



# AGENDA

## LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM AUTHORITY ("AUTHORITY")

### BOARD OF DIRECTORS SPECIAL MEETING

Thursday, March 2, 2023 • 9:00 a.m.

County of Los Angeles Sheriff's Department (LASD)  
Scientific Services Bureau  
Hertzberg Davis Forensic Science Center  
Conference Rooms 223 through 227  
1800 Paseo Rancho Castilla, Los Angeles, CA 90032

**Microsoft Teams Meeting\* Link for the Public:** [Click here to join the meeting](#)

#### **Call-in Number for the Public:**

Public may submit a Public Comment during the meeting to the Board by accessing the Microsoft Teams Meeting Link above or by the Call-In Telephone Number below.

**Telephone Number:** (323) 886-6924

**Conference ID:** 245 893 302#

#### **AGENDA POSTED: February 28, 2023**

Complete agendas are available on the Authority's website at <http://www.la-rics.org>.

	MEMBERS		ALTERNATES
1.	<b>Fesia Davenport</b> , CEO County of Los Angeles Chief Executive Office	1.	<b>Leslie Luke</b> , Deputy Director, Office of Emergency Management County of Los Angeles Chief Executive Office
2.	<b>Anthony Marrone (Vice-Chair)</b> , Fire Chief County of Los Angeles Fire Department	2.	<b>Eleni Pappas</b> , Deputy Fire Chief County of Los Angeles Fire Department
3.	<b>Robert Luna (Chair)</b> , Sheriff County of Los Angeles Sheriff's Department	3.	<b>Brian Yanagi</b> , Chief County of Los Angeles Sheriff's Department
4.	<b>Richard Tadeo</b> , Director, EMS Agency County of Los Angeles Department of Health Services	4.	<b>Jacqueline Rifenburg</b> , Assistant Director, EMS Agency County of Los Angeles Department of Health Services
5.	<b>Vincent Capelle</b> , Fire Chief Los Angeles Area Fire Chiefs Association	5.	<b>Phil Ambrose</b> , Battalion Chief Los Angeles Area Fire Chiefs Association
6.	<b>Brian Solinsky</b> , Police Chief Los Angeles County Police Chief's Association	6.	<b>Tom Jacobs</b> , Lieutenant Los Angeles County Police Chief's Association
7.	<b>Mark R. Alexander</b> , City Manager California Contract Cities Association	7.	<b>Marcel Rodarte</b> , Executive Director California Contract Cities Association
8.	<b>David Povero</b> , Police Chief At-Large Seat #8 (City of Covina Police Department)	8.	<b>Ric Walczak</b> , Captain At-Large Seat #8 (City of Covina Police Department)
9.	<b>Mark Fronterotta</b> , Police Chief At-Large Seat #9 (City of Inglewood Police Department)	9.	<b>Cardell Hurt</b> , Acting Chief of Police At-Large Seat #9 (City of Inglewood Police Department)
10.	<b>Vacant Seat</b> At-Large Seat #10 (City of Signal Hill Police Department)	10.	<b>Vacant Seat</b> At-Large Seat #10 (City of Signal Hill Police Department)

OFFICERS
<b>Scott Edson</b> , LA-RICS Executive Director
<b>Arlene Barrera</b> , County of Los Angeles, Auditor-Controller
<b>Keith Knox</b> , County of Los Angeles, Treasurer and Tax Collector
<b>Susy Orellana-Curtiss</b> , LA-RICS Administrative Deputy
<b>Beatriz Cojulun</b> , LA-RICS Board Secretary



**NOTE: ACTION MAY BE TAKEN ON ANY ITEM IDENTIFIED ON THE AGENDA**

- I. CALL TO ORDER**
- II. ANNOUNCE QUORUM – ROLL CALL**
- III. APPROVAL OF MINUTES - NONE**
- IV. PUBLIC COMMENTS**
- V. CONSENT CALENDAR – NONE**
- VI. REPORTS – NONE**
- VII. DISCUSSION ITEMS – NONE**
- VIII. ADMINISTRATIVE MATTERS (A)**
  - A. APPROVE AMENDMENT NO. 112 – UNILATERAL AMENDMENT NO. 32 TO AGREEMENT NO. LA-RICS 007 LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM LAND MOBILE RADIO (LMR) SYSTEM**

It is recommended that your Board:

- 1. Approve Amendment No. 112 – Unilateral Amendment No. 32 to Agreement No. LA-RICS 007 for an LMR System with Motorola Solutions, Inc. (MSI) for bridge warranty services for the DTVRS Subsystem, the corresponding Backhaul Subsystem necessary for use of the DTVRS Subsystem, the CORE and DSR Systems, and Station B and the Site on Wheels, to provide for bridge warranty services for a period of approximately seven and half (7.5) months until such time as Final LMR System Acceptance is achieved, for a cost increase in the amount of \$844,356.
- 2. Authorize an increase to the Maximum Contract Sum in an amount of \$844,356 from \$216,034,427 to \$216,878,783 when taking the recommended action into consideration.
- 3. Delegate authority to the Executive Director to finalize, negotiate, and execute Amendment No. 112 – Unilateral Amendment No. 32, in substantially similar form to the enclosed Amendment (Enclosure), and issue one or more Notices to Proceed (NTP) for this work as may be needed.

