROL HEAD SOFTWARE
Dual Head	APX6500	12	G67	ADD: REMOTE MOUNT MID POWER
Dual Head	APX6500	12	G335	ADD: ANT 1/4 WAVE 762-870 MHZ
Dual Head	APX6500	24	W22	ADD: STD PALM MICROPHONE APX
Dual Head	APX6500	24	G831	ADD: SPKR 15W WATER RESISTANT
Dual Head	APX6500	12	GA00092	ADD: APX DUAL-CONTRL HD HARDWARE
Dual Head	APX6500	24	G609	ADD: REMOTE MOUNT CBL 50 FEET
Dual Head	APX6500	12	GA00226	ADD: GPS ANTENNA
Dual Head	APX6500	12	G78	ADD: 3Y ESSENTIAL SERVICE
Dual Head	APX6500	12	W969	ADD: MULTIPLE KEY ENCRYPTION OPERATION
Dual Head	APX6500	12	G843	ADD: AES ENCRYPTION APX



SECTION 3

STATEMENT OF WORK

3.1 OVERVIEW

This Statement of Work (SOW) describes the deliverables to be furnished to City of Providence, RI. The tasks described herein will be performed by Motorola, its subcontractors, and City of Providence to implement the solution described in the System Description. It describes the actual work involved in installation, identifies the installation standards to be followed, and clarifies the responsibilities for both Motorola and City of Providence during the project implementation. Specifically, this SOW provides:

- A summary of the phases and tasks to be completed within the project lifecycle.
- A list of the deliverables associated with the project.
- A description of the responsibilities for both Motorola and City of Providence.
- The qualifications and assumptions taken into consideration during the development of this project.

This SOW provides the most current understanding of the work required by both parties to ensure a successful project implementation. In particular, Motorola has made assumptions of the sites to be used for the new system. Should any of the sites change, a revision to the SOW and associated pricing will be required. It is understood that this SOW is a working document, and that it will be revised as needed to incorporate any changes associated with contract negotiations, Contract Design Review (CDR), and any other change orders that may occur during the execution of the project.

3.2 ASSUMPTIONS

Motorola has based the system design on information provided by City of Providence and an analysis of their system requirements. All assumptions have been listed below for review. Should Motorola's assumptions be deemed incorrect or not agreeable to City of Providence, a revised proposal with the necessary changes and adjusted costs may be required. Changes to the equipment or scope of the project after contract may require a change order

- City of Providence is responsible to provide a suitable microwave system to support our proposed GPS & IP Upgrade solution.
 - Motorola is expecting the microwave system will be compatible with the existing system as well as our proposed solution and ready prior to implementation of this project.
- DC plants at all sites can accommodate the replacement of new networking equipment being quoted. Upgrades to existing DC plant has not been included as part of the proposal.
- AC power is available at the location for the IMW and network devices equipment at the Dispatch center.



- All work is assumed to be done during normal business hours as dictated by time zone (Monday thru Friday, 8:00 a.m. to 5:00 p.m.).
- All work identified as being the responsibility of Motorola to be completed utilizing Motorola preferred contractors.
- The sites will have adequate room (new rack at dispatch and rack unit space at the prime/RF sites) for installation of proposed equipment, based on applicable codes and Motorola's R56 standards.
- The existing utility service and backup power facilities (UPS, generators) have sufficient extra capacity to support the proposed new equipment load.
- The floor can support the proposed new loading. Physical or structural improvements to the existing room will not be required.
- Pricing assumes all sites are accessible by truck. Snow removal is the responsibility of the city.
- Motorola is not responsible for issues outside of its immediate control. Such issues include, but are not restricted to, improper frequency coordination by others and non-compliant operation of other radios. If, for any reason, any of the proposed sites cannot be utilized due to reasons beyond Motorola's control, the costs associated with site changes or delays including, but not limited to, re-engineering, frequency re-licensing, site zoning, site permitting, schedule delays, site abnormalities, re-mobilization, etc., will be paid for by City of Providence and documented through the change order process.
- Post Warranty services or Lifecycle services have not been quoted with this proposal (for the GPS and Compasscomm Solution).
- Subscribers are included as part of the proposal. However, this proposal does not include storage, inventory, programming, fleetmapping, codeplug generation, installation or configuration of these units.

