



Board of County Commissioners Agenda Request

2 I
Agenda Item #

Requested Meeting Date: 12/06/16

Title of Item: Motorola Services Agreement 2017

<input type="checkbox"/> REGULAR AGENDA <input checked="" type="checkbox"/> CONSENT AGENDA <input type="checkbox"/> INFORMATION ONLY	Action Requested: <input checked="" type="checkbox"/> Approve/Deny Motion <input type="checkbox"/> Adopt Resolution (attach draft)	<input type="checkbox"/> Direction Requested <input type="checkbox"/> Discussion Item <input type="checkbox"/> Hold Public Hearing* <small>*provide copy of hearing notice that was published</small>
Submitted by: Sheriff Scott Turner		Department: Sheriff's Office
Presenter (Name and Title): Sheriff Scott Turner		Estimated Time Needed:
Summary of Issue: Dispatch / radio annual maintenance services and support contract for 2017. Expense paid by user-dedicated E-911 funds.		
Alternatives, Options, Effects on Others/Comments:		
Recommended Action/Motion: Approve Motorola Services Agreement for 2017		
Financial Impact: Is there a cost associated with this request? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No What is the total cost, with tax and shipping? \$ Is this budgeted? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>Please Explain:</i>		

Legally binding agreements must have County Attorney approval prior to submission.

SCOTT A. TURNER
SHERIFF OF AITKIN COUNTY

217 Second Street NW, Room 185
Aitkin, MN 56431

218-927-7435 Emergency 911
Sheriff Fax 218-927-7359 / Dispatch Fax 218-927-6887
TOLL FREE 1-888-900-2138

MEMO

TO: Aitkin County Board

DATE: November 30, 2016

FROM: Sheriff Scott Turner

RE: Radio System Maintenance Agreement

Attached is a copy of the copy of the annual maintenance fees associated with our radio system. This fee is paid for out of our annual allotment of monies from the 911 user fees on telephone bills. It is a required expenditure as this maintenance assures rapid response to address any issues that may arise with our radio system, including the dispatch counsel. It is a system that is used to page out all of the various emergency response agencies, as well as communicate with them during an event.

The \$55,514.16 does represent a significant portion of our annual fees.

If you have any questions, please do not hesitate to call.



SERVICES AGREEMENT

Attn: National Service Support/4th fl
 1301 East Algonquin Road
 (800) 247-2346

Contract Number: S00001023097
 Contract Modifier: RN27-OCT-16 12:30:28

Date: 11/07/2016

Company Name:	Aitkin County Sheriff
Attn:	SHERIFF SCOTT TURNER
Billing Address:	217 Second St Nw
City, State, Zip:	Aitkin, MN, 56431
Customer Contact:	
Phone:	

Required P.O.: No
 Customer #: 1000997760
 Bill to Tag #: 0001
 Contract Start Date: 01/01/2017
 Contract End Date: 12/31/2017
 Anniversary Day: Dec 31st
 Payment Cycle: ANNUAL
 PO #:

QTY	MODEL/OPTION	SERVICES DESCRIPTION	MONTHLY EXT	EXTENDED AMT
		***** Recurring Services *****		
2	LSV01Q00400A	ADVANCED NETWORK MONITORING SITE(S)	\$302.22	\$3,626.64
9	LSV01Q00402A	ADVANCED DISPATCH SITE(S)	\$485.94	\$5,831.28
9	LSV01Q00403A	ADVANCED ONSITE INF RESP STD SITE(S)	\$2,458.58	\$29,502.96
9	LSV01Q00404A	ADVANCED NETWK PREV MAINT 1 SITE(S)	\$586.66	\$7,039.92
9	LSV01Q00421A	ADVANCED INFR RPR W/ADV REPL SITE(S)	\$631.46	\$7,577.52
4	SVC01SVC0016C	LOCAL RADIO SUPPORT W/PICK-UP/DLVRY	\$48.30	\$579.60
3	SVC322AC	CONSOLETTA-PICK UP & DELIVERY		
4	SVC457AE	XTL5000 CONSOLETTA		
4	SVC573AG	APX7500 CONSOLETTA		
4	SVC01SVC1220C	ASTRO SFS LITE SERVICE AGREEMENT	\$52.99	\$635.88
3	SVC570AG	APX7500 CONSOLETTA		
3	SVC680AD	XTL5000 CONSOLETTA		
3	SVC01SVC1420C	SP - LOCAL INFRASTRUCTURE REPAIR MC2500 MULTICHANNEL	\$60.03	\$720.36

SPECIAL INSTRUCTIONS - ATTACH STATEMENT OF WORK FOR PERFORMANCE DESCRIPTIONS	Subtotal - Recurring Services	\$4,626.18	\$55,514.16
	Subtotal - One-Time Event Services	\$.00	\$.00
	Total	\$4,626.18	\$55,514.16

The prices quoted via this service contract renewal are valid only until expiration of the current service contract. If the Customer does not provide to MSI a valid, executed contract renewal within 30 days of contract expiration, a one-time administrative fee equal to 5% of the subsequent year's annual contract rate will be billed to the Customer upon	Taxes	-	-
	Grand Total	\$4,626.18	\$55,514.16
	THIS SERVICE AMOUNT IS SUBJECT TO STATE AND LOCAL TAXING JURISDICTIONS WHERE APPLICABLE, TO BE VERIFIED BY MOTOROLA.		

Service Terms and Conditions

Motorola Solutions Inc. ("Motorola") and the customer named in this Agreement ("Customer") hereby agree as follows:

Section 1. APPLICABILITY

These Maintenance Service Terms and Conditions apply to service contracts whereby Motorola will provide to Customer either (1) maintenance, support, or other services under a Motorola Service Agreement, or (2) installation services under a Motorola Installation Agreement.

Section 2. DEFINITIONS AND INTERPRETATION

2.1. "Agreement" means these Maintenance Service Terms and Conditions; the cover page for the Service Agreement or the Installation Agreement, as applicable; and any other attachments, all of which are incorporated herein by this reference. In interpreting this Agreement and resolving any ambiguities, these Maintenance Service Terms and Conditions take precedence over any cover page, and the cover page takes precedence over any attachments, unless the cover page or attachment states otherwise.

2.2. "Equipment" means the equipment that is specified in the attachments or is subsequently added to this Agreement.

2.3. "Services" means those installation, maintenance, support, training, and other services described in this Agreement.

Section 3. ACCEPTANCE

Customer accepts these Maintenance Service Terms and Conditions and agrees to pay the prices set forth in the Agreement. This Agreement becomes binding only when accepted in writing by Motorola. The term of this Agreement begins on the "Start Date" indicated in this Agreement.

Section 4. SCOPE OF SERVICES

4.1. Motorola will provide the Services described in this Agreement or in a more detailed statement of work or other document attached to this Agreement. At Customer's request, Motorola may also provide additional services at Motorola's then-applicable rates for the services.

4.2. If Motorola is providing Services for Equipment, Motorola parts or parts of equal quality will be used; the Equipment will be serviced at levels set forth in the manufacturer's product manuals; and routine service procedures that are prescribed by Motorola will be followed.

4.3. If Customer purchases from Motorola additional equipment that becomes part of the same system as the initial Equipment, the additional equipment may be added to this Agreement and will be billed at the applicable rates after the warranty for that additional equipment expires.

4.4. All Equipment must be in good working order on the Start Date or when additional equipment is added to the Agreement. Upon reasonable request by Motorola, Customer will provide a complete serial and model number list of the Equipment. Customer must promptly notify Motorola in writing when any Equipment is lost, damaged, stolen or taken out of service. Customer's obligation to pay Service fees for this Equipment will terminate at the end of the month in which Motorola receives the written notice.

4.5. Customer must specifically identify any Equipment that is labeled intrinsically safe for use in hazardous environments.

4.6. If Equipment cannot, in Motorola's reasonable opinion, be properly or economically serviced for any reason, Motorola may modify the scope of Services related to that Equipment; remove that Equipment from the Agreement; or increase the price to Service that Equipment.

4.7. Customer must promptly notify Motorola of any Equipment failure. Motorola will respond to Customer's notification in a manner consistent with the level of Service purchased as indicated in this Agreement.

Section 5. EXCLUDED SERVICES

5.1. Service excludes the repair or replacement of Equipment that has become defective or damaged from use in other than the normal, customary, intended, and authorized manner; use not in compliance with applicable industry

standards; excessive wear and tear; or accident, liquids, power surges, neglect, acts of God or other force majeure events.

5.2. Unless specifically included in this Agreement, Service excludes items that are consumed in the normal operation of the Equipment, such as batteries or magnetic tapes.; upgrading or reprogramming Equipment; accessories, belt clips, battery chargers, custom or special products, modified units, or software; and repair or maintenance of any transmission line, antenna, microwave equipment, tower or tower lighting, duplexer, combiner, or multicoupler. Motorola has no obligations for any transmission medium, such as telephone lines, computer networks, the internet or the worldwide web, or for Equipment malfunction caused by the transmission medium.

Section 6. TIME AND PLACE OF SERVICE

Service will be provided at the location specified in this Agreement. When Motorola performs service at Customers location, Customer will provide Motorola, at no charge, a non-hazardous work environment with adequate shelter, heat, light, and power and with full and free access to the Equipment. Waivers of liability from Motorola or its subcontractors will not be imposed as a site access requirement. Customer will provide all information pertaining to the hardware and software elements of any system with which the Equipment is interfacing so that Motorola may perform its Services. Unless otherwise stated in this Agreement, the hours of Service will be 8:30 a.m. to 4:30 p.m., local time, excluding weekends and holidays. Unless otherwise stated in this Agreement, the price for the Services exclude any charges or expenses associated with helicopter or other unusual access requirements; if these charges or expenses are reasonably incurred by Motorola in rendering the Services, Customer agrees to reimburse Motorola for those charges and expenses.

Section 7. CUSTOMER CONTACT

Customer will provide Motorola with designated points of contact (list of names and phone numbers) that will be available twenty-four (24) hours per day, seven (7) days per week, and an escalation procedure to enable Customer's personnel to maintain contact, as needed, with Motorola.

Section 8. PAYMENT

Unless alternative payment terms are stated in this Agreement, Motorola will invoice Customer in advance for each payment period. All other charges will be billed monthly, and Customer must pay each invoice in U.S. dollars within twenty (20) days of the invoice date. Customer will reimburse Motorola for all property taxes, sales and use taxes, excise taxes, and other taxes or assessments that are levied as a result of Services rendered under this Agreement (except income, profit, and franchise taxes of Motorola) by any governmental entity.

Section 9. WARRANTY

Motorola warrants that its Services under this Agreement 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. In the event of a breach of this warranty, Customers 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. **MOTOROLA DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**

Section 10. DEFAULT/TERMINATION

10.1. If either party defaults in the performance of this Agreement, the other party will give to the non-performing party a written and detailed notice of the default. The non-performing party will have thirty (30) days thereafter to provide a written plan to cure the default that is acceptable to the other party and begin implementing the cure plan immediately after plan approval. If the non-performing party fails to provide or implement the cure plan, then the injured party, in addition to any other rights available to it under law, may immediately terminate this Agreement effective upon giving a written notice of termination to the defaulting party.

10.2. Any termination of this Agreement will not relieve either party of obligations previously incurred pursuant to this Agreement, including payments which may be due and owing at the time of termination. All sums owed by Customer to Motorola will become due and payable immediately upon termination of this Agreement. Upon the effective date of termination, Motorola will have no further obligation to provide Services.

Section 11. LIMITATION OF LIABILITY

Except for personal injury or death, Motorola's total liability, whether for breach of contract, warranty, negligence, strict liability in tort, or otherwise, will be limited to the direct damages recoverable under law, but not to exceed the price of twelve (12) months of Service provided under this Agreement. **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, TIME, DATA, GOOD WILL, REVENUES, PROFITS OR SAVINGS; OR OTHER SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES IN ANY WAY RELATED**

TO OR ARISING FROM THIS AGREEMENT OR THE PERFORMANCE OF SERVICES BY MOTOROLA PURSUANT TO THIS AGREEMENT. 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. This limitation of liability will survive the expiration or termination of this Agreement and applies notwithstanding any contrary provision.

Section 12. EXCLUSIVE TERMS AND CONDITIONS

12.1. This Agreement supersedes all prior and concurrent agreements and understandings between the parties, whether written or oral, related to the Services, and there are no agreements or representations concerning the subject matter of this Agreement except for those expressed herein. The Agreement may not be amended or modified except by a written agreement signed by authorized representatives of both parties.