Agenda Item A



**IX. MISCELLANEOUS**

**X. ITEMS FOR FUTURE DISCUSSION AND/OR ACTION BY THE BOARD**

**XI. CLOSED SESSION REPORT – NONE**

**XII. ADJOURNMENT AND NEXT MEETING**

Regular Board Meeting on Thursday, April 6, 2023, at 9:00 a.m., at the LASD Scientific Services Bureau, Hertzberg Davis Forensic Science Center, 1800 Paseo Rancho Castilla, Los Angeles, CA 90032.



## BOARD MEETING INFORMATION

Members of the public may also address the Board on any matter within the subject matter jurisdiction of the Board. The Board will entertain such comments during the Public Comment period. Public Comment will be limited to three (3) minutes per individual for each item addressed, unless there are more than ten (10) requests for each item, in which case the Public Comment will be limited to one (1) minute per individual. The aforementioned limitation may be waived by the Board's Chair.

*(NOTE: Pursuant to Government Code Section 54954.3(b) the legislative body of a local agency may adopt reasonable regulations, including, but not limited to, regulations limiting the total amount of time allocated for public testimony on particular issues and for each individual speaker.)*

It is requested that individuals who require the services of a translator contact the Board Secretary no later than the day preceding the meeting. Whenever possible, a translator will be provided. Sign language interpreters, assistive listening devices, or other auxiliary aids and/or services may be provided upon request. To ensure availability, you are advised to make your request as soon as possible. (323) 881-8291 or (323) 881-8295.

SI REQUIERE SERVICIOS DE TRADUCCION, FAVOR DE NOTIFICAR LA OFICINA LO MAS PRONTO POSIBLE. (323) 881-8291 o (323) 881-8295.

The meeting is recorded, and the recording is kept for 30 days.



## LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM AUTHORITY

2525 Corporate Place, Suite 100  
Monterey Park, California 91754  
Telephone: (323) 881-8291  
<http://www.la-rics.org>

SCOTT EDSON  
EXECUTIVE DIRECTOR

March 2, 2023

LA-RICS Board of Directors  
Los Angeles Regional Interoperable Communications System Authority (the "Authority")

Dear Directors:

**APPROVE AMENDMENT NO. 112 – UNILATERAL AMENDMENT NO. 32  
TO AGREEMENT NO. LA-RICS 007  
LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM  
LAND MOBILE RADIO (LMR) SYSTEM**

**SUBJECT**

Board approval is requested to authorize the Executive Director to execute Amendment No. 112 – Unilateral Amendment No. 32 to Agreement No. LA-RICS 007 (Agreement) for bridge warranty services for the Digital Trunked Voice Radio Subsystem (DTVRS), the corresponding Backhaul Subsystem necessary for use of the DTVRS Subsystem, the CORE and DSR Systems, and Station B and the Site on Wheels, for a cost increase in the amount of \$844,356.

**RECOMMENDED ACTIONS**

It is recommended that your Board:

1. Approve Amendment No. 112 – Unilateral Amendment No. 32 to Agreement No. LA-RICS 007 for an LMR System with Motorola Solutions, Inc. (MSI) for bridge warranty services for the DTVRS Subsystem, the corresponding Backhaul Subsystem necessary for use of the DTVRS Subsystem, the CORE and DSR Systems, and Station B and the Site on Wheels, to provide for bridge warranty services for a period of approximately seven and half (7.5) months until such time as Final LMR System Acceptance is achieved, for a cost increase in the amount of \$844,356.
2. Authorize an increase to the Maximum Contract Sum in an amount of \$844,356 from \$216,034,427 to \$216,878,783 when taking the recommended action into consideration.

**AGENDA ITEM A**

3. Delegate authority to the Executive Director to finalize, negotiate, and execute Amendment No. 112 – Unilateral Amendment No. 32, in substantially similar form to the enclosed Amendment (Enclosure), and issue one or more Notices to Proceed (NTP) for this work as may be needed.

### **BACKGROUND**

As your Board is aware, the Authority is fast approaching achieving Provisional LMR Subsystem Acceptance for the DTVRS Subsystem, currently on target for mid-March 2023. However, similar to what was done with the Narrowband Mobile Data Network (NMDN) Subsystem, prior to accepting the DTVRS Subsystem the Authority is engaging in Bridge Warranty services with MSI to provide those services until such time as Final LMR System Acceptance is achieved, which is currently slated for October 2023. The parties have not been able to agree on price for the DTVRS Subsystem Bridge Warranty services, which necessitates this Unilateral Amendment.

In anticipation of DTVRS Subsystem acceptance, the Authority has been working with MSI to come to agreement on the cost for the Bridge Warranty services for the DTVRS Subsystem, the corresponding Backhaul Subsystem necessary for use of the DTVRS Subsystem, as well as the CORE and DSR Systems, and Station B and the Site on Wheels. MSI's proposed cost of \$1,874,724 for these Bridge Warranty services for a period of seven and half (7.5) months was, based on the analysis of the Authority's Subject Matter Experts (SMEs), not in accordance with contract pricing for comparable services. Moreover, the Authority made several attempts to understand and obtain the detailed makeup of the cost proposal to confirm the Authority was receiving appropriate and adequate costs for the services being sought. At this, the Authority was met with resistance by MSI, with MSI reiterating the cost makeup was based on its "configurator" comprised of calculations and cost factors that MSI would not disclose.