Tasks	Motorola	Customer
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	
Deliverable: Signed contract, defined project team, and scheduled project kickoff meeting.		
Project Kickoff		
Introduce team, review roles, and decision authority.	X	X
Present project scope and objectives.	X	
Review SOW responsibilities and project schedule.	X	X



Tasks	Motorola	Customer
Schedule Design Review.	X	X
Deliverable: Completed project kickoff and scheduled Design Review.		
Design Review		
Review the Customer's operational requirements.	X	X
Present the system design and operational requirements for the solution.	X	
Establish a defined baseline for the system design and identify any special product requirements and their impact on system implementation.	X	
Present installation plan.	X	
Present preliminary cutover plan and methods to document final cutover process.	X	
Present configuration and details of sites required by system design.	X	
Validate that Customer sites can accommodate proposed equipment.	X	X
Provide approvals required to add equipment to proposed existing sites.		X
Review safety, security, and site access procedures.	X	X
Present equipment layout plans and system design drawings.	X	
Provide backhaul performance specifications and demarcation points.	X	
Provide heat load and power requirements for new equipment.	X	
Provide information on existing system interfaces.		X
Assume responsibility for issues outside of Motorola's' control.		X
Review and update design documents, including System Description, Statement of Work, and Acceptance Test Plan, based on Design Review agreements.	X	X
Execute Change Order in accordance with all material changes to the Contract resulting from the Design Review.	X	X
Deliverable: Finalized design documentation based upon "frozen" design, along with any relevant Change Order documentation.		
Deliverable: Design Review completed and final Design delivered		
Site Access		
Provide site owners/managers with written notice to provide entry to sites identified in the project design documentation.		X

Tasks	Motorola	Customer
Obtain site licensing and permitting, including site lease/ownership, zoning, permits, regulatory approvals, easements, power, and telco connections.		X
Deliverable: Access, permitting, and licensing necessary to install system equipment at each site.		
Site Planning		
Provide approvals necessary for Motorola to conduct work at all locations.		X
Provide the R56 requirements for space, power, grounding, HVAC, and connectivity requirements at each site.		X
Provide an electrician for the following: ▪ Install 4 (Four) 60A breakers to feed new AC Edge Panel at the Prime Site (relocate existing circuits from OP08 to new panels)	X	
Provide adequate electrical power in proper phase and voltage at the prime site location.		X
Confirm that there is adequate utility service to support the new equipment and ancillary equipment.		X
SYSTEM INSTALLATION		
Equipment Order and Manufacturing		
Create equipment order and reconcile to contract.	X	
Create Ship Views, to confirm with City of Providence the secure storage location(s) to which the equipment will ship. Ship Views are the mailing labels that carry complete equipment shipping information, which direct the timing, method of shipment, and ship path for ultimate destination receipt.	X	
Manufacture Motorola-provided equipment necessary for system based on equipment order.	X	
Procure non-Motorola equipment necessary for the system.	X	
Reconcile the equipment list(s) to the Contract.	X	
Deliverable: Equipment procured and ready for shipment.		
System Staging		
Ship all equipment needed for staging directly to the shop	X	
Provide information on existing system interfaces, room layouts, or other information necessary for the assembly to meet field conditions.	X	X
Power up, load application parameters, program, and test all staged equipment.	X	
Confirm system configuration and software compatibility with the existing system.	X	



Tasks	Motorola	Customer
Inventory the equipment with serial numbers and installation references.	X	
Conduct site and system level testing.	X	
Deliverable: System staged and ready for shipment.		
Equipment Storage		
Provide secure location for solution equipment (for 3 months).	X	
Coordinate receipt of and inventory solution equipment with designated contact.	X	
Pack and ship solution equipment to the identified, or site locations.	X	
Receive solution equipment.	X	
Inventory solution equipment.	X	
Deliverable: Solution equipment received and ready for installation		
General Installation		
Install all proposed fixed equipment as outlined in the System Description based upon the agreed-upon floor plans, connecting audio, control, and radio transmission cables to connect equipment to the power panels or receptacles, and audio/control line connection points. Installation performed in accordance with R56 standards and state/local codes.	X	
Provide system interconnections that are not specifically outlined in the system design, including dedicated phone circuits, microwave links, or other types of connectivity.		X
Install and terminate all network cables between site routers and network demarcation points, including microwave, leased lines, and Ethernet within 10ft of the MSI provided equipment.	X	
Connect installed equipment to the provided ground system.	X	
Label equipment, racks, and cables.	X	
Note any required changes to the installation for inclusion in the "as-built" system documentation.	X	
Removal of old equipment.	X	
Transport, and dispose of old equipment.		X
Deliverable: Equipment installed.		
SYSTEM OPTIMIZATION AND TESTING		
Solution Optimization		
System optimization will be completed in the as described in the system overview and agreed during CDR.	X	X