12.2. Customer agrees to reference this Agreement on any purchase order issued in furtherance of this Agreement, however, an omission of the reference to this Agreement will not affect its applicability. In no event will either party be bound by any terms contained in a Customer purchase order, acknowledgement, or other writings unless: the purchase order, acknowledgement, or other writing specifically refers to this Agreement; clearly indicate the intention of both parties to override and modify this Agreement; and the purchase order, acknowledgement, or other writing is signed by authorized representatives of both parties.

Section 13. PROPRIETARY INFORMATION; CONFIDENTIALITY; INTELLECTUAL PROPERTY RIGHTS

13.1. Any information or data in the form of specifications, drawings, reprints, technical information or otherwise furnished to Customer under this Agreement will remain Motorola's property, will be deemed proprietary, will be kept confidential, and will be promptly returned at Motorola's request. Customer may not disclose, without Motorola's written permission or as required by law, any confidential information or data to any person, or use confidential information or data for any purpose other than performing its obligations under this Agreement. The obligations set forth in this Section survive the expiration or termination of this Agreement.

13.2. Unless otherwise agreed in writing, no commercial or technical information disclosed in any manner or at any time by Customer to Motorola will be deemed secret or confidential. Motorola will have no obligation to provide Customer with access to its confidential and proprietary information, including cost and pricing data.

13.3. This Agreement does not grant directly or by implication, estoppel, or otherwise, any ownership right or license under any Motorola patent, copyright, trade secret, or other intellectual property, including any intellectual property created as a result of or related to the Equipment sold or Services performed under this Agreement.

Section 14. FCC LICENSES AND OTHER AUTHORIZATIONS

Customer is solely responsible for obtaining licenses or other authorizations required by the Federal Communications Commission or any other federal, state, or local government agency and for complying with all rules and regulations required by governmental agencies. Neither Motorola nor any of its employees is an agent or representative of Customer in any governmental matters.

Section 15. 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.

Section 16. MATERIALS, TOOLS AND EQUIPMENT

All tools, equipment, dies, gauges, models, drawings or other materials paid for or furnished by Motorola for the purpose of 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.

Section 17. GENERAL TERMS

17.1. If any court renders any portion of this Agreement unenforceable, the remaining terms will continue in full force and effect.

17.2. This Agreement and the rights and duties of the parties will be interpreted in accordance with the laws of the State

in which the Services are performed.

17.3. Failure to exercise any right will not operate as a waiver of that right, power, or privilege.

17.4. Neither party is liable for delays or lack of performance resulting from any causes that are beyond that party's reasonable control, such as strikes, material shortages, or acts of God.

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

17.6. 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.

17.7. THIS AGREEMENT WILL RENEW, FOR AN ADDITIONAL ONE (1) YEAR TERM, ON EVERY ANNIVERSARY OF THE START DATE UNLESS EITHER THE COVER PAGE SPECIFICALLY STATES A TERMINATION DATE OR ONE PARTY NOTIFIES THE OTHER IN WRITING OF ITS INTENTION TO DISCONTINUE THE AGREEMENT NOT LESS THAN THIRTY (30) DAYS OF THAT ANNIVERSARY DATE. At the anniversary date, Motorola may adjust the price of the Services to reflect its current rates.

17.8. If Motorola provides Services after the termination or expiration of this Agreement, the terms and conditions in effect at the time of the termination or expiration will apply to those Services and Customer agrees to pay for those services on a time and materials basis at Motorolas then effective hourly rates.

17.9 This Agreement may be executed in one or more counterparts, all of which shall be considered part of the Agreement. The parties may execute this Agreement in writing, or by electronic signature, and any such electronic signature shall have the same legal effect as a handwritten signature for the purposes of validity, enforceability and admissibility. 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.

Revised Oct 15, 2015

Advanced Services
Statement of Work
Version 1.2

September 2016

Table of Contents

Advanced Services	3
Customer Support Plan (CSP)	3
Centralized Service Delivery	3
Field Service Delivery	4
Network Hardware Repair	4
Security Management Operations	5
Appendix A: Network Event Monitoring Statement of Work	6
Appendix B: Technical Support Statement of Work	12
Appendix C: Network Hardware Repair Statement of Work	17
Appendix D: Remote Security Patch Installation Statement of Work	20
Appendix E: OnSite Support Statement of Work	25
Appendix F: Annual Preventive Maintenance Statement of Work	29

This Statement of Work (SOW), including all of its subsections and attachments is an integral part of the Services Agreement or other signed agreement between Motorola Solutions, Inc. (Motorola) and Customer ("Agreement") and is subject to the terms and conditions set forth in the Agreement.

Advanced Services are Network Event Monitoring, Technical Support, Network Hardware Repair, Remote Security Patch Installation, OnSite Support and Annual Preventive Maintenance. Each of these services are summarized below and expanded upon in the appendices A, B, C, D, E and F. In the event of a conflict between the Sections below and an individual SOW Subsection, the individual SOW Subsection prevails.

Advanced Services

Motorola's Advanced Services are designed for customers who would benefit from Motorola's support experience. Advanced Services are delivered through a combination of centralized resources within Motorola's Solutions Support Center (SSC) collaborating with authorized local field services delivery resources that are experienced in managing mission critical networks and associated technologies. The MSI SSC operates 24 x 7 x 365, leveraging field resources that are either dedicated to the network or engaged as needed.

Advanced Services applies to fixed end communications network equipment located at the network core, RF site and dispatch sites. Advanced Services do not include maintenance of mobile or portable devices, or network backhaul.

The services described in this SOW will be performed in accordance with the Customer Support Plan (CSP) agreed upon by the parties.

The CSP will define the system elements covered under Advanced Services. The division of responsibilities between Motorola and Customer shall be defined and documented in the Appendices of this SOW, the Advanced Services CSP and other portions of the Agreement.

Customer Support Plan (CSP)

The Advanced Services Statement of Work summarizes Motorola's delivery approach and standard goals. Since individual customer technologies, systems, operating environments, and operational capabilities differ, the outlined services approach in the Advanced Services SOW will be adapted to each Customer's own environment and unique needs via the CSP.

The CSP is a critical component of this SOW and, once created, will automatically become integrated into this SOW by this reference. Motorola and Customer will collaborate to define the Customer-specific processes, procedures, network information, and other relevant support details required to perform the Services set forth in the Advanced Services SOW.

Centralized Service Delivery

Network Event Monitoring provides for real time continuous event management for radio communications networks. The SSC Network Operations Center utilizes sophisticated tools for remote monitoring and event characterization of customer communications networks. When an event is detected, technologists acknowledge and assess the situation, and initiate a defined response. Appendix A contains the SOW for Network Event Monitoring.

Technical Support provides telephone consultation for technical issues that require a high level of ASTRO 25 network experience and troubleshooting capabilities. Technical Support is delivered through the Motorola Solutions Support Center (SSC) by a staff of technical support specialists skilled in diagnosis and swift resolution of infrastructure performance and operational issues.

Motorola applies leading industry standards in recording, monitoring, escalating and reporting for Technical Support calls from its contracted customers, reflecting the importance of maintaining mission critical systems. Appendix B contains the SOW for Technical Support.

The Service Desk provides a single point of contact for all Service related items, including communications between Customer, Third-Party Subcontractors, and Motorola. The Service Desk provides an ingress/egress point for Service Requests, Service Incidents, Changes, and Dispatch. All incoming transactions through the Service Desk are recorded, tracked and updated through the Motorola Customer Relationship Management (CRM) system. Key responsibilities are: Documentation of customer inquiries, requests, concerns and related tickets. Tracking and resolution of issues, and timely communication with all stakeholders is based on the nature of the incident and the requirements of the CSP. The Services Desk will manage service requests received from authorized parties and will coordinate the appropriate response with Customer and third parties, as necessary.

Field Service Delivery

Advanced Services are provided by authorized local field Services delivery resources. Annual Preventive Maintenance and OnSite Support are both managed from the SSC, but delivered by authorized local field services resources.

OnSite Support provides local, trained and qualified technicians who arrive at the customer location upon a dispatch service call to diagnose and restore the communications network. This involves running diagnostics on the hardware or FRU (Field Replacement Unit) and replacing defective infrastructure or FRU. The system technician will respond to the customer location based on pre-defined severity levels. Appendix E contains the SOW for Onsite Support.

Annual Preventive Maintenance Service provides proactive, regularly scheduled operational test and alignment of infrastructure and network components to continually meet original manufacturer's specifications. Certified field technicians perform hands-on examination and diagnostics of network equipment on a routine and prescribed basis. Appendix F contains the SOW for Annual Preventive Maintenance.

Network Hardware Repair

Motorola provides a hardware repair service for all of the Motorola and select third-party infrastructure equipment supplied by Motorola. The Motorola authorized Repair Depot manages and performs the repair of Motorola supplied equipment as well as coordinating the equipment repair logistics process. Appendix C contains the SOW for Network Hardware Repair.

Network Hardware Repair with Advanced Replacement is a purchasable option under which Motorola will provide Customer with an advanced replacement unit(s) or Field Replacement Units (FRU's) as they are available in exchange for Customer's malfunctioning equipment. Malfunctioning equipment will be evaluated and repaired by the infrastructure repair depot and returned to depot's FRU inventory upon completion of repair. Customers who prefer to maintain their existing FRU inventory have an option to request a "Loaner" FRU while their unit is being repaired. If purchased, an appendix with the Network Hardware Repair with Advanced Replacement SOW will be included at the end of this document.

Security Management Operations

Remote Security Patch Installation

Motorola maintains a dedicated vetting lab for each supported ASTRO 25 release for the purpose of pre-testing security updates. In some cases, when appropriate, Motorola will make the updates available to outside vendors, allow them to test, and then incorporate those results into this offering. Once tested, Motorola posts the updates to a secured extranet website and sends an email notification to the customer. If there are any recommended configuration changes, warnings, or workarounds, Motorola will provide detailed documentation along with the updates on the website. In addition to testing the security updates, Remote Security Patch Installation includes remote installation of the updates. Appendix D contains the SOW for Remote Security Patch Installation.

Security Monitoring

ASTRO 25 Security Monitoring is a purchasable solution that provides 24x7x365 monitoring of the radio network security elements by specialized security technologists with years of experience working with ASTRO 25 mission-critical networks. For highly complex or unusual security events, our technologists have direct and immediate access to Motorola engineers for rapid resolution. If purchased, an appendix with the Security Monitoring SOW will be included at the end of this document.

My View Portal

MyView Portal is a web-based platform that provides a transparent, single source view of network maintenance and operations along with historical system and service delivery information. It can be accessed from a desktop, laptop or tablet web browser.

Event Monitoring Reports: See resolution status for incidents and notifications by severity level.

Technical Support: View case status details to compare them to committed response times.

OnSite Support: Observe case details by severity level and track the progress of onsite support issue resolution.

Annual Preventive Maintenance: Access the maintenance status for all sites and quickly identify actions needed to take to optimize system performance.

Network Hardware Repair: Track return material authorizations (RMAs) shipped to our repair depot and eliminate the need to call for status updates.

Security Patching: Receive automated patch downloads and status on completed updates.

Trending Reports: Access up to 13 months of historical data and system activity to analyze case management.

Asset and Contract Information: View all the assets purchased for the network, recent orders, and contract information.

The data presented in MyView Portal is in support of the appendix SOW's which provide the terms of any service delivery commitments associated with this data.

Appendix A: Network Event Monitoring Statement of Work

Network Event Monitoring provides real-time fault monitoring for radio communications networks on a continuous basis. Network Event Monitoring utilizes sophisticated tools for remote monitoring and event characterization of your communications networks. When an event is detected, skilled technologists acknowledge and assess the situation, and initiate a defined response.

The terms and conditions of this Statement of Work (SOW) are an integral part of Motorola's Service Agreement or other applicable agreement to which it is attached and made a part thereof by this reference.

1.0 Description of Network Event Monitoring Services

Network Event Monitoring is a service designed to monitor elements of a communication system for events, as set forth in the Monitored Elements Table. When the SSC detects an event, then, based on the severity of the event, trained technologists acknowledge and remotely diagnose the event and initiate an appropriate response in accordance with the customer handling procedure. Appropriate responses could include, but are not limited to, continuing to monitor the event for further development, attempting remote remediation via engagement of Technical Support resources, or initiating dispatch of a Field Servicer ("Servicer") for onsite remediation if required.