Without the details supporting MSI's cost proposal of \$1,874,724, the Authority calculated the Unilateral amendment cost of \$844,356 by taking the existing maintenance contract value for the DTVRS Subsystem and Backhaul, and adjusted it to reflect the current reduced site makeup and corresponding technology (90.11% of the original site design), and pro-rated it for seven and half (7.5) months. Additionally, the Authority applied a 20% Consumer Price Index (CPI) increase.

It is for these reasons the Authority is presenting Amendment No. 112 – Unilateral Amendment No. 32 for DTVRS Subsystem Bridge Warranty services in the amount of \$844,356 to your Board for consideration.

### **PURPOSE/JUSTIFICATION OF RECOMMENDED ACTIONS**

Approval of the recommended actions will authorize the Executive Director to execute Amendment No. 112 – Unilateral Amendment No. 32 for bridge warranty services for the

DTVRS Subsystem, the corresponding Backhaul Subsystem necessary for use of the DTVRS Subsystem, as well as the CORE and DSR Systems, and Station B and the Site on Wheels for a period of seven and a half (7.5) months, which results in an increase to the Maximum Contract Sum in the amount of \$844,356.

It is necessary to bridge warranty services for the DTVRS Subsystem and corresponding sites to ensure the equipment and subsystem is fully functional and operational at all times until such time as Final LMR System Acceptance is achieved. These bridge warranty services will ensure MSI responds to and resolves any and all equipment malfunctions (repair/replace) as may be needed to ensure the DTVRS Subsystem, corresponding Backhaul Subsystem necessary for use of the DTVRS Subsystem, as well as the CORE and DSR Systems, and Station B and Site on Wheels equipment are fully functional and up to public safety grade standards.

### **FISCAL IMPACT/FINANCING**

The activities contemplated in Amendment No. 112 – Unilateral Amendment No. 32 will result in an increase to the Maximum Contract Sum in the amount of \$844,356 from \$216,034,427 to \$216,878,783. If approved by your Board, the worked contained in Amendment No. 112 – Unilateral Amendment No. 32 will be fully funded by the Urban Areas Security Initiative (UASI) 2022 grant.

### **FACTS AND PROVISIONS/LEGAL REQUIREMENT**

The Authority's counsel has reviewed the recommended actions and approved as to form.

### **CONCLUSION**

Upon the Board's approval of the recommended actions, the Executive Director will have delegated authority to proceed in a manner described in the recommended actions.

Respectfully submitted,



SCOTT EDSON  
EXECUTIVE DIRECTOR

JA

Enclosure

c: Counsel to the Authority

**AMENDMENT NUMBER ONE HUNDRED TWELVE  
(UNILATERAL AMENDMENT NUMBER THIRTY-TWO)  
TO AGREEMENT NO. LA-RICS 007  
FOR  
LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM  
LAND MOBILE RADIO SYSTEM**

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**RECITALS**

This Amendment Number One Hundred Twelve – Unilateral Amendment Number Thirty-Two (together with all exhibits, attachments, and schedules hereto, "hereinafter Unilateral Amendment No. 32") is unilaterally issued by the Los Angeles Regional Interoperable Communications System Authority ("Authority") pursuant to Section 2.3.6 (Unilateral Amendment) of the Agreement, and is effective as of March \_\_\_\_\_, 2023, based on the following recitals:

The Authority and Motorola Solutions, Inc. ("Contractor") have entered into that certain Agreement No. LA-RICS 007 for Los Angeles Regional Interoperable Communications System ("LA-RICS") – Land Mobile Radio System, dated as of August 15, 2013 (together with all exhibits, attachments, and schedules thereto, all as amended prior to the date hereof, the "Agreement").

The Agreement has been subsequently amended by mutual agreement of the parties pursuant to Amendment Numbers One through Fifty-Nine.

This Agreement has been subsequently amended unilaterally pursuant to Amendment Number Sixty – Unilateral Amendment Number One, issued May 18, 2021, to (a) make changes necessary to incorporate certain LMR change orders for the DPK, FRP, MIR and MTL2 sites as further described in Unilateral Amendment No. 1 for a not to exceed cost increase in the amount of \$39,866 to the Maximum Contract Sum; (b) increase the Maximum Contract Sum by \$39,866 from \$287,407,190 to \$287,447,056 for the Work contemplated in Unilateral Amendment No. 1; and (c) make other certain changes as set forth in Unilateral Amendment No. 1.

This Agreement has been subsequently amended unilaterally pursuant to Amendment Number Sixty-One – Unilateral Amendment Number Two, issued June 29, 2021, to (a) incorporate a certain LMR change order for the RPVT site as further described in Unilateral Amendment No. 2 for a not to exceed cost increase in the amount of \$257,862 to the Maximum Contract Sum; (b) increase the Maximum Contract Sum by \$257,862 from \$287,447,056 to \$287,704,918 for the Work contemplated in Unilateral Amendment No. 2; and (c) make other certain changes as set forth in Unilateral Amendment No. 2.

This Agreement has been subsequently amended unilaterally pursuant to Amendment Number Sixty-Two – Unilateral Amendment Number Three, issued July 13, 2021, to (a) incorporate a certain LMR change order for the ESR site as further described in Unilateral Amendment No. 3 for a not to exceed cost increase in the amount of \$14,205 to the Maximum Contract Sum; (b) increase the Maximum Contract Sum by \$14,205 from \$287,704,918 to \$287,719,123 for the Work contemplated in Unilateral Amendment No. 3; and (c) make other certain changes as set forth in Unilateral Amendment No. 3.