Tasks	Motorola	Customer
Verify that all equipment is operating properly and that all electrical and signal levels are set accurately.	X	
Verify that all audio and data levels are at factory settings.	X	
Verify communication interfaces between devices for proper operation.	X	
Ensure that functionality meets manufacturers' specifications and complies with the final configuration established during design review or system staging for each stage of implementation.	X	
Deliverable: Completion of System Optimization.		
Functional Acceptance Testing		
Verify the operational functionality and features of the solution supplied by Motorola, as contracted.	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 the Customer acceptance testing or beneficial use, repeat that particular task after Motorola 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 results.	X	X
Resolve any minor task failures before Final System Acceptance.	X	
Deliverable: Completion of functional testing and approval by Customer.		
PROJECT TRANSITION		
Cutover		
Finalize Cutover Plan.	X	X
Conduct cutover meeting with relevant personnel to address both how to mitigate technical and communication problem impacts to the users during cutover and during the general operation of the system.	X	X
Notify the personnel affected by the cutover of the date and time planned for migration of the Master site as described in the system description and agreed upon during CDR.	X	X
Provide ongoing communication with users regarding the project and schedule.	X	X



Tasks	Motorola	Customer
Cutover users and ensure that user radios are operating on system.	X	X
Resolve punch list items, documented during the Acceptance Testing in order to meet all the criteria for final system acceptance.	X	
Assist Motorola with resolution of identified punch list items by providing support, such as access to the sites, equipment and system, and approval of the resolved punch list items.		X
Deliverable: Migration to new system completed, and punch list items resolved.		
Transition to Warranty		
Review the items necessary for transitioning the project to warranty support and service.	X	
Motorola to provide services during year 1 warranty which align with the proposed services.	X	
Provide a Customer Support Plan detailing the warranty support associated with the contract equipment.	X	
Participate in the Transition Service/Project Transition Certificate (PTC) process.		X
Deliverable: Service information delivered and approved by Customer		
Finalize Documentation and System Acceptance		
Provide manufacturer's installation material, part list and other related material to Customer upon project completion.	X	
Provide an electronic as-built system manual on CD or other Customer preferred electronic media. The documentation will include the following: <ul style="list-style-type: none"> - Site Block Diagrams. - Site Equipment Rack Configurations. - ATP Test Checklists. - Functional Acceptance Test Plan Test Sheets and Results. - Equipment Inventory List. 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.		

SECTION 4

ACCEPTANCE TEST PLAN

4.1 OVERVIEW

This preliminary System Acceptance Test Plan (SATP) is written to meet the particular requirements of the City of Providence system. The SATP provides a detailed description of the procedures used to validate performance and establish criteria for the customer's acceptance of the equipment.

The system acceptance test requirements, methods, and procedures are outlined in this document. If there are any scope changes to the system architecture, functionality, or hardware/software deliverables after the award this document will be modified to reflect these amendments if required.

The failure of one test will not necessarily require that the entire SATP be run again. In the event of a test failure, Motorola shall determine the cause of the failure, identify and make the required corrections, and repeat the test. If it is determined that Motorola is responsible for the test failure, then the failure, determination, correction, and retest shall be done at no additional cost to the customer. Any previously conducted test that could have their original results impacted as a result of the corrections implemented will be re-conducted as mutually agreed upon by the customer and Motorola to verify that they continue to meet the contract specifications.

The following test scripts are preliminary; the final System Acceptance Test Plan will be developed and submitted to the customer prior to the ATP dates.



Wide Area Trunking - FDMA Only Sites

4.1.1 Talkgroup Call

1. DESCRIPTION

The Talkgroup is the primary level of organization for communications on a trunked radio system. Radios with Talkgroup call capability will be able to communicate with other members of the same Talkgroup. This provides the effect of a private channel down to the Talkgroup level.