1.1 Availability

Network Event Monitoring is available 24 hours a day, 7 days a week. Network Event Monitoring availability is based on the level of contracted service and defined in the Customer Support Plan (CSP).

1.2 Geographic Availability

Network Event Monitoring is a globally provided service unless limited by data export control regulations. Timeframes are based on the customer's local time zone.

1.3 Inclusions

Network Event Monitoring can be delivered on Motorola sold infrastructure as stated in the Monitored Elements Table.

1.4 Limitations and Exclusions

- 1.4.1 Does not include monitoring of anything outside of the radio network or monitoring of infrastructure provided by a third party, unless specifically stated. Monitored elements must be within the radio network and capable of sending traps to the Unified Event Manager (UEM).
- 1.4.2 Additional support charges above and beyond the contracted service agreement fees may apply if Motorola determines that system faults were caused by the customer making changes to critical system parameters.
- 1.4.3 The following activities are outside the scope of the Network Monitoring service, but are optional services that are available to remote Network Monitoring customers at an additional cost:
 - 1.4.3.1 Emergency on-site visits required to resolve technical issues that cannot be resolved by SSC working remotely with the local customer technical resource.

- 1.4.3.2 System installations, upgrades, and expansions.
- 1.4.3.3 Customer training.
- 1.4.3.4 Hardware repair and/or exchange.
- 1.4.3.5 Network security services.
- 1.4.3.6 Network transport (WAN ports, WAN cloud, redundant paths).
- 1.4.3.7 Information Assurance.
- 1.4.3.8 Any services not expressly included in this statement of work.
- 1.4.4 Reference the event catalogue to confirm monitored equipment.

1.5 Motorola has the following responsibilities:

- 1.5.1. Provide dedicated connectivity through a network connection necessary for monitoring communication networks. The Connectivity Matrix further describes the connectivity options.
- 1.5.2 If determined necessary by Motorola, provide Motorola owned equipment for monitoring system elements. If Motorola installs or replaces Motorola owned equipment, the type of equipment and location installed is listed in the Motorola Owned & Supplied Equipment Table.
- 1.5.3 Verify connectivity and event monitoring prior to system acceptance or start date.
- 1.5.4 Monitor system continuously during hours designated in the CSP in accordance with the pre-defined times specified in section 1.6.2 below.
- 1.5.5 Remotely access the customer's system to perform remote diagnosis as permitted by customer pursuant to section 1.6.4.
- 1.5.6 Create a case, as necessary. Gather information to perform the following:
 - 1.5.6.1 Characterize the issue
 - 1.5.6.2 Determine a plan of action
 - 1.5.6.3 Assign and track the case to resolution.
- 1.5.7 Cooperate with customer to coordinate transition of monitoring responsibilities between Motorola and customer as specified in section 1.6.13 and 1.6.13.1.
- 1.5.8 Maintain communication as needed with the customer in the field until resolution of the case

1.6 The Customer has the following responsibilities:

- 1.6.2 Allow Motorola continuous remote access to enable the monitoring service.
- 1.6.3 Provide continuous utility service to any Motorola equipment installed or utilized at customer's premises to support delivery of the service. Customer acknowledges Risk of loss to any Equipment provided to Customer as part of the Services will reside with Customer upon delivery and will remain with Customer until Equipment is returned to Motorola or its authorized representative.
- 1.6.4 Provide Motorola with pre-defined customer information and preferences prior to Start Date necessary to complete the CSP, including, but not limited to:
 - 1.6.4.1 Case notification preferences and procedure
 - 1.6.4.2 Repair Verification Preference and procedure
 - 1.6.4.3 Database and escalation procedure forms.

- 1.6.4.4 Submit changes in any information supplied to Motorola and included in the CSP to the CSM.
- 1.6.5 Provide the following information when initiating a service request:
 - 1.6.5.1 Assigned system ID number
 - 1.6.5.2 Problem description and site location
 - 1.6.5.3 Other pertinent information requested by Motorola to open a Case.
- 1.6.6 Notify the SSC when customer performs any activity that impacts the system. (Activity that impacts the system may include, but is not limited to, installing software or hardware upgrades, performing upgrades to the network, renaming elements or devices within the network, or taking down part of the system to perform maintenance.)
- 1.6.7 Allow Servicers access to equipment (including any connectivity or monitoring equipment) if remote service is not possible.
- 1.6.8 Allow Servicers access to remove Motorola owned monitoring equipment upon cancellation of service.
- 1.6.9 Provide all customer managed passwords required to access the customer's system to Motorola upon request or when opening a case to request service support or enable response to a technical issue.
- 1.6.10 Pay additional support charges above and beyond the contracted service agreements that may apply if it is determined that system faults were caused by the customer making changes to critical system parameters
- 1.6.11 Obtain at Customer's cost all third party consents or licenses required to enable Motorola to provide the monitoring service.
- 1.6.12 Cooperate with Motorola and perform all acts that are reasonable or necessary to enable Motorola to provide the services described in this SOW.
- 1.6.13 Contact Motorola to coordinate transition of monitoring when monitoring responsibility is to be transferred to or from Motorola. (I.e. normal business hours to after-hours monitoring) as set forth in pre-defined information provided by customer CSP.
 - 1.6.13.1 Upon contact, customer must provide customer name, site id, status on any open cases, severity level, and brief description of case and action plan to Motorola.
- 1.6.14 Acknowledge that cases will be handled in accordance with the times and priorities as defined in the Event Definition table- Appendix A.
- 1.6.15 Cooperate with Motorola and perform all acts that are reasonable or necessary to enable Motorola to provide the Network Event Monitoring.

Engagement Matrix

The event types are based on the defined levels as follows:

Severity Level	Severity Definition	Engagement Times
1	<p>This is defined as a critical/major incident that causes the system and/or infrastructure to experience a loss of call processing functionality and no work-around or immediate solution is available.</p> <p>The following are examples of this kind of failure:</p> <ul style="list-style-type: none"> ○ 33% of call processing resources impaired ○ Remote Site/sub-system severed ○ Site Environment alarms: <ul style="list-style-type: none"> ○ Smoke ○ Unauthorized access ○ Temperature ○ Power failure 	Response provided 24 hours, 7 days a week, including US Holidays.
2	<p>This is defined as a moderate/minor incident that causes the system to operate with a continuous reduction in capacity or functionality of core services (core services include, voice, data or network management).</p> <p>The following are examples of this kind of failure:</p> <ul style="list-style-type: none"> ○ Less than 33% of call processing resources impaired ○ Failure of a single redundant component 	Response provided 8 x 5 on standard business days, which is normally Monday through Friday 8AM to 5PM, excluding US Holidays.
3	<p>This is defined as a minor issue, which has little or no impact on the functionality, efficiency or usability of core services. The following are examples of this kind of severity:</p> <ul style="list-style-type: none"> ○ Faults that have no impact in how the user perceives the system to work ○ Intermittent issues ○ Requests for information 	Response provided 8 x 5 on standard business days, which is normally Monday through Friday 8AM to 5PM, excluding US Holidays.

	<input type="radio"/> Preventive Maintenance or upgrade related work	
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Connectivity Matrix

Request connectivity 8 weeks in advance of service start date

System Type	Connectivity	Set up and Maintenance
ASTRO® 25	Internet VPN	Motorola
ASTRO® 25	T1	Motorola

Motorola Owned & Supplied Equipment Table

Equipment Type	Location Installed
Firewall/Router	Master Site
Service Delivery Management Server	Master Site for each Zone

Monitored Elements Table

Master Site Infrastructure	RF Site Equipment	Dispatch Site Equipment
Servers & Back up Servers	Channels	Consoles
MOSCAD (digital inputs & RS232 serial alarms)	MOSCAD (digital inputs & RS232 serial alarms)	AIS Servers
TRAK	RF Site Communication Path	Operator Position (OP)
Core LAN Switch	Switch	Motorola Gold Elite Gateway (MGEG)
Packet Data Gateway (PDG)	Site Controller	Call Processor
Radio Network Gateway (RNG)	Router	Logging Replay Station (only within the Radio Network Interface "RNI")
Zone Database Server (ZDS)	Gateway Router	Ambassador (AMB)
Gateway Router	Network Time Protocol (NTP)	Client Station
Controller – Zone & Domain	Firewall	Voice Processing Module (VPM)
Firewall Manager Servers	SmartX Site Converter (only the converter, not the legacy sites)	MCC 7500 IP Logging Recorders
Air Traffic Router (ATR)		MCC 7100 (only within the Radio Network Interface "RNI")
Unified Event Manager (UEM)		Conventional Channel Gateway (CCGW)
Zone Statistical Server (ZSS)		
Install Server		

**Some or all of the above equipment may be monitored depending on system configuration and need. Other equipment (not listed) may be monitored as an option, consult with your Customer Support Manager for details.*

Appendix B: Technical Support Statement of Work

Motorola's Technical Support service provides telephone consultation for technical issues that require a high level of ASTRO 25 network knowledge and troubleshooting capabilities. Remote Technical Support is delivered through the Motorola Solutions Support Center (SSC) by a staff of technical support specialists skilled in diagnosis and swift resolution of infrastructure performance and operational issues.

Motorola applies leading industry standards in recording, monitoring, escalating and reporting for Technical Support calls from its contracted customers, reflecting the importance of maintaining mission critical systems.

1.1 Description of Technical Support Services

Motorola's Solutions Support Center's (SSC) primary goal is Customer Issue Resolution (CIR), providing Incident Restoration and Service Request Fulfillment on Motorola's currently supported infrastructure. This team of highly skilled, knowledgeable, and experienced specialists is available to the customer as an integrated part of the support and technical issue resolution process. The SSC remotely supports the customer and works with but not limited to fault diagnostics tools, simulation networks and fault database search engines.

Technical Support is available Monday - Friday 8:00am - 5:00pm local site time and 24 hours a day, 7 days a week for Severity 1 Incidents. Technical Support availability for severity 2, 3 and 4 incidents is outlined in the [Severity Level Response Goals](#). Calls requiring incidents or service requests will be logged in Motorola's Customer Relationship Management (CRM) system. This helps ensure that technical issues are prioritized, updated, tracked and escalated as necessary, until resolution. Technical Support Operations assigns the impact level in accordance with the agreed [Severity Level Definitions](#) stated in this document.

Motorola will track the progress of each case from initial capture to resolution. Motorola will advise and inform the customer of the case progress and tasks that require further investigation and assistance from the customer's technical resources.

This service requires the customer to provide a suitably trained technical resource that delivers maintenance and support to the customer's system, and who is familiar with the operation of that system. Motorola provides technical consultants to support the local resource in the timely closure of infrastructure, performance and operational issues.

1.2 Scope

Technical Support service is available Monday - Friday 8:00am - 5:00pm local site time and 24 hours a day, 7 days a week for Severity 1 Incidents. See [Severity Level Definitions](#).

1.3 Inclusions

Technical Support service will be delivered on Motorola sold infrastructure including integrated 3rd party products.

1.4 Limitations and Exclusions

The following activities are outside the scope of the Technical Support service, but are optional services that are available to remote Technical Support customers at an additional cost:

1.4.1 Emergency on-site visits required to resolve technical issues that cannot be resolved with the SSC working remotely with the local customer technical resource.

1.4.2 Third party support for equipment not sold by Motorola.

1.4.3 System installations, upgrades, and expansions.

1.4.4 Customer training.

1.4.5 Hardware repair and/or exchange.

1.4.6 Network security services.

1.4.7 Network transport management.

1.4.8 Motorola services not included in this statement of work.

1.4.9 Any technical support required as a result of a virus or unwanted intrusion is excluded if the system is not protected against these security threats by Motorola's Pre-tested Security Update Service when applicable.

1.5 Motorola has the following responsibilities:

1.5.1. Provide availability to the Motorola Solution Support Center (800-221-7144), 24 hours a day, 7 days a week to respond to Customer's requests for Severity 1 support. Refer to Severity Level Response Time Goals for Severity 2, 3 and 4 response times.

1.5.2. Respond initially to Incidents and Technical Service Requests in accordance with the response times set forth in the Severity Level Response Time Goals section of this document and the severity level defined in the Severity Level Definitions section of this document.

1.5.3. Provide caller a plan of action outlining additional requirements, activities or information required to achieve restoral/fulfillment.