The Agreement has been subsequently amended by mutual agreement of the parties pursuant to Amendment Numbers Sixty-Three and Sixty-Four.

This Agreement has been subsequently amended unilaterally pursuant to Amendment Number Sixty-Five – Unilateral Amendment Number Four, issued August 12, 2021, to (a) reconcile Phase 2 Work for the SPH site reflected in a Change Order Modification as further described in Unilateral Amendment No. 4 for a not to exceed cost increase in the amount of \$945,937; (b) increase the Maximum Contract Sum by \$945,937 from \$287,738,017 to \$288,683,954, for the Work contemplated in Unilateral Amendment No. 4; and (c) make other certain changes as set forth in Unilateral Amendment No. 4.

This Agreement has been subsequently amended unilaterally pursuant to Amendment Number Sixty-Six – Unilateral Amendment Number Five, issued August 19, 2021, to (a) incorporate a certain LMR change order for the MML site as further described in Unilateral Amendment No. 5 for a cost increase in the amount of \$104,344; (b) increase the Maximum Contract Sum by \$104,344 from \$288,683,954 to \$288,788,298, for the Work contemplated in Unilateral Amendment No. 5; and (c) make other certain changes as set forth in Unilateral Amendment No. 5.

This Agreement has been subsequently amended unilaterally pursuant to Amendment Number Sixty-Seven – Unilateral Amendment Number Six, issued August 19, 2021, to (a) incorporate a certain LMR change order for the Black Jack Peak (BJM) site related to rock coring for caissons which includes additional tower foundation drilling as further described in Unilateral Amendment No. 6 for a cost increase in the amount of \$60,220; (b) increase the Maximum Contract Sum by \$60,220 from \$288,788,298 to \$288,848,518, for the Work contemplated in Unilateral Amendment No. 6; and (c) make other certain changes as set forth in Unilateral Amendment No. 6.

This Agreement has been subsequently amended unilaterally pursuant to Amendment Number Sixty-Eight – Unilateral Amendment Number Seven, issued August 19, 2021, to (a) incorporate a certain LMR change order for the Castro Peak (CPK) site related to rock coring for caissons which includes additional tower foundation drilling as further described in Unilateral Amendment No. 7 for a cost increase in the amount of \$78,061; (b) increase the Maximum Contract Sum by \$78,061 from \$288,848,518 to \$288,926,579, for the Work contemplated in Unilateral Amendment No. 7; and (c) make other certain changes as set forth in Unilateral Amendment No. 7.

This Agreement has been subsequently amended unilaterally pursuant to Amendment Number Sixty-Nine – Unilateral Amendment Number Eight, issued August 19, 2021, to (a) incorporate a certain LMR change order for the Dakin Peak (DPK) site related to rock coring for caissons which includes additional tower foundation drilling as further described in Unilateral Amendment No. 8 for a cost increase in the amount of \$66,682; (b) increase the Maximum Contract Sum by \$66,682 from \$288,926,579 to \$288,993,261, for the Work contemplated in Unilateral Amendment No. 8; and (c) make other certain changes as set forth in Unilateral Amendment No. 8.

This Agreement has been subsequently amended unilaterally pursuant to Amendment Number Seventy – Unilateral Amendment Number Nine, issued August 19, 2021, to, (a) incorporate a certain LMR change order for the Green Mountain (GRM) site related to rock coring for caissons which includes additional tower foundation drilling as further described in Unilateral Amendment No. 9 for a cost increase in the amount of \$31,320; (b) increase the Maximum Contract Sum by \$31,320 from \$288,993,261 to \$289,024,581, for the Work contemplated in Unilateral Amendment No. 9; and (c) make other certain changes as set forth in Unilateral Amendment No. 9.

This Agreement has been subsequently amended unilaterally pursuant to Amendment Number Seventy-One – Unilateral Amendment Number Ten, issued August 19, 2021, to (a) incorporate a certain LMR change order for the FS 72 (LACF072) site related to rock coring for caissons which includes additional tower foundation drilling as further described in Unilateral Amendment No. 10 for a cost increase in the amount of \$3,367; (b) increase the Maximum Contract Sum by \$3,367 from \$289,024,581 to \$289,027,948, for the Work contemplated in Unilateral Amendment No. 10; and (c) make other certain changes as set forth in Unilateral Amendment No. 10.

This Agreement has been subsequently amended unilaterally pursuant to Amendment Number Seventy-Two – Unilateral Amendment Number Eleven, issued August 19, 2021, to (a) incorporate a certain LMR change order for the Rancho Palos Verde (RPVT) site related to rock coring for caissons which includes additional tower foundation drilling as further described in Unilateral Amendment No. 11 for a cost increase in the amount of \$8,044; (b) increase the Maximum Contract Sum by \$8,044 from \$289,027,948 to \$289,035,992, for the Work contemplated in Unilateral Amendment No. 11; and (c) make other certain changes as set forth in Unilateral Amendment No. 11.

This Agreement has been subsequently amended unilaterally pursuant to Amendment Number Seventy-Three – Unilateral Amendment Number Twelve, issued August 19, 2021, to (a) incorporate a certain LMR change order for the San Pedro Hill (SPH) site related to rock coring for caissons which includes additional tower foundation drilling as further described in Unilateral Amendment No. 12 for a cost increase in the amount of \$7,761; (b) increase the Maximum Contract Sum by \$7,761 from \$289,035,992 to \$289,043,753, for the Work contemplated in Unilateral Amendment No. 12; and (c) make other certain changes as set forth in Unilateral Amendment No. 12.