This test will demonstrate that a Talkgroup transmission initiated by a radio user will only be heard by system users, which have, the same Talkgroup selected. As with other types of calls, Talkgroup calls can take place from anywhere in the system.

SETUP

RADIO-1 - SITE 1 - TALKGROUP 1
RADIO-2 - SITE 2 - TALKGROUP 1
RADIO-3 - SITE 1 - TALKGROUP 2
RADIO-4 - SITE 2 - TALKGROUP 2

VERSION #1.040

2. TEST

- Step 1. Initiate a Wide Area Call with RADIO-1 in TALKGROUP 1.
- Step 2. Observe that only RADIO-2 will be able to monitor and respond to the call.
- Step 3. Initiate a Wide Area Call with RADIO-3 in TALKGROUP 2.
- Step 4. Observe that only RADIO-4 will be able to monitor and respond the call.

Pass ____ Fail ____



Wide Area Trunking - FDMA Only Sites

4.1.2 Continuous Assignment Updating

1. DESCRIPTION

When a talkgroup is assigned a voice channel, the site controller continues to transmit the channel assignment on the control channel for the duration of the talkgroup call. Radios coming into use on the system are automatically sent to voice channels with conversations in progress involving their selected talkgroups.

SETUP

RADIO-1 - TALKGROUP 1
RADIO-2 - TALKGROUP 1
RADIO-3 - TALKGROUP 1

VERSION #1.010

2. TEST

- Step 1. Turn OFF RADIO-1.
- Step 2. Initiate a Talkgroup Call using RADIO-2 and verify RADIO-3 hears the audio.
- Step 3. While the Talkgroup Call is in progress, turn ON RADIO-1.
- Step 4. Observe RADIO-1, which was just brought back into service, joins the Talkgroup Call already in progress.
- Step 5. End the talkgroup call.
- Step 6. Switch RADIO-1 to another talkgroup.
- Step 7. Initiate a Talkgroup Call from RADIO-2 to RADIO-3.
- Step 8. While the Talkgroup Call is in progress, set RADIO-1 back to TALKGROUP 1.
- Step 9. Observe that RADIO-1 joins the Talkgroup Call already in progress.

Pass ____ Fail ____

Wide Area Trunking - FDMA Only Sites

4.1.3 Multigroup Call in Wait Mode

1. DESCRIPTION

This trunking feature allows an equipped radio user to transmit an announcement to several different talkgroups simultaneously. The multigroup (ATG) call can be flagged for Wait Mode in the Provisioning Manager (PM) database forcing all attached talkgroups to finish calls in progress before the trunked system will process the multigroup call. The system does not permit inactive, attached talkgroups to initiate Talkgroup Calls during the "wait" timeframe. As with other types of calls, multigroup calls can take place from anywhere in the system.

SETUP

RADIO-1 - TALKGROUP 1
RADIO-2 - TALKGROUP 2
RADIO-3 - RANDOM (Not part of MG)
RADIO-4 - ATG 1

* TALKGROUP 1 and TALKGROUP 2 are members of ATG 1.

* RANDOM is any talkgroup not a member of ATG 1.

* Multigroups are set up through both the Provisioning Manager (PM) and the Subscriber Programming software.

VERSION #1.020

2. TEST

- Step 1. Verify ATG 1 is set for the Wait mode.
- Step 2. Using RADIO-1, initiate a call on TALKGROUP 1.
- Step 3. While RADIO-1 is keyed, attempt to initiate a multigroup call using RADIO-4 on ATG 1. Verify RADIO-4 receives a busy tone because one of the talkgroups attached to ATG 1 is involved in a Talkgroup Call.
- Step 4. Key RADIO-2 and verify that a busy tone is received because the ATG 1 call is in queue.
- Step 5. Dekey RADIO-1 and verify RADIO-4 receives a callback.
- Step 6. Key RADIO-4 and verify both RADIO-1 and RADIO-2 hear the multigroup call while RADIO-3 does not unmutate.

Pass ____ Fail ____



Wide Area Trunking - FDMA Only Sites

4.1.4 Call Alert

1. DESCRIPTION

Call Alert is a tone page that allows a user to selectively alert another radio unit. The initiating radio will receive notification from the trunked system as to whether or not the page was received by the target radio. Units receiving a Call Alert will sound an alert tone. As with other types of calls, Call Alerts can take place from anywhere in the system.