1.5.4. Maintain communication with the customer in the field as needed until resolution of the case

1.5.5. Coordinate technical resolutions with agreed upon third party vendors, as needed.

1.5.6. Manage functionally escalated support issues to additional Motorola technical resources, as applicable.

1.5.7. Determine, in its sole discretion, when a case requires more than the Technical Support services described in this SOW and notify customer of an alternative course of action.

1.6. The Customer has the following responsibilities:

1.6.1. Provide Motorola with pre-defined information prior to contract start date necessary to complete Customer Support Plan (CSP).

1.6.2. Submit changes in any information supplied in the Customer Support Plan (CSP) to the Customer Support Manager (CSM).

1.6.3. Contact the SSC in order to engage the Technical Support service, providing the necessary information for proper entitlement services. Including but not limited to the name of contact, name of customer, system ID number, site(s) in question, and brief description of the problem including pertinent information for initial issue characterization.

1.6.4. Maintain suitable trained technical resources that provide field maintenance and technical maintenance services to the system, and who are familiar with the operation of that system.

- 1.6.5. Supply suitably skilled and trained on-site presence when requested by the SSC.
- 1.6.6. Validate issue resolution prior to close of the case in a timely manner.
- 1.6.7. Acknowledge that cases will be handled in accordance with the times and priorities as defined in the Severity Level Definitions and in the Severity Level Response Time Goals section in this document.
- 1.6.8. Cooperate with Motorola and perform all acts that are reasonable or necessary to enable Motorola to provide the Technical Support
- 1.6.9 Obtain at Customer's cost all third party consents or licenses required to enable Motorola to provide the Service.

1.7 Severity Level Definitions

The following severity level definitions will be used to determine the maximum response times:

Severity Level	Severity Definition
Severity 1	<p>This is defined as a failure that causes the system and/or infrastructure a loss of voice functionality and no work-around or immediate solution is available.</p> <p>The following are examples of this kind of failure:</p> <ul style="list-style-type: none"> • 33% of call processing resources impaired • Site Environment alarms: <ul style="list-style-type: none"> ○ Smoke, ○ Unauthorized access ○ Temperature ○ Power failure
Severity 2	<p>This is defined as a fault that causes the system to operate with a continuous reduction in capacity or functionality of core services (core services consist of: Voice, data or network management).</p> <p>The following are examples of this kind of failure:</p> <ul style="list-style-type: none"> ○ Less than 33% of call processing resources impaired ○ Failure of a single redundant component
Severity 3	<p>This is defined as a fault which reduces the functionality, efficiency or usability of core services (voice, data and network management) and there is a viable work-around in place.</p> <p>The following are examples of this kind of severity:</p> <ul style="list-style-type: none"> ○ Intermittent faults that are infrequent and minor impact to core services ○ Statistical reporting problems
Severity 4	<p>This is defined as a minor issue, which has little or no impact on the functionality, efficiency or usability of core services. The following are examples of this kind of severity:</p> <ul style="list-style-type: none"> ○ Faults resulting in minor functions or features being unsupported or unreliable in ways that are not noticeable to the user. ○ Faults that have no impact in how the user perceives the system to work. ○ Cosmetic issues. ○ Requests for information.

1.8 Severity Level Response Goals

The response times are based on the defined severity levels as follows:

Severity Level	Response Time
Severity 1	A Motorola SSC Technician will make contact with the customer technical representative within one hour of the request for support being logged in the issue management system. Continual effort will be maintained to restore the system or provide a workaround resolution. Response provided 24 x 7.
Severity 2	A Motorola SSC Technician will make contact with the customer technical representative within four hours of the request for support being logged at the issue management system. Response provided 8 x 5 on standard business days, which is normally Monday through Friday 8AM to 5PM, excluding US Holidays.
Severity 3	A Motorola SSC Technician will make contact with the customer technical representative within the next business day of the request for support being logged at the issue management system. Response provided 8 x 5 on standard business days, which is normally Monday through Friday 8AM to 5PM, excluding US Holidays.
Severity 4	A Motorola SSC Technician will make contact with the customer technical representative within the next business day of the request for support being logged at the issue management system. Response provided 8 x 5 on standard business days, which is normally Monday through Friday 8AM to 5PM, excluding US Holidays.

Appendix C: Network Hardware Repair Statement of Work

Motorola provides a hardware repair service for all of the Motorola and select third-party infrastructure equipment supplied by Motorola. The Motorola authorized Repair Depot manages and performs the repair of Motorola supplied equipment as well as coordinating the equipment repair logistics process.

1.1 Description of Services

Infrastructure components are repaired at a Motorola authorized Infrastructure Depot Operations (IDO). At Motorola's discretion, select third party infrastructure may be sent to the original equipment manufacturer or third party vendor for repair.

1.2 Scope

Repair Authorizations are obtained by contacting the Solutions Support Center (SSC) which is available 24 hours a day, 7 days a week.

Repair authorizations can also be obtained online via Motorola Online at <https://businessonline.motorolasolutions.com>, under Repair Status/Submit Infrastructure RA.

1.3 Inclusions

Network Hardware Repair is available on Motorola sold communication systems which may include some aspect of third party hardware and software. Motorola will make a "commercially reasonable effort" to repair Motorola manufactured infrastructure products for seven years after product cancellation.

1.4 Exclusions

If infrastructure is no longer supported by Motorola, the original equipment manufacturer or a third party vendor, Motorola may return said equipment to the customer without repair or replacement. The following items are excluded from Network Hardware Repair:

- 1.4.1 All Motorola infrastructure hardware over seven (7) years from product cancellation date.
- 1.4.2. All Third party infrastructure hardware over two (2) years from product cancellation date.
- 1.4.3 All Broadband infrastructure over three (3) years from product cancellation date
- 1.4.4 Physically damaged infrastructure.
- 1.4.5 Third party equipment not shipped by Motorola
- 1.4.6 Consumable items including, but not limited to, batteries, connectors, cables, toner/ink cartridges, tower lighting, laptop computers, monitors, keyboards and mouse.
- 1.4.7 Video retrieval from Digital In-Car Video equipment.
- 1.4.8 Infrastructure backhaul such as, Antennas, Antenna Dehydrator, Microwave¹, Line Boosters, Amplifier, Data Talker Wireless Transmitter, Short haul modems, UPS¹
- 1.4.9 Test equipment.
- 1.4.10. Racks, furniture and cabinets.
- 1.4.11. Firmware and/or software upgrades.

¹ Excluded from service agreements but may be repaired on an above contract, time and material basis. All UPS Systems must be shipped to IDO for repair. Note! Excludes batteries and on-site services

- 1.5 Motorola has the following responsibilities:
- 1.5.1 Enable Customer access to the Motorola call Center operational 24 hours a day, 7 days per week, to create requests for repair service.
 - 1.5.2 Provide repair return authorization numbers when requested by Customer.
 - 1.5.3 Receive malfunctioning infrastructure from Customer and document its arrival, repair and return.
 - 1.5.4 Perform the following service on Motorola infrastructure:
 - 1.5.4.1 Perform an operational check on the infrastructure to determine the nature of the problem.
 - 1.5.4.2 Replace malfunctioning Field Replacement Units (FRU) or components.
 - 1.5.4.3 Verify that Motorola infrastructure is returned to Motorola manufactured specifications, as applicable.
 - 1.5.4.4 Perform a box unit test on all serviced infrastructure.
 - 1.5.4.5 Perform a system test on select infrastructure.
 - 1.5.5 Provide the following service on select third party infrastructure:
 - 1.5.5.1 Perform pre-diagnostic and repair services to confirm infrastructure malfunction and eliminate sending infrastructure with no trouble found (NTF) to third party vendor for repair, when applicable.
 - 1.5.5.2 Ship malfunctioning infrastructure components to the original equipment manufacturer or third party vendor for repair service, when applicable.
 - 1.5.5.3 Track infrastructure sent to the original equipment manufacturer or third party vendor for service.
 - 1.5.5.4 Perform a post-test after repair by Motorola, original equipment manufacturer, or third party vendor to confirm malfunctioning infrastructure has been repaired and functions properly in a Motorola system configuration, when applicable.
 - 1.5.5.5 Re-program repaired infrastructure to original operating parameters based on software/firmware provided by customer as required by section 1.6.7. If the customer software version/configuration is not provided, shipping times will be delayed. If the Infrastructure repair depot determines that the malfunctioning infrastructure is due to a software defect, the repair depot reserves the right to reload infrastructure with a similar software version.
 - 1.5.5.6 Properly package repaired infrastructure.
 - 1.5.5.7 Ship repaired infrastructure to the customer specified address during normal operating hours of Monday through Friday 7:00am to 7:00pm CST, excluding holidays. FRU will be sent two-day air unless otherwise requested. Motorola will pay for such shipping, unless customer requests shipments outside of the above mentioned standard business hours and/or carrier programs, such as NFO (next flight out). In such cases, customer will be responsible for payment of shipping and handling charges.
- 1.6 The Customer has the following responsibilities:
- 1.6.1 Contact or instruct Servicer to contact the Motorola Solutions Support Center (SSC) and request a return authorization number prior to shipping malfunctioning infrastructure.

1.6.2 Provide model description, model number and serial number, type of system, software and firmware version, symptom of problem and address of site location for FRU or infrastructure.

1.6.3 Indicate if infrastructure or third party infrastructure being sent in for service was subjected to physical damage or lightning damage.

1.6.4 Follow Motorola instructions regarding inclusion or removal of firmware and software applications from infrastructure being sent in for service.

1.6.5 Provide customer purchase order number to secure payment for any costs described herein.

1.6.6 Properly package and ship the malfunctioning FRU, at customer's expense. Customer is responsible for properly packaging the malfunctioning infrastructure FRU to ensure that the shipped infrastructure arrives un-damaged and in repairable condition.

1.6.6.1 Clearly print the return authorization number on the outside of the packaging.

1.6.7 Maintain versions and configurations for software/applications and firmware to install repaired equipment.

1.6.8 Provide Motorola with proper software/firmware information to reprogram equipment after repair unless current software has caused this malfunction.

1.6.9 Cooperate with Motorola and perform all acts that are reasonable or necessary to enable Motorola to provide the infrastructure repair services to customer.

1.6.10 Obtain at Customer's cost all third party consents or licenses required to enable Motorola to provide the Service.

Appendix D: Remote Security Patch Installation Statement of Work

To verify compatibility with your ASTRO 25 system, Motorola's Remote Security Patch Installation provides pre-tested 3rd party software (SW) security updates.

In addition to testing the security updates, Remote Security Patch Installation includes remote installation of the updates.

This Statement of Work ("SOW") is subject to the terms and conditions of Motorola's Professional Services Agreement, Service Agreement or other applicable agreement in effect between the parties ("Agreement"). Motorola and Customer may be referred to herein individually as a "Party or together as "Parties"

1.1 Description of Remote Security Patch Installation

Motorola shall maintain a dedicated vetting lab for each supported ASTRO 25 release for the purpose of pre-testing security updates. In some cases, when appropriate, Motorola will make the updates available to outside vendors, allow them to test, and then incorporate those results into this offering. Depending on the specific ASTRO 25 release and customer options, these may include updates to antivirus definitions, OEM vendor supported Windows Workstation and Server operating system patches, Solaris and Red Hat Linux (RHEL) operating system patches, VMware ESXi Hypervisor patches, Oracle database patches, PostgreSQL patches, and patches for other 3rd party Windows applications such as Adobe Acrobat and Flash.

Motorola has no control over the schedule of releases. The schedule for the releases of updates is determined by the Original Equipment Manufacturers (OEMs), without consultation with Motorola. Antivirus definitions are released every week. Microsoft patches are released on a monthly basis. Motorola obtains and tests these updates as they are released. Other products have different schedules or are released "as-required." Motorola will obtain and test these OEM vendor supported updates on a quarterly basis.

1.2 Connectivity

To accommodate remote installation of security updates, a connection is required from Motorola to the customer ASTRO 25 network. There are two different options. 1) T1 line purchased and maintained by Motorola, or 2) The customer internet connection is used and a Virtual Private Network (VPN) is established between Motorola and the ASTRO 25 network. Since this relies on the customer internet connection, the customer is responsible for the availability of the connection.

Along with the connection itself, Motorola supplied hardware is required to be deployed to the customer premises on the ASTRO 25 network. Motorola shall load software, configure, and ship the hardware to the customer supplied contact for installation. This hardware and its maintenance is part of the connectivity service.