This Agreement has been subsequently amended unilaterally pursuant to Amendment Number Seventy-Four – Unilateral Amendment Number Thirteen, issued August 19, 2021, to (a) incorporate a certain LMR change order for the Tower Peak (TWR) site related to rock coring for caissons which includes additional tower foundation drilling as further described in Unilateral Amendment No. 13 for a cost increase in the amount of \$54,558; (b) increase the Maximum Contract Sum by \$54,558 from \$289,043,753 to \$289,098,311, for the Work contemplated in Unilateral Amendment No. 13; and (c) make other certain changes as set forth in Unilateral Amendment No. 13.

This Agreement has been subsequently amended unilaterally pursuant to Amendment Number Seventy-Five – Unilateral Amendment Number Fourteen, issued, September 3, 2021, to (a) incorporate a certain LMR change order for the Rancho Palos Verdes Tee Course (RPVT) site related to utility power work as further described in Unilateral Amendment No. 14 for a cost increase in the amount of \$286,577; (b) increase the Maximum Contract Sum by \$286,577 from \$289,098,311 to \$289,384,888, for the Work contemplated in Unilateral Amendment No. 14; and (c) make other certain changes as set forth in Unilateral Amendment No. 14.

This Agreement has been previously amended unilaterally pursuant to Amendment Number Seventy-Six – Unilateral Amendment No. 15, issued September 3, 2021, to (a) incorporate a certain LMR change order for the Topanga Peak (TOP Relay) site related to zoning application as further described in Unilateral Amendment No. 15 for a cost increase in the amount of \$24,740; (b) increase the Maximum Contract Sum by \$24,740 from \$289,384,888 to \$289,409,628, for the Work contemplated in Unilateral Amendment No. 15; and (c) make other certain changes as set forth in Unilateral Amendment No. 15.

The Agreement has been subsequently amended by mutual agreement of the parties pursuant to Amendment Number Seventy-Seven.

This Agreement has been previously amended unilaterally pursuant to Amendment Number Seventy-Eight – Unilateral Amendment No. 16, issued September 24, 2021, to (a) incorporate a certain LMR change order for the Burnt Peak 1 (BUR1) site related to utility power work as further described in Unilateral Amendment No. 16 for a cost increase in the amount of \$7,300; (b) increase the Maximum Contract Sum by \$7,300 from \$289,425,758 to \$289,433,058 for the Work contemplated in Unilateral Amendment No. 16; and (c) make other certain changes as set forth in Unilateral Amendment No. 16.

This Agreement has been previously amended unilaterally pursuant to Amendment Number Seventy-Nine – Unilateral Amendment No. 17, issued September 29, 2021, to (a) incorporate a certain LMR change order for the San Pedro Hill (SPH) site related to utility power work as further described in Unilateral Amendment No. 17 for a cost increase in the amount of \$41,045; (b) increase the Maximum Contract Sum by \$41,045 from \$289,433,058 to \$289,474,103 for the Work contemplated in Unilateral Amendment No. 17; and (c) make other certain changes as set forth in Unilateral Amendment No. 17.

This Agreement has been previously amended unilaterally pursuant to Amendment Number Eighty – Unilateral Amendment No. 18, issued October 08, 2021, to (a) incorporate a certain LMR change order for the Burnt Peak (BUR1) site related to rock coring for caissons which includes additional tower foundation drilling as further described in Unilateral Amendment No. 18 for a cost increase in the amount of \$18,960; (b) make changes necessary to remove from further consideration Amendment No. 78 – Unilateral Amendment No. 16 related to utility power work at Burnt Peak 1 (BUR1) site for a cost decrease in the amount of \$7,300; (c) increase the Maximum Contract Sum by the net

amount of \$11,660 from \$289,474,103 to \$289,485,763 when taking the actions contemplated in Unilateral Amendment No. 18 into consideration; and (d) make other certain changes as set forth in Unilateral Amendment No. 18.

The Agreement has been subsequently amended by mutual agreement of the parties pursuant to Amendment Numbers Eighty-One, Eighty-Two, and Eighty-Three.

This Agreement has been previously amended unilaterally pursuant to Amendment Number Eighty-Four – Unilateral Amendment No. 19, issued November 5, 2021, to (a) incorporate a certain LMR change order for the various sites related to field implementation of USFS VIAMM requirements as further described in Unilateral Amendment No. 19 for a cost increase in the amount of \$168,928; (b) increase the Maximum Contract Sum by \$168,928 from \$289,632,704 to \$289,801,632; and (c) make other certain changes as set forth in Unilateral Amendment No. 19.

The Agreement has been subsequently amended by mutual agreement of the parties pursuant to Amendment Numbers Eighty-Five and Eighty-Six.

This Agreement has been previously amended unilaterally pursuant to Amendment Number Eighty-Seven – Unilateral Amendment No. 20, issued January 28, 2022, to (a) incorporate a certain LMR change order in order to supply and install 40-feet of waveguide bridge at the Rolling Hills Transmit (RHT) site as further described in Unilateral Amendment No. 20 for a cost increase in the amount of \$5,266; (b) increase the Maximum Contract Sum by \$5,266 from \$214,682,188 to \$214,687,454; and (c) make other certain changes as set forth in Unilateral Amendment No. 20.