SETUP

RADIO-1 - TALKGROUP 1
RADIO-2 - TALKGROUP 2
RADIO-3 - TALKGROUP 3

VERSION #1.010

2. TEST

- Step 1. Using RADIO-1, press the page button.
- Step 2. Enter the unit ID of RADIO-2 with the keypad, or scroll to the location where this ID is stored
- Step 3. Press the PTT to initiate the call alert. Verify that the RADIO-1 user receives audible indication that the Call Alert was sent.
- Step 4. Verify that RADIO-2 user receives an audible indication of an incoming Call Alert was sent but RADIO-3 does not.
- Step 5. Verify RADIO-1 gets an audible indication that the Call Alert was successfully received at the target radio.
- Step 6. Turn off RADIO-2. Send a Call Alert from RADIO-1 to RADIO-2.
- Step 7. Verify that the RADIO-1 user receives audible indication that the Call Alert was sent.
- Step 8. Verify RADIO-1 receives a "No Acknowledgement" indication that the Call Alert was not received at the target radio.

Pass _____ Fail _____



Wide Area Trunking - FDMA Only Sites

4.1.5 Private Call

1. DESCRIPTION

Private Call is a selective calling feature that allows a radio user to carry on one-to-one conversation that is only heard by the 2 parties involved. Subscriber units receiving a private call will sound an alert tone. As with other types of calls, Private Calls can take place from anywhere in the system.

SETUP

RADIO-1 - TALKGROUP 1
RADIO-2 - TALKGROUP 1
RADIO-3 - TALKGROUP 1

VERSION #1.020

2. TEST

- Step 1. Using RADIO-1, press the Private Call (Call) button.
- Step 2. Enter the unit ID of RADIO-2 with the keypad, or scroll to the location where this ID is stored.
- Step 3. Press the PTT to initiate the Private Call.
- Step 4. Verify that RADIO-2 hears tones and the display indicates that a Private Call has been received, but RADIO-3 receives no indications.
- Step 5. Answer the call at RADIO-2 by pressing the Private Call (Call)/Respond button. If RADIO-2 has a display, verify it shows the ID number or Alias of the calling unit.
- Step 6. Press the PTT switch on RADIO-2 and respond to the Private Call. Note that if you do not press the Private Call button before pressing PTT, your audio will be heard by all members of the talkgroup, and not just by the radio initiating the Private Call.
- Step 7. Verify that RADIO-2 can communicate with RADIO-1.
- Step 8. Verify that RADIO-3 does not monitor the Private Call.
- Step 9. End the Private Call by pressing the "home" key and return to normal talkgroup operation.

Pass _____ Fail _____



Wide Area Trunking - FDMA Only Sites

4.1.6 Audio Interrupt/Interrupt Never Mode

1. DESCRIPTION

A radio PTT request may be received for a group already active and currently being sourced by another radio unit. The talkgroup can be flagged to either allow or disallow the new PTT. If allowed, the latest PTT request will be granted and become the source of the call.

SETUP

RADIO-1 - TALKGROUP 1
RADIO-2 - TALKGROUP 1
RADIO-3 - TALKGROUP 1

VERSION #1.020

2. TEST

- Step 1. Verify TALKGROUP 1's template is set up as Audio Interrupt Never.
- Step 2. Using RADIO-1, initiate a call on TALKGROUP 1.
- Step 3. Verify both RADIO-2 and RADIO-3 monitor the audio.
- Step 4. Using RADIO-3, initiate a call on TALKGROUP 1.
- Step 5. Verify that RADIO-3 receives a reject and that RADIO-2 continues to listen to RADIO-1.
- Step 6. Dekey both Radios.

Pass ____ Fail ____



Wide Area Trunking - FDMA Only Sites

4.1.7 Emergency Alarm and Call with Top of Queue

1. DESCRIPTION

Users in life threatening situations can use the Emergency button on the radio to immediately send a signal to the dispatcher and be assigned the next available voice channel. An Emergency Call can be set to either Top of Queue or Ruthless Preemption operation. During an emergency call the Emergency ID will appear on the display of the subscribers. To demonstrate this, an Emergency Alarm and Call will be initiated from a subscriber which will be received by a subscriber on the same talkgroup, affiliated at any site of any zone in the system.

NOTE: If the subscriber does not have the Display option, the Emergency ID will not be displayed.