ASTRO 25 connectivity is ordered separately from Remote Security Patch Installation and has a separate statement of work. See that SOW for more detail on terms of the connection.

If connectivity is already established for a different service such as network or security monitoring then the same connection can be used for Remote Security Patch Installation. There is no need for a separate connection to be established.

1.3 Security Update Installation

Motorola shall push the tested security updates over the established connection. The timing and coordination with the customer of each update depends on the updates themselves. Motorola requires IP connectivity to all elements that are in scope for patching. If IP connectivity from

Motorola is not available then those elements will not be considered for remote patching and will require alternative arrangements outside of the scope of this statement of work.

1.3.1 Antimalware Signature Update Installation

Antimalware signature updates are released often, but Motorola collects and tests them on a weekly basis. The updates are non-intrusive (for example, no reboots or manual configuration changes are required) and automatically implemented. Therefore, antimalware signature updates will be pushed within a week of testing without Customer coordination. An email will be sent to inform the Customer that the signatures have been updated.

1.3.2 Microsoft Windows Security Update Installation

Microsoft typically releases security updates every second Tuesday of the month (aka "Patch Tuesday"); however, selected security updates are sometimes released on other days, and it is possible that no security updates are released during a month. Security updates for some 3rd party Windows software (Non-Motorola and non-Microsoft applications that run on Windows, such as Adobe Reader and Flash) are also released on Patch Tuesday. The most recent Windows and 3rd party Windows security updates available will be acquired by Motorola on each Patch Tuesday. These patch security updates require at least one week for incorporation into the offering and a minimum of 36 hours for testing in the Motorola vetting labs, after which security updates with no issues are then released. Patches may be held back at the discretion of Motorola if they are found to cause any problems to features, performance or functionality and will only be released when the issues are fully resolved.

It is important to understand that it is often the case that after security updates are installed, Microsoft requires the patched computer to be rebooted before the security updates take full effect and vulnerabilities are mitigated. The clients include dispatch consoles and there is no way for Motorola to know when it is safe to reboot. The customer must reboot at a time chosen by them so as to not impact operations.

Once the security updates are vetted, Motorola will start pushing the updates to the customer without customer coordination or notification. An email will be sent requesting that the clients be rebooted. It is the customer's responsibility to reboot all of the clients before the next set update is sent. When preparing for the next month's push of security updates, Motorola will first scan to verify all of the previous updates were implemented and if any computer has not been rebooted. Motorola will send an email requesting that the remaining computers be rebooted before any new updates are pushed.

1.3.3 Microsoft Windows Security Updates Outside ASTRO 25 Firewalls

Connections to other networks (from now on referred to as Customer Enterprise Network, or CEN) must be delineated by firewalls. All updates deployed by Remote Security Patch Installation are specific to equipment inside the ASTRO 25 Radio Network with only the following exceptions: Key Management Facility (KMF), Text messaging Services (TMS) and advanced Messaging Services (AMS) and MCC 7100 consoles. In these exceptions, the customer has a choice of including these machines in the Remote Security Patch Installation service, or including them in their own IT security patch procedures.

The KMF, TMS, and AMS are all outside the firewall (relative to the Radio Network) and therefore updates require that the firewall be opened. The default for Remote Remote Security Patch Installation is that these functions are included.

The MCC 7100 console may be directly on the radio network or in the CEN. Any MCC 7100 on the radio network would simply be included in the standard Remote Security Patch Installation offering. However, the MCC 7100 may also be located in the CEN and connected

through a VPN to a firewall at a dispatch location. In this case, the default for Remote Security Patch Installation is to not update these consoles.

If the customer requires inclusion for the CEN based MCC 7100 consoles, then they must contact their Customer Service Manager and make a formal request. They must also consent to allow Motorola to open the firewall to allow access for updates.

1.3.4 Quarterly Security Update Installation

The quarterly patch updates are for Solaris and Red Hat Linux (RHEL) operating systems, and VMWare ESXi hypervisor (virtualization). They are tested and released on a quarterly basis, at end of March, June, September, and December. Motorola will schedule installation of the updates with the customer in the first weeks of the following quarter. Motorola will send the customer an ITIL with details on the upgrade and scheduling for each of the events.

These updates are intrusive and require customer coordination. Examples of how they affect the customer include reboots to implement the patches and rolling (switching from one zone controller to the other) of the zone controllers. Systems with redundant zone controllers (L2, M2, M3) have low downtime (minutes) as the zone controllers are rolled, but systems with single zone controllers (L1, M1) will be down for longer periods. During these times, the system will be in "Site trunking" mode. It is up to the customer to understand the operational impacts and to coordinate these events with users.

This effort will be done during standard business hours, or 8am to 5pm CST. Customers requesting that downtime be during non-standard hours must submit an official request through their CSM. The ITIL will show work being done during standard hours such as prep work, downloading of the patches to memory, etc and the actual reboots or ZC rollover will be initiated when requested. Additional remote work will proceed the next day during standard hours.

Motorola System Enhancement Releases ("SERs") and Field Service Bulletins ("FSB's) are not part of this service. However in some instances, these fixes must be done to allow the latest security patches. If it is possible for the specific required FSB to be installed remotely, then Motorola will include it as part of Remote Security Patch Installation. Otherwise, Motorola will communicate this to the customer and the patches that cannot be delivered. The Customer and their CSM will determine how to get the SER or FSB installed. Once the SER or FSB appears on the system, Remote Security Patch Installation will then install the affected patches.

For minimal downtime and to avoid redundant efforts, the customer should coordinate any maintenance or other updates such as FSB's and SER's with Motorola.

1.4 Scope

Remote Security Patch Installation supports the currently shipping Motorola ASTRO 25 System Release (SR) and strives to support five (5) releases prior. Motorola reserves the right to adjust which releases are supported as business conditions dictate. Contact your Customer Service Manager for the latest supported releases.

Remote Security Patch Installation is available for any L or M core system in a supported release. Remote Security Patch Installation is not available for K cores.

Systems that have non-standard configurations that have not been certified by Motorola Systems Integration and Testing (SIT) are specifically excluded from this Service unless otherwise agreed in writing by Motorola. Service does not include pre-tested intrusion detection system (IDS) updates

for IDS solutions. Certain consoles, MOTOBRIDGE, MARVLIS, Symbol Equipment, AirDefense Equipment, AVL, Genesis, WAVE and Radio Site Security products are also excluded. Motorola will determine, in its sole discretion, the third party software that is supported as a part of this offering.

1.5 Motorola has the following responsibilities:

1.5.1 Obtain relevant third party software (“SW”) security updates as made available from the OEM’s. This includes antivirus definition updates, operating systems patches, hypervisor patches, database patches, and selected other third party patches that Motorola deployed in ASTRO 25 system releases covered by this Remote Security Patch Installation. Motorola does not control when these updates are released, but as much as possible vet the updates on this schedule:

McAfee Antivirus definitions– Weekly

Windows OS updates – Monthly

Solaris, RHEL OS, VMware ESXi updates – Quarterly

1.5.2 Each assessment of relevant third party SW will take at least one week to incorporate the security updates into the Remote Security Patch service and 36 additional hours of examination time to evaluate the impact each update has on the system.

1.5.3 Perform rigorous testing of updates to verify whether they degrade or compromise system functionality on a dedicated ASTRO 25 test system with standard supported configurations.

1.5.4 Address any issues identified during testing by working as necessary with Motorola selected commercial supplier(s) and/or Motorola product development engineering team(s). If a solution for the identified issues cannot be found, the patch will not be posted on Motorola’s site.

1.5.5 Pre-test STIG recommended remediation when applicable.

1.5.6 Release all tested updates to Motorola’s secure extranet site.

1.5.7 Coordinate updates with customer as outlined in section 1.

1.5.8 In the event that no updates are released by the OEM’s during the usual time period, Motorola will send a notice that no new patches were sent.

1.5.9 Notify customer of update releases by email.

1.5.10 A supported Remote Security Patch Installation ASTRO 25 release matrix will be kept on the extranet site for reference.

1.6 The Customer has the following responsibilities:

1.6.1 This service requires connectivity from Motorola to the customer’s ASTRO 25 system. This connectivity must be established prior to service start.

1.6.2 Maintain IP connectivity from Motorola to all elements in the system that require remote patching.

1.6.3 Provide Motorola with pre-defined information (customer contacts, system information, etc) prior to contract start date necessary to complete a Customer Support Plan (CSP).

- 1.6.4 Submit changes in any information supplied in the Customer Support Plan (CSP) to the Customer Support Manager (CSM).
- 1.6.5 Upgrade system to a supported system release as necessary to continue service.
- 1.6.6 Refrain from making uncertified changes of any type to the system.
- 1.6.7 Adhere closely to the System Support Center (SSC) troubleshooting guidelines provided upon system acquisition. A failure to follow SSC guidelines may cause the customer and Motorola unnecessary or overly burdensome remediation efforts. In such case, Motorola reserves the right to charge an additional service fee for the remediation effort.
- 1.6.8 Comply with the terms of the applicable software license agreement(s) between the Customer and Motorola and non-Motorola software copyright owner.
- 1.6.9. Obtain at Customer's cost all third party consents or licenses required to enable Motorola to provide the Service.
- 1.6.10 Upon successful installation of patches on windows clients (e.g. Dispatch Ops Position, NM Client, etc.) and receiving notification indicating the task has been successfully executed by Motorola, affected computers must be rebooted by the customer within 72 hours.
- 1.6.11 Understand downtime implications associated with reboots and patch activities and internally coordinate with users as necessary.

1.7 Disclaimer:

Motorola disclaims any and all warranties with respect to pre-tested antivirus definitions, database security updates, hypervisor patches, operating system software patches, intrusion detection sensor signature files, or other 3rd party files, express or implied. Further, Motorola disclaims any warranty concerning the non-Motorola software and does not guarantee that customer's system will be error-free or immune to security breaches as a result of these services.

Appendix E: OnSite Support Statement of Work

Motorola's OnSite Support service provides case management and escalation for onsite technical service requests. The service is delivered by the Motorola's Solutions Support Center (SSC) in conjunction with a local service provider. The SSC is responsible for opening a case for onsite support and monitoring the status of that case to maintain response time conformance.

The terms and conditions of this Statement of Work (SOW) are an integral part of Motorola's Service Agreement or other applicable agreement to which it is attached and made a part thereof by this reference.

1.0 Description of Services

The Motorola SSC will receive customer request for OnSite service provider and dispatch a servicer. The servicer will respond to the customer location based on pre-defined Severity Levels set forth in [Severity Level Definitions](#) table and Response times set forth in [Severity Level Response Time Goals](#) table in order to restore the system.

Motorola will provide case management as set forth herein. The SSC will maintain contact with the on-site Motorola Service Shop until system restoral and case closure. The SSC will continuously track and manage cases from creation to close through an automated case tracking process.

1.1 Scope

OnSite Support is available 24 hours a day, 7 days a week in accordance with [Severity Level Definitions](#) and [Severity Level Response Time Goals](#) tables.

1.2 Inclusions

Onsite Support can be delivered on Motorola-sold infrastructure.

2.0 Motorola has the following responsibilities:

- 2.1. Receive service requests.
- 2.2. Create a case as necessary when service requests are received. Gather information to characterize the issue, determine a plan of action and assign and track the case to resolution.
- 2.3. Dispatch a field servicer ("Servicer") as required by Motorola's standard procedures and provide necessary case information.
- 2.4. Provide the required personnel access to relevant customer information as needed.
- 2.5. Servicer will perform the following on-site:
- 2.6. Run diagnostics on the Infrastructure or Field Replacement Units (FRU).
- 2.7. Replace defective Infrastructure or FRU, as supplied by customer.
- 2.8. Provide materials, tools, documentation, physical planning manuals, diagnostic/test equipment and any other requirements necessary to perform the maintenance service.
- 2.9. If a third party vendor is needed to restore the system, the Servicer may accompany that vendor onto the customer's premises.
- 2.10. Verify with customer that restoration is complete or system is functional, if required by customer's repair verification in the Customer Support Plan. If verification by customer cannot be completed within 20 minutes of restoration, the case will be closed and the Servicer will be released.
- 2.11. Escalate the case to the appropriate party upon expiration of a response time.