The Agreement has been subsequently amended by mutual agreement of the parties pursuant to Amendment Number Eighty-Eight.

This Agreement has been previously amended unilaterally pursuant to Amendment Number Eighty-Nine – Unilateral Amendment No. 21, issued February 15, 2022, to (a) incorporate an LMR change order impacting three (3) sites (JPK2, LPC, and MML) related to field implementation of USFS VIAMM requirements as further described in Unilateral Amendment No. 21 for a cost increase in the amount of \$22,297; (b) increase the Maximum Contract Sum by \$22,297 from \$214,707,708 to \$214,730,005; and (c) make other certain changes as set forth in Unilateral Amendment No. 21.

The Agreement has been subsequently amended by mutual agreement of the parties pursuant to Amendment Numbers Ninety, Ninety-One and Ninety-Two.

This Agreement has been previously amended unilaterally pursuant to Amendment Number Ninety-Three – Unilateral Amendment No. 22, issued June 06, 2022, to (a) incorporate an LMR Change Order in order to provide additional electromagnetic measurements at the Signal Hill (SGH) site as further described in Unilateral Amendment No. 22 for a cost increase in the amount of \$7,994; (b) increase

the Maximum Contract Sum by \$7,994 from \$215,255,548 to \$215,263,542; and (c) make other certain changes as set forth in Unilateral Amendment No. 22.

The Agreement has been previously amended unilaterally pursuant to Amendment Number Ninety-Four – Unilateral Amendment No. 23, issued June 14, 2022, to (a) incorporate an LMR Change Order to remove certain equipment from the tower at the BKK Landfill (BKK) site as further described in Unilateral Amendment No. 23 for a cost increase in the amount of \$4,329; (b) increase the Maximum Contract Sum by \$4,329 from \$215,263,542 to \$215,267,871; and (c) make other certain changes as set forth in Unilateral Amendment No. 23.

The Agreement has been previously amended unilaterally pursuant to Amendment Number Ninety-Five – Unilateral Amendment No. 24, issued June 14, 2022, to (a) incorporate an LMR Change Order to perform subsurface investigation soil sampling work at the LACFDEL site as further described in Unilateral Amendment No. 24 for a cost increase in the amount of \$13,099; (b) increase the Maximum Contract Sum by \$13,099 from \$215,267,871 to \$215,280,970; and (c) make other certain changes as set forth in Unilateral Amendment No. 24.

The Agreement has been previously amended unilaterally pursuant to Amendment Number Ninety-Six – Unilateral Amendment No. 25, issued June 14, 2022, to (a) incorporate an LMR Change Order to perform new design/Phase 1 work and perform additional slope stability work at the Mirador (MIR) site as further described in Unilateral Amendment No. 25 for a cost increase in the amount of \$26,197; (b) increase the Maximum Contract Sum by \$26,197 from \$215,280,970 to \$215,307,167; and (c) make other certain changes as set forth in Unilateral Amendment No. 25.

The Agreement has been previously amended unilaterally pursuant to Amendment Number Ninety-Seven – Unilateral Amendment No. 26, issued June 14, 2022, to (a) incorporate an LMR Change Order to terminate certain easement work at the Signal Hill (SGH) site as further described in Unilateral Amendment No. 26 for a cost increase in the amount of \$3,881; (b) increase the Maximum Contract Sum by \$3,881 from \$215,307,167 to \$215,311,048; and (c) make other certain changes as set forth in Unilateral Amendment No. 26.

The Agreement has been previously amended unilaterally pursuant to Amendment Number Ninety-Eight – Unilateral Amendment No. 27, issued June 14, 2022, to (a) incorporate an LMR Change Order to perform additional topography work at the East Sunset Ridge (ESR) site as further described in Unilateral Amendment No. 27 for a cost increase in the amount of \$2,100; (b) increase the Maximum Contract Sum by \$2,100 from \$215,311,048 to \$215,313,148; and (c) make other certain changes as set forth in Unilateral Amendment No. 27.

The Agreement has been subsequently amended by mutual agreement of the parties pursuant to Amendment Numbers Ninety-Nine.



The Agreement has been previously amended unilaterally pursuant to Amendment Number One-Hundred – Unilateral Amendment No. 28, issued June 29, 2022 to (a) incorporate an LMR Change Order for work related to incremental specialty fencing costs at Dakin Peak (DPK) and Tower Peak (TWR) due to a zoning requirement from the Los Angeles County Department of Regional Planning for a cost increase in the amount of \$48,907; (b) increase the Maximum Contract Sum by \$48,907 from \$215,324,765 to \$215,373,672; and (c) make other certain changes as set forth in Unilateral Amendment No. 28.

The Agreement has been previously amended unilaterally pursuant to Amendment Number One Hundred One – Unilateral Amendment No. 29, issued June 29, 2022 to (a) incorporate an LMR Change Order for access road maintenance work at the Pine Mountain (PMT) site for a cost increase in the amount of \$4,887; (b) increase the Maximum Contract Sum by \$4,887 from \$215,373,672 to \$215,378,559; and (c) make other certain changes as set forth in Unilateral Amendment No. 29.

The Agreement has been subsequently amended by mutual agreement of the parties pursuant to Amendment Numbers One Hundred Two, One Hundred Three, and One Hundred Four.