SETUP

RADIO-1 - TALKGROUP 1
RADIO-1 - SITE - SITE 1
RADIO-2 - TALKGROUP 1
RADIO-2 - SITE - Any Site
RADIO-3 - TALKGROUP 2
RADIO-3 - SITE - SITE 1
RADIO-4 - TALKGROUP 3
RADIO-4 - SITE - SITE 1

All radios and talkgroups should start with default priorities. Default is 10.

VERSION #1.010

2. TEST

- Step 1. Verify the emergency type for TALKGROUP 1's template is set up as Top of Queue.
- Step 2. Simulate a busy system by disabling all channels at SITE 1 with the exception of the control channel and one voice channel.
- Step 3. Press the PTT to initiate a call with RADIO-3 and hold the PTT switch until instructed to release.
- Step 4. Key RADIO-4 and verify the radio receives a busy tone. Release the PTT switch on RADIO-4.
- Step 5. Using RADIO-1 send an Emergency Call by depressing the emergency switch and then the PTT switch.
- Step 6. Observe that RADIO-1 cannot transmit due to the voice channel being busy.
- Step 7. Release the PTT switch on RADIO-3.
- Step 8. Observe that RADIO-1 receives the call back before RADIO-4 and is able to proceed with the call. Also observe that the display on RADIO-2 denotes an emergency and the unit ID or alias of RADIO-1.
- Step 9. Dekey RADIO-1 and end the Emergency Call by holding down the Emergency button on RADIO-1 until an alert tone sounds. Verify RADIO-1 returns to normal operation and that RADIO-4 receives a callback.
- Step 10. Return the system to normal operation by enabling all the channels at SITE 1.

Pass _____ Fail _____



Enhanced Data

4.1.8 Enhanced Data Context Activation

1. DESCRIPTION

Context Activation refers to the process a Radio uses to register for packet data service on the trunked system. For this test, the Radio is configured to initiate a context request with the system upon power-on.

SETUP

RADIO-1 - TALKGROUP 1 (Must be equipped with a display and initially Powered-off)

Note: RADIO-1 must have data capabilities enabled in the network manager.

VERSION #1.050

2. TEST

- Step 1. Power-on RADIO-1.
- Step 2. After a period of 10 seconds, observe that the radio is enabled for data services by the presence of a data icon on the radio display.
- Step 3. Using the menu buttons below the radio display, observe that the radio has a valid IP address

Pass____ Fail____



Enhanced Data

4.1.9 Preemption of Unprotected Data Channels for Voice

1. DESCRIPTION

Unprotected data channels can be preempted by radios requesting voice services. System Administrators can select the type of channel that is preempted first – P25 data or Enhanced Data.

SETUP

Protected P25 data channels – 0
Protected Enhanced Data Channels -0
Preferred data service – Enhanced Data
RADIO-1 - TALKGROUP 1
RADIO-1 - SITE - SITE 1
RADIO-2 - TALKGROUP 2
RADIO-2 - SITE - SITE 1
RADIO-3 - TALKGROUP 2
RADIO-3 - SITE - Any Site
Note: Two channels in this test will be allocated for data services – Enhanced Data and P25 data

VERSION #1.060

2. TEST

- Step 1. Disable all channels at SITE 1 with the exception of the control channel, and 3 working channels.
- Step 2. Using an Enhanced data capable radio, send continuous data messages at a cadence of 15 seconds. Observe that an enhanced data channel is allocated in ZoneWatch.
- Step 3. Using a P25 data capable radio, send continuous data messages at a cadence of 15 seconds. Observe that a P25 data channel is allocated in ZoneWatch.
- Step 4. Initiate a Talkgroup Call with RADIO-1. Keep this call in progress until instructed to end the call
- Step 5. Observe in ZoneWatch that all channels are allocated.
- Step 6. Key RADIO-2 on TALKGROUP 2 and observe that the radio can make a call to RADIO-3. Observe in ZoneWatch that the Enhanced Data channel is allocated, but the P25 data channel has been converted to a voice call.
- Step 7. End the Talkgroup Call established in Step 4. End the call between RADIO-2 and RADIO-3.
- Step 8. In the network manager, change the preferred data service from Enhanced Data to P25 data. Allow time for the parameter to be distributed to the target devices.
- Step 9. Repeat Steps 1-8 to observe that the data channel that is preempted and converted to voice is the Enhanced Data channel.
- Step 10. Return all the channels in the system to service.