- 2.12. Close the case upon receiving notification from customer or servicer, indicating the case is resolved.
 - 2.13. Notify customer of case status as defined by the Customer Support Plan:
 - 2.13.1 Open and closed; or
 - 2.13.2 Open, assigned to the servicer, arrival of the servicer on-site, deferred or delayed, closed.
 - 2.14. Provide Case activity reports to customer if requested.
- 3.0 Customer has the following responsibilities:
- 3.1. Contact Motorola, as necessary, to request service.
 - 3.2. Provide Motorola with the following pre-defined customer information and preferences prior to start date necessary to complete Customer Support Plan (CSP):
 - 3.2.1. Case notification preferences and procedure.
 - 3.2.2. Repair verification preference and procedure.
 - 3.2.3. Database and escalation procedure forms.
 - 3.2.4. Submit changes in any information supplied in the CSP to the Customer Support Manager (CSM).
 - 3.3. Provide the following information when initiating a service request:
 - 3.3.1. Assigned system ID number.
 - 3.3.2. Problem description and site location.
 - 3.3.3. Other pertinent information requested by Motorola to open a case.
 - 3.4. Allow Servicers access to equipment.
 - 3.5. Supply infrastructure or FRU, as applicable, in order for Motorola to restore the system.
 - 3.6. Maintain and store in an easily accessible location any and all software needed to restore the system.
 - 3.7. Maintain and store in an easily accessible location proper system backups.
 - 3.8. For E911 systems, test the secondary/backup Public Safety Answering Point (PSAP) connection to be prepared in the event of a catastrophic failure of a system. Train appropriate personnel on the procedures to perform the function of switching to the backup PSAP.
 - 3.9. Verify with the SSC that restoration is complete or system is functional, if required by repair verification preference provided by customer.
- 3.10. Cooperate with Motorola and perform all acts that are reasonable or necessary to enable Motorola to provide these services.
- 3.11. Obtain and provide applicable third party consents or licenses at Customer cost to enable Motorola to provide the Services.

4.0 Severity Level Definitions

The following severity level definitions will be used to determine the maximum response times:

Severity Level	Severity Definition
Severity 1	<p>This is defined as a failure that causes the system and/or infrastructure a loss of voice functionality and no work-around or immediate solution is available.</p> <p>The following are examples of this kind of severity:</p> <ul style="list-style-type: none"> ● 33% of call processing resources impaired ● Site Environment alarms: <ul style="list-style-type: none"> ○ Smoke ○ Unauthorized access ○ Temperature ○ Power failure
Severity 2	<p>This is defined as a fault that causes the system to operate with a continuous reduction in capacity or functionality of core services (core services are voice, data or network management).</p> <p>The following are examples of this kind of severity:</p> <ul style="list-style-type: none"> ● Less than 33% of call processing resources impaired ● Failure of a single redundant component
Severity 3	<p>This is defined as a fault which reduces the functionality, efficiency or usability of core services (voice, data and network management) and there is a viable work-around in place.</p> <p>The following are examples of this kind of severity:</p> <ul style="list-style-type: none"> ● Intermittent faults that are infrequent and minor impact to core services ● Statistical reporting problems
Severity 4	<p>This is defined as a minor issue, which has little or no impact on the functionality, efficiency or usability of core services. The following are examples of this kind of severity:</p> <ul style="list-style-type: none"> ● Faults resulting in minor functions or features being unsupported or unreliable in ways that are not noticeable to the user. ● Faults that have no impact in how the user perceives the system to work. ● Cosmetic issues. ● Requests for information. ● Preventive Maintenance

5.0 Severity Level Response Time Goals

(Customer's Response Time Classification is designated in the Customer Support Plan.)

Severity Level	Standard Response Time
Severity 1*	Within 4 hours from receipt of notification continuously
Severity 2	Within 4 hours from receipt of notification Standard Business Day
Severity 3	Within 8 hours from receipt of notification Standard Business Day
Severity 4	Within 12 hours from receipt of notification Standard Business Day

* Premier Response is an option that can be purchased, it provides a 2-hour response time for severity 1 issues.

Appendix F: Annual Preventive Maintenance Statement of Work

The terms and conditions of this Statement of Work (SOW) are an integral part of Motorola's Service Agreement or other applicable agreement to which it is attached and made a part thereof by this reference.

Annual Preventative Maintenance will provide an annual operational test and alignment, on the customer's infrastructure equipment (Infrastructure or Fixed Network Equipment or "FNE") to monitor the Infrastructure's conformance to specifications, as set forth in the applicable attached Exhibit(s), all of which are hereby incorporated by this reference.

1.1 Scope

Annual Preventive Maintenance will be performed during standard business hours (unless otherwise agreed to in writing). If the system or Customer requirements dictate this service must occur outside of standard business hours, Motorola will provide an additional quotation. Customer is responsible for any charges associated with unusual access requirements or expenses.

1.2 Inclusions

Annual Preventive Maintenance service will be delivered on Motorola sold infrastructure including integrated third party products per the level of service as defined in Table 1: PM Tasks Performed.

1.3 Limitations and Exclusions

Unless specifically described in Table 1, the following activities are outside the scope of the Annual Preventive Maintenance service, but are optional services that are available to Annual Preventive Maintenance customers at an additional cost:

- 1.3.1. Emergency on-site visits required to resolve technical issues.
- 1.3.2. Third party support for equipment not sold by Motorola as part of the original system.
- 1.3.3. System installations, upgrades, and expansions.
- 1.3.4. Customer training.
- 1.3.5. Hardware repair and/or exchange.
- 1.3.6. Network security services.
- 1.3.7. Network transport.
- 1.3.8. Information Assurance.
- 1.3.9. Motorola services not included in this statement of work.
- 1.3.10. Any maintenance required as a result of a virus or unwanted intrusion is excluded if the system is not protected against these security threats by Motorola's Pre-tested Security Update Service when applicable.
- 1.3.11. Tower mapping analysis or tower structure analysis

1.4 Motorola has the following responsibilities:

- 1.4.1 Notify the customer of any planned system downtime needed to perform this Service.
- 1.4.2 Advise customer of any issue that requires immediate attention.
- 1.4.3 Maintain communication with the customer as needed until completion ("resolution" implies a problem is being fixed) of the Annual Preventive Maintenance.

-
- 1.4.4 Determine, in its sole discretion, when a case requires more than the Preventive Maintenance services described in this SOW and notify customer of an alternative course of action.
 - 1.4.5 Provide customer with a report documenting system performance against expected parameters along with recommended actions. Time allotment TBD.
 - 1.4.6 Provide trained and qualified personnel with proper security clearance required to complete Annual Preventive Maintenance service.
- 1.5 The Customer has the following responsibilities:
- 1.5.1 Provide preferred schedule for Annual Preventative Maintenance to Motorola.
 - 1.5.2 Authorize and acknowledge any scheduled system downtime.
 - 1.5.3 Maintain periodic backup of databases, software applications, and firmware.
 - 1.5.4 Establish and maintain a suitable environment (heat, light, and power) for the equipment location and provide Motorola full, free, and safe access to the equipment so that Motorola may provide services. All sites shall be accessible by standard service vehicles.
 - 1.5.5 Submit changes in any information supplied in the Customer Support Plan (CSP) to the Customer Support Manager (CSM).
 - 1.5.6 Provide site escorts in a timely manner if required.
 - 1.5.7 Provide Motorola with requirements necessary for access to secure facilities.
 - 1.5.8 Obtain at Customer's cost all third party consents or licenses required to enable Motorola to provide the Service.

Table 1: PM Tasks Performed

MASTER SITE CHECKLIST	
SERVERS	
Equipment Alarms	Check LED and/or other status indicators for fault conditions.
Capture Diags	Perform recommended diagnostic tests based on server type. Capture available diagnostic logs.
NM Client Applications	Review UEM events and transport medium types, (microwave/leased line/telco, etc). Event log review for persistent types. Verify all NM client applications are operating correctly.
Verify System SW CD's	Perform audit of software media on site. Versions, KC numbers, types, etc.
Complete Backup	Verify backups have been done or scheduled. SZ database (BAR), Centracom CDM/ADM database, etc.
ROUTERS	
Equipment Alarms	Check LED and/or other status indicators for fault conditions.
SWITCHES	
Equipment Alarms	Check LED and/or other status indicators for fault conditions.
Capture Diags	Perform recommended diagnostic tests based on switch type. Capture available diagnostic logs.
Verify Redundant Switches	Test redundancy in CWR devices. Core router switchover (coordinate with customer).
DOMAIN CONTROLLERS	
Equipment Alarms	Check LED and/or other status indicators for fault conditions.
Capture Diags	Perform recommended diagnostic tests based on server type. Capture available diagnostic logs.
Verify System SW CD's	Perform audit of software media on site. Versions, KC numbers, types, etc.
FIREWALLS	
Equipment Alarms	Check LED and/or other status indicators for fault conditions.
Capture Diags	Perform recommended diagnostic tests based on server type. Capture available diagnostic logs.
LOGGING EQUIPMENT	
Equipment Alarms	Check LED and/or other status indicators for fault conditions.
Capture Diags	Perform recommended diagnostic tests based on server type. Capture available diagnostic logs.
Server CPU Health	i.e. memory, HDD, CPU, disk space/utilization.
MISCELLANEOUS EQUIPMENT	

Equipment Alarms	Check LED and/or other status indicators for fault conditions.
Capture Diags	Perform recommended diagnostic tests based on server type. Capture available diagnostic logs.
Server CPU Health	i.e. memory, HDD, CPU, disk space/utilization.

PRIME SITE CHECKLIST	
SOFTWARE	
Verify System SW CD's	Perform audit of software media on site. Versions, KC numbers, types, etc.
SWITCHES	
Equipment Alarms	Check LED and/or other status indicators for fault conditions.
Capture Diags	Perform recommended diagnostic tests based on switch type. Capture available diagnostic logs.
MISCELLANEOUS EQUIPMENT	
Equipment Alarms	Check LED and/or other status indicators for fault conditions.
Capture Diags	Perform recommended diagnostic tests based on server type. Capture available diagnostic logs.
Site Frequency Standard Check	Check lights and indicators for A/B receivers.
COMPARATORS	
Equipment Alarms	Verify no warning/alarm indicators.
Clean Fans and Equipment	Use antistatic vacuum to clean cooling pathways

DISPATCH SITE CHECKLIST	
GENERAL	
Inspect all Cables	Inspect all cables/connections to external interfaces are secure
Mouse and Keyboard	Verify operation of mouse and keyboard
Configuration File	Verify each operator position has access to required configuration files
Console Op Time	Verify console op time is consistent across all ops
Screensaver	Verify screensaver set as customer prefers

Screen Performance	Verify screen operational/performance
Touchscreen	Verify touchscreen operation (if applicable)
Cabling/Lights/Fans	Visual inspection of all equipment - cabling/ lights/ fans
Filters/Fans/Dust	Clean any filters/ fans/ dust- all equipment
Monitor and Hard Drive	Confirm monitor and hard drive do not "sleep"
DVD/CD	Verify / clean DVD or CD drive
HEADSET UNPLUGGED TESTING	
Speakers	Test all speakers - audio quality, volume, static, drop-outs, excess hiss when turned up.
Channel Audio in Speaker	Verify selected channel audio in select speaker only.
Footswitch Pedals	Verify both footswitch pedals operational
Radio On-Air Light	Verify radio on air light comes on with TX (if applicable)
Radio TX and RX	Verify radio TX/RX from both headset jacks. Verify levels OK. Check volume controls for noise/static or drop-outs.
Speaker Mute	Verify select speaker muted.
Telephone Operation	Verify telephone operational through both headset jacks. Check volume controls for noise/static or drop-outs.
Audio Switches	Verify select audio switches to speaker when phone off-hook. (if interfaced to phones)
Radio Takeover in Headset	Verify radio-takeover in headset mic when phone off-hook (mic switches to radio during PTT and mutes to phone).
OTHER TESTS	
Phone Status Light	Verify phone status light comes on when phone off-hook (if applicable)
Desk Microphone Operation	Confirm desk mic operation (if applicable)
Radio IRR Operation	Verify radio IRR operational (if applicable)
Telephone IRR Operation	Verify telephone [if on radio computer] IRR operational (if applicable)
Recording	Verify operator position being recorded on long term logging recorder (if applicable)
COMPUTER PERFORMANCE TESTING	
Computer Reboot	Reboot op position computer
Computer Operational	Confirm client computer is fully operational (if applicable)
AUDIO TESTING	
Audio Levels and Quality	Confirm all conventional resources are functional with adequate audio levels and quality
Secure Mode	Confirm any secure talkgroups are operational in secure mode
EQUIPMENT ROOM TESTS	
Recording - AIS Test	Verify audio logging of trunked calls

Recording	Test op position logging on analog recorder (with customer assistance)
System Alarms	Review alarm system on all equipment for errors
Verify System SW CD's	Perform audit of software media on site. Versions, KC numbers, types, etc.