The Agreement has been previously amended unilaterally pursuant to Amendment Number One Hundred Five – Unilateral Amendment No. 30, issued on November 16, 2022, to (a) reconcile Exhibit C.2 (Phase 1 – System Design) to reflect a cost decrease in an amount of \$122,264; (b) reconcile Exhibit C.17 (LMR Change Order Modifications) to reflect a cost decrease in an amount of \$120,647; (c) reconcile Exhibit C.19 (Channel 15 and Channel 16 Interference Mitigation) to reflect a cost decrease in the amount of \$115,920; (d) reflect a cost neutral transfer of discounts from Exhibit C.4 (Phase 3 – Supply LMR System Components) to Exhibit C.15 (LMR System Discounts) in the amount of \$361,900; (e) reflect a cost neutral transfer of a discount from Exhibit C.17 (LMR Change Order Modifications) to Exhibit C.3 (Phase 2 – Site Construction and Site Modification) in the amount of \$121,819; (f) reflect an adjustment to holdback in the amount of \$64,774; (g) decrease the Maximum Contract Sum by \$358,830 from \$216,275,434 to \$215,916,604; and; and (h) make other certain changes as set forth in Unilateral Amendment No. 30.

The Agreement has been subsequently amended by mutual agreement of the parties pursuant to Amendment Number One Hundred Six.

The Agreement has been previously amended unilaterally pursuant to Amendment Number One Hundred Seven – Unilateral Amendment No. 31, issued on December 01, 2022, to (a) incorporate an LMR Change Order for tower foundation rock excavation work at the Mount Lukens 2 (MTL2) site for a cost increase in the amount of \$57,675; (b) increase the Maximum Contract Sum by \$57,675 from \$215,959,150 to \$216,016,825; and (c) make other certain changes as set forth in Unilateral Amendment No. 31.

The Agreement has been subsequently amended by mutual agreement of the parties pursuant to Amendment Numbers One Hundred Eight Through One Hundred Eleven.

The Agreement permits the Authority to issue Unilateral Amendments pursuant to Section 2.3.6 (Unilateral Amendment) and Section 2.3.10.2 (Unilateral Amendment), and the Authority has determined a Unilateral Amendment needs to be issued.

The Authority is unilaterally amending the Agreement to (a) include a Bridge Warranty for the Digital Trunked Voice Radio Subsystem (DTVRS) Subsystem, the corresponding Backhaul Subsystem necessary for use of the DTVRS Subsystem, the CORE and DSR Systems, as well as Station B and Site on Wheels to bridge the gap in warranty services for a period of approximately seven and a half (7.5) months, until such time as Final LMR System Acceptance is achieved for a cost increase in the amount of \$844,356; (b) increase the Maximum Contract Sum by \$844,356 from \$216,034,427 to \$216,878,783; and (c) make other certain changes as set forth in this Unilateral Amendment No. 32.

This Unilateral Amendment No. 32 is authorized under Section 2 (Changes to Agreement) and Section 2.3.6 (Unilateral Amendment) of the Agreement.

NOW THEREFORE, in consideration of the foregoing recitals, all of which are incorporated as part of this Unilateral Amendment No. 32, and for other valuable consideration, the Authority issues the following:

1. Capitalized Terms; Section References. Capitalized terms used herein without definition (including in the recitals hereto), have the meanings given to such terms in the Base Document. Unless otherwise noted, section references in this Unilateral Amendment No. 32 refer to sections of the Base Document, as amended by this Unilateral Amendment No. 32.
2. Unilateral Amendment for Bridge Warranty for DTVRS Subsystem, Backhaul Subsystem necessary for use with the DTVRS Subsystem, the CORE and DSR Systems, and Station B and Site on Wheels. Pursuant to Section 2.3.6 (Unilateral Amendment) of Agreement No. LA-RICS 007, this Unilateral Amendment No. 32 is issued by the Authority and hereby directs Contractor to perform bridge warranty services for the DTVRS Subsystem, corresponding Backhaul Subsystem necessary for use with the DTVRS Subsystem, the CORE and DSR Systems, as well as Station B and Site on Wheels for a period of approximately seven and a half (7.5) months from the time this Unilateral Amendment No. 32 is issued and, Notification and Notice to Proceed (NTP) is issued, until such time as Final LMR System Acceptance is achieved. Additionally, such work will be performed for a period of approximately seven and a half (7.5) months in accordance with Attachment A (Bridge Warranty Maintenance Service Terms and Conditions) attached to this Unilateral Amendment No. 32, and the DTVRS Warranty Support Plan dated February 28, 2023, and approved by the Authority

on February 28, 2023, attached to this Unilateral Amendment No. 32 as Attachment B (LA-RICS Digital Trunked Voice Radio Subsystem (DTVRS) Warranty Support Plan).

The cost to perform the Bridge Warranty services for DTVRS Subsystem, Backhaul Subsystem necessary for use with the DTVRS Subsystem, and the CORE and DSR Systems is contemplated in Exhibit C.21 (LMR Unilateral Amendments) and Exhibit C.23 (LMR Subsystem Bridge Warranty) of Exhibit C (Schedule of Payments), respectively. The cost to perform the Bridge Warranty services for Station B and Site on Wheels will be compensated on a Time and Material Basis contained within Exhibit C.20 (LMR Bridge Warranty) of Exhibit C (Schedule of Payments), in particular from the Repair and Restoration Services on a Time and Materials line item.