Pass____ Fail____



Enhanced Data

4.1.10 Protected P25 Data Channels

1. DESCRIPTION

Protected P25 data channels cannot be preempted by radios requesting voice services. If no voice channel resources are available and data channels are allocated at or below the protected data channel limit, radios requesting channels for new conversations are placed in a queue. Users of the same priority will move through the queue in a FIFO (first in, first out) sequence.

When a voice channel becomes available, the radio at the top of the busy queue gets a channel assignment and generates a callback tone. The callback tone alerts the user that a channel assignment was made and transmitting is now possible on the selected talkgroup.

SETUP

Protected P25 data channels -- 1
RADIO-1 - TALKGROUP 1
RADIO-1 - SITE - SITE 1
RADIO-2 - TALKGROUP 2
RADIO-2 - SITE - SITE 1
RADIO-3 - TALKGROUP 2
RADIO-3 - SITE - Any Site

VERSION #1.070

2. TEST

- Step 1. Simulate a busy system by disabling all channels at SITE 1 with the exception of the control channel, 1 P25 data channel and one voice channel.
- Step 2. Using a P25 data capable radio, send continuous data messages at a cadence of 15 seconds. Observe that a P25 data channel is allocated in ZoneWatch.
- Step 3. Initiate a Talkgroup Call with RADIO-1. Keep this call in progress until instructed to end the call.
- Step 4. Observe in ZoneWatch that all channels are allocated.
- Step 5. Key RADIO-2 on TALKGROUP 2 and observe that the radio receives a busy. Observe in ZoneWatch that the data channels are allocated and RADIO-2 is in the busy queue.
- Step 6. End the Talkgroup Call established in Step 4.
- Step 7. Observe RADIO-2 receives the callback tone and can now make a call to RADIO-3 upon receipt of the callback indication.
- Step 8. End the call between RADIO-2 and RADIO-3.
- Step 9. Return all the channels in the system to service.

Pass ____ Fail ____



Enhanced Data

4.1.11 Protected Data Channels Emergency Alarm and Call with Top of Queue

1. DESCRIPTION

Users in life threatening situations can use the Emergency button on the radio to immediately send a signal to the dispatcher and be assigned the next available voice channel. An Emergency Call can be set to either Top of Queue or Ruthless Preemption operation. During an emergency call the Emergency ID will appear on the display of the subscribers. To demonstrate this, an Emergency Alarm and Call will be initiated from a subscriber which will be received by a subscriber on the same talkgroup, affiliated at any site of any zone in the system.

NOTE: If the subscriber does not have the Display option, the Emergency ID will not be displayed.

SETUP

Protected Enhanced Data Channels - 1
RADIO-1 - TALKGROUP 1
RADIO-1 - SITE - SITE 1
RADIO-2 - TALKGROUP 1
RADIO-2 - SITE - Any Site
RADIO-3 - TALKGROUP 2
RADIO-3 - SITE - SITE 1
RADIO-4 - TALKGROUP 3
RADIO-4 - SITE - SITE 1

configure the emergency type for TALKGROUP 1 to Top of Queue.

All radios and talkgroups should start with default priorities. Default is 10.

VERSION #1.030

Subscriber Upgrade and GPS



Motorola Solutions Confidential Restricted

2. TEST

- Step 1. Simulate a busy system by disabling all channels at SITE 1 with the exception of the control channel, 1 voice channel and 1 Enhanced Data channel.
- Step 2. Press the PTT to initiate a call with RADIO-3 and hold the PTT switch until instructed to release. Using an Enhanced data capable radio, send continuous data messages at a cadence of 15 seconds. Observe that an enhanced data channel is allocated in ZoneWatch.
- Step 3. Key RADIO-4 and observe the radio receives a busy tone. Release the PTT switch on RADIO-4.
- Step 4. Using RADIO-1 send an Emergency Call by depressing the emergency switch and then the PTT switch. Using RADIO-1 send an Emergency Call by depressing the emergency switch and then the PTT switch.
- Step 5. Observe that RADIO-1 cannot transmit due to the voice channel being busy. Observe that the Enhanced Data channel is still allocated.
- Step 6. Release the PTT switch on RADIO-3.
- Step 7. Observe that RADIO-1 receives the call back before RADIO-4 and is able to proceed with the call. Also observe that the display on RADIO-2 denotes an emergency and the unit ID or alias of RADIO-1.
- Step 8. Dekey RADIO-1 and end the Emergency Call by holding down the Emergency button on RADIO-1 until an alert tone sounds. Observe RADIO-1 returns to normal operation and that RADIO-4 receives a callback.
- Step 9. Return the system to normal operation by enabling all the channels at SITE 1.