RF SITE CHECKLIST

Equipment Alarms	Verify no warning/alarm indicators.
Clean Fans and Equipment	Use antistatic vacuum to clean cooling pathways
Site Frequency Standard Check	Check lights and indicators for A/B receivers.
Basic Voice Call Check	Voice test each voice path, radio to radio.
Control Channel Redundancy (trunking)	Roll control channel, test, and roll back.
Site Controller Redundancy (trunking)	Roll site controllers with no dropped audio.
GTR 8000 Results Sheet	Complete GTR tests - Frequency Error, Modulation Fidelity, Forward at Set Power, Reverse at Set Power, Gen Level Desense no Tx.

MOSCAD CHECKLIST

MOSCAD SERVER	
Equipment Alarms	Verify no warning/alarm indicators.
Check Alarm/Event History	Review MOSCAD alarm and events to find if there are chronic issues.
Windows Event Logs	Review Windows event logs. Save and clear if full.
Password Verification	Site devices to verify passwords. Document changes if any found.
Verify System SW CD's	Perform audit of software media on site. Versions, KC numbers, types, etc.
MOSCAD CLIENT	
Equipment Alarms	Verify no warning/alarm indicators.
Check Alarm / Event History	Review MOSCAD alarm and events to find if there are chronic issues.
Windows Event Logs	Review Windows event logs. Save and clear if full.
Password Verification	Site devices to verify passwords. Document changes if any found.

Verify System SW CD's	Perform audit of software media on site. Versions, KC numbers, types, etc.
MOSCAD RTU's	
Equipment Alarms	Verify no warning/alarm indicators.
Verify Connectivity	Verify Connectivity

FACILITIES CHECKLIST	
VISUAL INSPECTION EXTERIOR	
ASR Sign	Verify that the ASR sign is posted.
Warning Sign - Tower	Verify warning sign is posted on the tower.
Warning Sign - Gate	Verify that a warning sign is posted at the compound gate entrance.
10 Rule Sign	Verify that a 10 rules sign is posted on the inside of the shelter door.
Outdoor Lighting	Verify operation of outdoor lighting/photocell.
Exterior of Building	Check exterior of building for damage/disrepair.
Fences / Gates	Check fences/gates for damage/disrepair.
Landscape / Access Road	Check landscape/access road for accessibility.
VISUAL INSPECTION INTERIOR	
Electrical Surge Protectors	Check electrical surge protectors for alarms.
Emergency Lighting	Verify emergency lighting operation.
Indoor Lighting	Verify indoor lighting.
Equipment Inspection	Visually inspect that all hardware (equipment, cables, panels, batteries, racks, etc.) are in acceptable physical condition for normal operation.
Site Frequency Standard Check	Check lights and indicators for A/B receivers.
Regulatory Compliance (License, ERP, Frequency, Deviation)	Check station for regulatory compliance. Update station logs.
Clean Fans and Equipment	Use antistatic vacuum to clean cooling pathways
UPS	
Visual inspection (condition, cabling)	Verify corrosion, physical connections, dirt/dust, etc.
GENERATOR	
Visual Inspection	Verify, check panel housing, cracks, rust and whethering. Physical connections, corrosion, dirt/dust, etc.

Fuel	Verify fuel levels in back up generators, document date of last fuel delivered from fuel service provider.
Oil	Check the oil dipstick for proper level. Note condition of oil.
Verify operation (no switchover)	Check, verify running of generator, ease of start or difficult. Is generator "throttling" or running smooth? Any loud unusual noise? Etc.
HVAC	
Air Filter	Check air filter and recommend replacement if required.
Coils	Check coils for dirt
Outdoor Unit	Check that outdoor unit is unobstructed
Wiring	Wiring (insect/rodent damage)
Cooling / Heating	Check each HVAC unit for cooling/heating

MICROWAVE CHECKLIST

RADIO	
Alarms	Check alarm / event history
Software	Verify version of application
TX Frequency	Verify transmit frequency
TX Power	Verify transmit power
RX Frequency	Verify receive frequency
RX Signal Level	Verify receive signal level and compare with install baseline documentation
Save configuration	Save current configuration for off site storage
Backhaul Validation	Monitor UEM status (alarms, logs, etc.) for all links. If UEM not used to monitor microwave, then use provided microwave alarm mgmt server.
WAVEGUIDE	
Visual Inspection	Inspect for wear or dents (from ground using binoculars).
Connection Verification	Verify all connections are secured with proper hardware (from ground using binoculars).
DEHYDRATOR	
Visual Inspection	Inspect moisture window for proper color
Pressure Verification	Verify pressure of all lines
Re-Pressurization	Bleed lines temporarily to verify the dehydrator re-pressurizes
Run Hours	Record number of hours ran

TOWER CHECKLIST

STRUCTURE CONDITION	
Rust	Check structure for rust.
Cross Members	Check for damaged or missing cross members.
Safety Climb	Check safety climb for damage.
Ladder	Verify that ladder system is secured to tower.
Welds	Check for cracks or damaged welds.
Outdoor lighting/photocell	Test outdoor lighting and photocell.
Drainage Holes	Check that drainage holes are clear of debris.
Paint	Check paint condition.
TOWER LIGHTING	
Lights/Markers	Verify all lights/markers are operational.
Day/Night Mode	Verify day and night mode operation.
Power Cabling	Verify that power cables are secured to tower.
ANTENNAS AND LINES	
Antennas	Visually inspect antennas for physical damage (from ground using binoculars).
Transmission Lines	Verify that all transmission lines are secure on the tower.
GROUNDING	
Structure Grounds	Inspect grounding for damage or corrosion
GUY WIRES	
Tower Guys	Check guy wires for fraying and tension.
Guy Wire Hardware	Check hardware for rust.
CONCRETE CONDITION	
Tower Base	Check for chips or cracks.

Appendix G: Network Hardware Repair with Advanced Replacement Overview

Network Hardware Repair with Advanced Replacement is a repair exchange service for Motorola and select third party infrastructure supplied by Motorola. When available, Motorola will provide customer with an advanced replacement unit(s) or Field Replacement Units (FRU's) in exchange for customer's malfunctioning equipment. Malfunctioning equipment will be evaluated and repaired by the infrastructure repair depot and returned to depot's FRU inventory upon completion of repair. For customers who prefer to maintain their existing FRU inventory they have an option to request a "Loaner" FRU while their unit is being repaired. Refer to the [Advanced Exchange or Loaner Decision Process flowchart](#) for details on the loaner process.

The Motorola authorized repair depot manages and performs the repair of Motorola supplied equipment as well as coordinating the equipment repair logistics process.

The terms and conditions of this Statement of Work (SOW) are an integral part of Motorola's Service Agreement or other applicable agreement to which it is attached and made a part thereof by this reference.

1.0 Description of Services

Infrastructure components are repaired at a Motorola authorized Infrastructure Depot Operations (IDO). At Motorola's discretion, select third party infrastructure may be sent to the original equipment manufacturer or third party vendor for repair.

1.1 Scope

Repair authorizations are obtained by contacting the Solutions Support Center which is available 24 hours a day, 7 days a week. Repair authorizations can also be obtained online via Motorola Online at under Repair Status/Submit Infrastructure RA.

Motorola Online: <https://businessonline.motorolasolutions.com>

1.2 Inclusions

Network Hardware Repair with Advanced Replacement is available on Motorola sold infrastructure including integrated 3rd party products. Motorola will make a "commercially reasonable effort" to repair Motorola manufactured infrastructure products for seven (7) years after product cancellation.

1.3 Exclusions

If infrastructure is no longer supported by either Motorola, the original equipment manufacturer or a third party vendor, as applicable Motorola may return said equipment to the customer without repair or replacement. The following items are excluded from Network Hardware Repair with Advanced Replacement:

- 1.3.1 All Motorola infrastructure hardware over seven (7) years from product cancellation date.
- 1.3.2. All third party infrastructure hardware over three (3) years from product cancellation date.
- 1.3.3 All broadband infrastructure three (3) years from product cancellation date
- 1.3.4 Physically damaged infrastructure.
- 1.3.5 Third party equipment not shipped by Motorola.

1.3.6 Consumable items including, but not limited to, batteries, connectors, cables, toner/ink cartridges, tower lighting, laptop computers, monitors, keyboards and mouse.

1.3.7 Video retrieval from digital in-car video equipment.

1.3.8 Infrastructure backhaul such as, Antennas, Antenna Dehydrator, Microwave¹, Line Boosters, Amplifier, Data Talker Wireless Transmitter, Short haul modems, UPS¹

1.3.9 Test equipment.

1.3.10. Racks, furniture and cabinets.

1.3.11. Non-standard configurations, customer-modified infrastructure and certain third party infrastructure are excluded from advanced replacement service.

1.3.11. Firmware and/or software upgrades.

¹ Excluded from service agreements but may be repaired on an above contract, time and material basis. All UPS Systems must be shipped to IDO for repair. Excludes batteries and any on-site services.

1.4 Motorola has the following responsibilities:

1.4.1 Enable customer access to the Motorola call center which is operational 24 hours a day, 7 days per week, to create requests for advanced replacement service.

1.4.2. Use commercially reasonable efforts to maintain FRU inventory on supported platforms.

1.4.3. Provide new or reconditioned FRU's to the customer, upon request and subject to availability. The FRU will be of similar equipment and version, and will contain equivalent boards and chips, as the customer's malfunctioning FRU.

1.4.4. Load firmware/software for equipment that requires programming. The software version information must be provided for the replacement FRU to be programmed accordingly. If the customer software version/configuration is not provided, shipping times will be delayed.

1.4.5 Package and ship Advance Exchange FRU from the FRU inventory to customer specified address.

1.4.5.1. During normal operating hours of Monday through Friday 7:00am to 7:00pm CST, excluding holidays, FRU will be shipped from Motorola as soon as possible depending on stock availability and configuration requested. Motorola will pay for the shipping to the customer, unless customer requests shipments outside of standard business hours and/or carrier programs, such as weekend or next flight out (NFO) shipment. In such cases, customer will be responsible for shipping and handling charges.

1.4.5.2. When sending the advanced replacement FRU to customer, provide a return air bill in order for customer to return the customer's malfunctioning FRU. The customer's malfunctioning FRU will become property of the Motorola repair depot or select third party and the customer will own the advanced replacement FRU.

1.4.5.3. When sending a loaner FRU to customer, Motorola will pay for outbound shipping charges. Inbound shipping to Motorola for repair is the responsibility of the customer. Motorola will repair and return the customer's FRU and will provide a return air bill for the customer to return IDO's loaner FRU. Refer to Advanced

Exchange or Loaner Decision Process flowchart for the loaner process and Shipping Charges for shipping charge detail.

1.4.6. Provide repair return authorization number upon customer request for Infrastructure that is not classified as an advanced replacement or loaner FRU.

1.4.7. Provide a repair Return Authorization (RA) number so that the returned FRU can be repaired and returned to FRU stock.

1.4.8. Receive malfunctioning FRU from Customer, carry out repairs and testing and return it to the FRU stock

1.4.9. Receive malfunctioning infrastructure from customer and document its arrival, repair and return.

1.4.10. Perform the following service on Motorola infrastructure:

1.4.10.1. Perform an operational check on the infrastructure to determine the nature of the problem.

1.4.10.2. Replace malfunctioning Field Replacement Units (FRU) or components.

1.4.10.3. Verify that Motorola infrastructure is returned to Motorola manufactured specifications, as applicable

1.4.10.4. Perform a box unit test on all serviced infrastructure.

1.4.10.5. Perform a system test on select infrastructure.

1.4.11. Provide the following service on select third party infrastructure:

1.4.11.1. Perform pre-diagnostic and repair services to confirm infrastructure malfunction and eliminate sending infrastructure with no trouble found (NTF) to third party vendor for repair, when applicable.

1.4.11.2. Ship malfunctioning infrastructure components to the original equipment manufacturer or third party vendor for repair service, when applicable.

1.4.11.3. Track infrastructure sent to the original equipment manufacturer or third party vendor for service.

1.4.11.4. Perform a post-test after repair by Motorola, to confirm malfunctioning infrastructure has been repaired and functions properly in a Motorola system configuration, when applicable.