Pass _____ Fail _____

Use or disclosure of this proposal is subject to the restrictions on the cover page.

Acceptance Test Plan 4-11

CompassComm ATP scripts to be provided during the CDR phase of the project.

Signoff Certificate

By their signatures below, the following witnesses certify they have observed the system Acceptance Test Procedures.

Signatures

WITNESS:

Date: _____

Please Print Name: _____

Initials:

Please Print Title: _____

WITNESS:

Date: _____

Please Print Name: _____

Initials:

Please Print Title: _____

WITNESS:

Date: _____

Please Print Name: _____

Initials:

Please Print Title: _____

SECTION 5

SERVICE/WARRANTY

Motorola has over 90 years of experience supporting mission critical communications for public safety and public service agencies. Motorola's technical and service professionals use a structured approach to life cycle service delivery and provide comprehensive maintenance and support throughout the life of the system. The value of support is measured by system availability, which is optimized through the use of proactive processes, such as preventive maintenance, fault monitoring and active response management. System availability is a function of having in place a support plan delivered by highly skilled support professionals, backed by proven processes, tools, and continuous training.

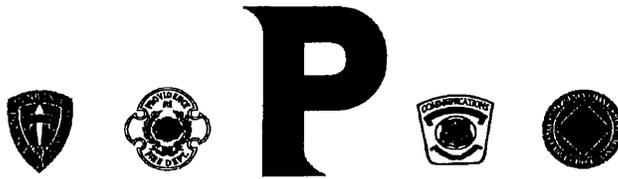
Whether it's a routine service call, or a disaster situation, Motorola understands its responsibility and takes pride in its commitment to deliver proven response service to the public safety community. Motorola has the capability to provide the technical, administrative, consultative, and maintenance repair services needed to support, enhance, and maintain the effectiveness of your communications network. Motorola's goal is to provide City of Providence with the qualified resources, to maintain and improve system operation and availability, and to deliver world-class service support.

Warranty and Post Warranty Service support services for the proposed Motorola manufactured ASTRO 25 Fixed end equipment to be delivered are outlined in Table 5-1.

Table 5-1: Warranty and Post Warranty Service Overview

Warranty and Post Warranty Service Overview	Warranty Year
Dispatch Service	✓
On Site Infrastructure Response	✓
Network Preventative Maintenance	✓
Infrastructure Repair with Advanced Replacement	✓
Technical Support Service	✓





OFFICE OF THE COMMISSIONER OF PUBLIC SAFETY
Steven M. Paré, Commissioner of Public Safety | Jorge O. Elorza, Mayor

October 9, 2019

The Honorable Jorge O. Elorza
Chairman, Board of Contract & Supply
City Hall
Providence, RI 02903

Re: (#26691) Request to Piggy Back State's Award for Maintenance with Ledge Light Technologies

Dear Mayor Elorza:

On June 25, 2018, the Board of Contract & Supply authorized the Police Department to piggyback the State of Rhode Island's Contract Price Agreement 2013-ET-007 for the continued Service and Maintenance of the *electronic traffic citation system (ECitation)* with: *Ledge Light Technologies, Inc. 88 D Howard Street, New London, CT 06320-4929.*

The State of Rhode Island has extended this contract until December 31, 2019 so that the current bid process can be completed with regards to a new reporting system. The Commissioner's Office and Information Technology Office respectfully requests to piggy back the State of Rhode Island's Contract Purchase Agreement Award #3338564 for Service and Maintenance with Ledge Light Technologies Inc. to pay for the Police Department's *maintenance of the E-Citation and Stop Survey System* through December 31, 2019 at a cost of **\$15,518.06**.

Funding is available in account: **101-301-52911**.

Respectfully submitted,

Steven M. Paré
Commissioner of Public Safety

Greg Haroian
Manager, Information Services, PS

Elaine Richards
Deputy Commissioner

Enc.