1.4.12. For loaner equipment, Motorola will ship repaired infrastructure to the customer specified address during normal operating hours of Monday through Friday 7:00am to 7:00pm CST, excluding holidays. FRU will be sent two-day air unless otherwise requested. Motorola will pay for such shipping, unless customer requests shipments outside of the above mentioned standard business hours and/or carrier programs, such as NFO (next flight out). In such cases, customer will be responsible for payment of shipping and handling charges.

1.5 The Customer has the following responsibilities:

1.5.1 Contact or instruct Servicer to contact the Motorola Solutions Support Center (SSC) and request a return authorization number prior to shipping malfunctioning infrastructure or third party infrastructure named in the applicable attached exhibit.

1.5.2 Provide model description, model number and serial number, type of system and firmware version, software options, symptom of problem and address of site id for FRU or infrastructure.

1.5.3 Indicate if FRU or third party FRU being sent in for service was subjected to physical damage or lightning damage.

1.5.4 Follow Motorola instructions regarding inclusion or removal of firmware and software applications from infrastructure being sent in for service.

1.5.5 Provide customer purchase order number to secure payment for any costs described herein.

1.5.6. Pay for shipping of Advanced Replacement or Loaner FRU from Motorola repair depot if customer requested shipping outside of standard business hours or carrier programs set forth in section 1.5.5.1. See [Shipping Charges](#).

1.5.7. Properly package and ship the malfunctioning FRU using the pre-paid air-bill that arrived with the advanced replacement FRU. Customer is responsible for properly packaging the malfunctioning infrastructure FRU to ensure that the shipped infrastructure arrives undamaged and in repairable condition. Customer will be subject to a replacement fee for malfunctioning FRU's not properly returned.

1.5.8. Within five (5) business days of receipt of the advanced replacement FRU from Motorola's FRU inventory, properly package customer's malfunctioning FRU and ship the malfunctioning Infrastructure to Motorola's repair depot for evaluation and repair. Customer must send the return air bill back to the repair depot in order to facilitate proper tracking of the returned infrastructure. Customer will be subject to a full replacement fee for FRU's not returned within 5 business days.

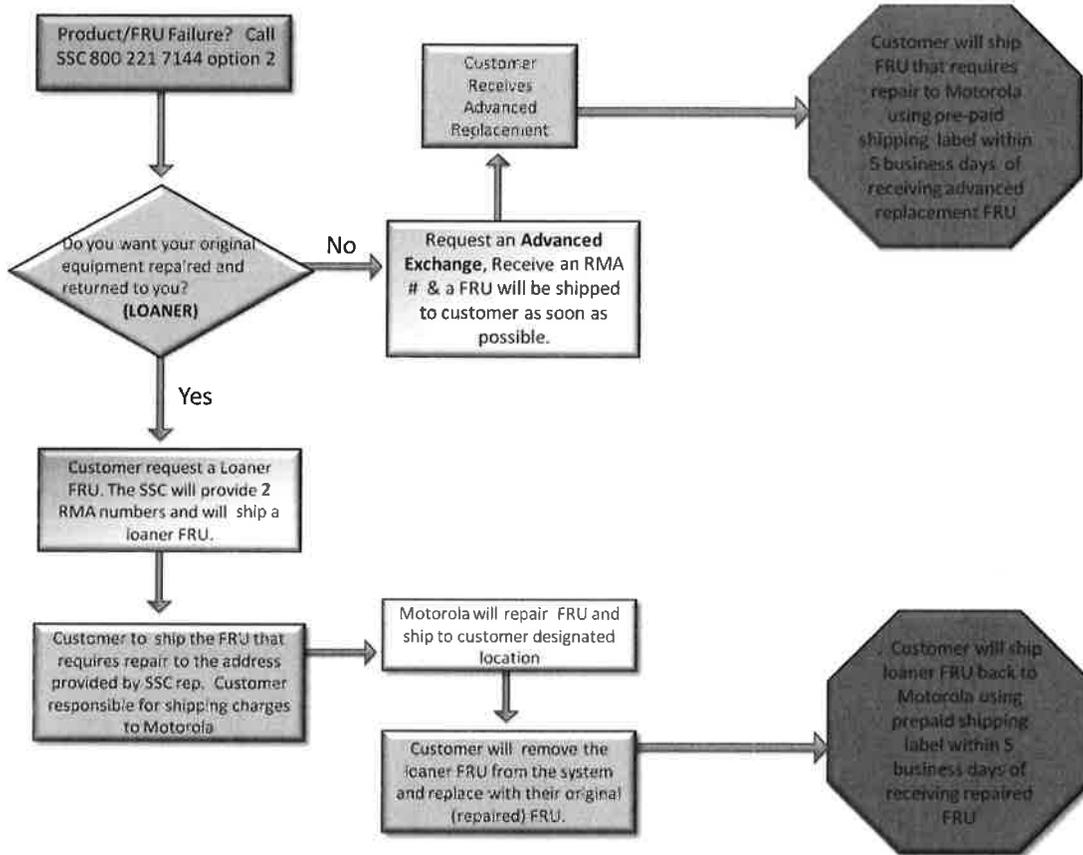
1.5.9. For Infrastructure and/or third party infrastructure repairs that are not exchanged in advance, properly package Infrastructure and ship the malfunctioning FRU, at Customer's expense and risk of loss to Motorola.

1.5.10. Clearly print the return authorization number on the outside of the packaging.

1.5.11. Maintain information of software/applications and firmware for re-loading of infrastructure.

1.5.12. Cooperate with Motorola and perform all acts that are reasonable or necessary to enable Motorola to provide the infrastructure repair services to customer.

Advanced Exchange or Loaner Decision Process:



Shipping Charges:

Service	Advanced Replacement Contract Shipping Charges
Exchanges (Outbound to customer)	Motorola
Exchanges or Loaners Next Flight Out (Outbound to customer)	Customer
Exchanges or Loaners Non-Motorola carrier * (Outbound to customer)	Customer
Exchanges (Inbound to Motorola)	Motorola
Loaner (Outbound to customer)	Motorola
Loaner Repair (Inbound to Motorola)	Customer
Loaner Repair & Return (Outbound to customer)	Motorola
Loaner Installation (OnSite Servicer)	Customer

*Motorola shipping carriers – FedEx and DHL

Appendix G: Security Monitoring Service Overview

Motorola's Security Monitoring Services includes anti-malware monitoring and authentication log monitoring. There are also options for firewall monitoring, intrusion detection system (IDS) monitoring, and ASTRO 25 system log monitoring.

Motorola's ASTRO 25 Security Monitoring is a complete solution that provides peace of mind and reduces the risk that your network availability will be impacted by a security threat. The solution includes 24x7x365 monitoring of the radio network security elements by experienced, specialized security technologists with years of experience working with ASTRO 25 mission-critical networks. For highly complex or unusual security events, our technologists have direct and immediate access to Motorola engineers for rapid resolution.

This Statement of Work ("SOW") is subject to the terms and conditions of Motorola's Professional Services Agreement, Service Agreement or other applicable agreement in effect between the parties ("Agreement"). Motorola and Customer may be referred to herein individually as a "Party" or together as "Parties"

1. Description of Security Monitoring Services

1.1. Anti-malware Monitoring

ASTRO 25 comes installed with Anti-malware software ("SW"). Security Monitoring will verify that malware definition updates, as provided by the Anti-malware OEM, are installed and running. The anti-malware SW is monitored for activity such as deletion, quarantine, and alerting of suspicious SW.

1.2. Authentication Monitoring

1.2.1. Active directory (including domain Linux and RADIUS) and two-factor authentication log-ins are monitored.

1.3. Firewall Monitoring – The ASTRO 25 system potentially has several firewall options. See Table 1 in the addendum for a list. In any of these firewall applications, Motorola provisions and deploys the firewalls with the ASTRO 25 system. Motorola will monitor each one that has the firewall monitoring option.

1.4. IDS (Intrusion Detection System) Monitoring. An IDS is an option to ASTRO 25 that may be deployed between the ASTRO 25 firewall and the CEN.

1.5. Centralized Log Monitoring

ASTRO 25 has an option that provides the ability to forward device syslogs to a single virtual server called Centralized Syslog Server. This allows monitoring of Linux components for authentication events.

2. Scope

The Motorola Secure Operations Center (SOC) consists of highly trained and experienced security specialists. When an event is detected, the technologists will run remote diagnostics and initiate an appropriate response. This response could involve: continuing to monitor the event for further development, attempting to remotely restore the system, or opening of a case for dispatch of a field servicer (“Servicer”).

3. Motorola Responsibilities:

- 3.1.** Provide, maintain, and replace when necessary, hardware (“HW”) and SW required to monitor ASTRO 25 security elements. HW may include a firewall, router, or physical server. SW may include virtual servers either on the ASTRO 25 core or a separate physical server, related OS, SIEM collectors, and SW that allows distribution of updates and remote diagnostics.
- 3.2.** Verify connectivity and monitoring is active prior to system acceptance or start date.
- 3.3.** Coordinate with customer to maintain Motorola service authentication credentials.
- 3.4.** Maintain properly trained and accredited technicians. Monitor the customer’s system 24/7/365 for malicious or unusual activity.
- 3.5.** Reports are posted to the SSC quality webpage. Contact your CSM for access.

4. The Customer has the following responsibilities:

- 4.1.** Security Monitoring requires a connection from the customer’s ASTRO 25 system to Motorola’s SOC in Schaumburg. Motorola offers either a T1 option or a Virtual Private Network (VPN) option through a customer supplied internet connection.
- 4.2.** Allow Motorola continuous remote access to monitor the ASTRO 25 system. This includes keeping the connection plugged-in, providing passwords, and working with Motorola to understand and maintain proper administration privileges.
- 4.3.** Provide continuous utility service to any Motorola equipment installed or utilized at the customer’s premises to support delivery of this service.
- 4.4.** Provide customer contact information necessary to complete the Customer Support Plan. Notify your CSM within 2 weeks of any contact changes.
- 4.5.** As necessary, upgrade the ASTRO 25 system to supported releases.
- 4.6.** Allow Motorola dispatched-servicers physical access to the equipment when required.
- 4.7.** Comply with the terms of the applicable software license agreements between Customer and Motorola and the non-Motorola software copyright owners.
- 4.8.** Cooperate with Motorola and perform all acts that are reasonable or necessary to enable Motorola to provide the services described in this SOW.
- 4.9.** Obtain at Customer’s cost all third party consents or licenses required to enable Motorola to provide the Services.

5. Disclaimer

Motorola disclaims any warranty concerning the non-Motorola software and does not guarantee that customer's system will be error-free or immune to security breaches as a result of these services.

Addendum

Potential ASTRO 25 Firewalls

CNI	Customer Network Interface. This firewall separates the ASTRO 25 Radio Network from the customer's IT network (often referred to as the CEN or Customer Enterprise network). There are single and redundant (high-availability) options for the CNI, the redundant option meaning there are two firewalls. Both firewalls must be monitored in the redundant case.
DSR	Dynamic System Resilience. This is an ASTRO 25 option where a geographically separated backup master site is implemented as a "hot-standby" in case of disaster at the primary. This option potentially doubles the number of firewalls in the system.
ZCP	Zone Core Protection. This ASTRO 25 option places firewalls at the master site where the RF and console sites connect. This protects the core from attack from a compromised site and propagation of the attack to the other sites. There are always 2 firewalls in this option for redundancy.
TI	Telephone Interconnect. This ASTRO 25 option allows calls to be made to/from ASTRO 25 subscribers. A firewall is required to protect the RNI from the telephone connection. One firewall may serve the dual purpose of the TI and ISSI interface.
ISSI	Inter RF Subsystem Interface. This option allows connectivity to a separate system. The original intent of this option was to connect to another P25 system supplied by either Motorola or any other P25 compliant vendor. This standard has since been used to allow connection to non-P25 systems through additional interfaces such as WAVE. In any case, a firewall is necessary to protect the RNI from this connection.
MCC 7100	The MCC 7100 dispatch console may be configured such that it can connect via Virtual Private Network (VPN) through an internet connection. A firewall is required to terminate on the ASTRO 25 side of that connection. This firewall may be physically located at either a console site or the master site and there may be multiple firewalls for this purpose.
Custom	Some customers may opt to install their own firewalls and want them monitored, most commonly at console sites. The customer will have to work with Motorola to determine if and how custom firewalls can be monitored. Additional charges may apply.