3. Amendments to the Base Document.

3.1 Section 8.1 (Maximum Contract Sum and Contract Sum – General), in particular Section 8.1.1 of the Base Document, is deleted in its entirety and replaced with the following:

8.1.1 The "Maximum Contract Sum" under this Agreement is Two Hundred Sixteen Million, Eight Hundred Seventy-Eight Thousand, Seven Hundred Eighty-Three Dollars (\$216,878,783) which includes the Contract Sum and all Unilateral Option Sums, as set forth in Exhibit C (Schedule of Payments).

3.2 Section 24.4 (Limitation of Liability), in particular Section 24.4.1 of the Base Document, is deleted in its entirety and replaced with the following:

24.4.1 Except for liability resulting from personal injury, harm to tangible property, or wrongful death, Contractor's total liability to the Authority, whether for breach of contract, warranty, negligence, or strict liability in tort, will be limited in the aggregate to direct damages no greater than One Hundred Sixty-One Million, Sixty Thousand, Two Hundred Eighty Dollars (\$161,060,280). Notwithstanding the foregoing, Contractor shall not be liable to the Authority for any special, incidental, indirect, or consequential damages.

4. Amendments to Agreement Exhibits.

4.1 Exhibit C.1 (LMR System Payment Summary) to Exhibit C (Schedule of Payments) is deleted in its entirety and replaced with Exhibit C.1 (LMR System Payment Summary), which is attached to this Unilateral Amendment No. 32 and incorporated herein by this reference.



- 4.2 Exhibit C.21 (LMR Unilateral Amendments) is deleted in its entirety and replaced with Exhibit C.21 (LMR Unilateral Amendments), which is attached to this Unilateral Amendment No. 32 and incorporated herein by this reference.
- 4.3 Exhibit C.23 (LMR Subsystem Bridge Warranty), to Exhibit C (Schedule of Payments) is deleted in its entirety and replaced with Exhibit C.23 (LMR Subsystem Bridge Warranty), which is attached to this Unilateral Amendment No. 32 and incorporated herein by this reference.
- 4.4 Attachment A (Bridge Warranty Maintenance Service Terms and Conditions) is attached to this Unilateral Amendment No. 32, and incorporated herein by this reference.
- 4.5 Attachment B (LA-RICS Digital Trunked Voice Radio Subsystem (DTVRS) Warranty Support Plan) is attached to this Unilateral Amendment No. 32, and incorporated herein by this reference.
- 5. This Unilateral Amendment No. 32 shall become effective as of the date identified in the recitals, which is the date upon which:
  - 5.1 Los Angeles County Counsel has approved this Unilateral Amendment No. 32 as to form;
  - 5.2 The Board of Directors of the Authority has authorized the Executive Director of the Authority, if required, to execute this Unilateral Amendment No. 32; and
  - 5.3 The Executive Director of the Authority has executed this Unilateral Amendment No. 32.
- 6. Except as expressly provided in this Unilateral Amendment No. 32, all other terms and conditions of the Agreement shall remain the same and in full force and effect.
- 7. This Unilateral Amendment No. 32 may be executed in one or more original or facsimile counterparts, all of which when taken together shall constitute one in the same instrument.

\* \* \*

**AMENDMENT NUMBER ONE HUNDRED TWELVE  
UNILATERAL AMENDMENT NUMBER THIRTY-TWO  
TO AGREEMENT NO. LA-RICS 007**

**FOR  
LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM  
LAND MOBILE RADIO SYSTEM**

IN WITNESS WHEREOF, the Authority has hereto caused this Unilateral Amendment No. 32 to be executed on its behalf by its duly authorized representatives, effective as of the date first set forth above.

LOS ANGELES REGIONAL  
INTEROPERABLE COMMUNICATIONS  
SYSTEM AUTHORITY

By: \_\_\_\_\_

Scott Edson  
Executive Director

APPROVED AS TO FORM FOR THE  
LOS ANGELES REGIONAL  
INTEROPERABLE COMMUNICATIONS  
SYSTEM AUTHORITY:

DAWYN R. HARRISON  
County Counsel

By: \_\_\_\_\_

Truc L. Moore  
Principal Deputy County Counsel

EXHIBIT C.1 - SCHEDULE OF PAYMENTS LMR SYSTEM PAYMENT SUMMARY				
Summary	Unilateral Option Sum	Contract Sum - Full Payable Amount	10% Holdback Amount	Payment Minus 10% Holdback Amount
Phase 1 <sup>(Note 1)</sup>	\$ -	\$ 41,632,564	\$ 3,117,075	\$ 38,515,489
Phase 2	\$ -	\$ 43,100,531	\$ 4,147,787	\$ 38,952,744
Phase 3	\$ -	\$ 56,698,625	\$ 4,230,479	\$ 52,468,147
Phase 4	\$ -	\$ 20,732,005	\$ 2,009,828	\$ 18,722,174
<b>SUBTOTAL (Phases 1 to 4):</b>	<b>\$ -</b>	<b>\$ 162,163,725</b>	<b>\$ 13,505,169</b>	<b>\$ 148,658,553</b>
Phase 5 (15 Years)	\$ 55,898,518	\$ -	\$ -	\$ 55,898,518
<b>TOTAL (Phases 1 to 5):</b>	<b>\$ 55,898,518</b>	<b>\$ 162,163,725</b>	<b>\$ 13,505,169</b>	<b>\$ 204,557,072</b>
<del>Bounded Area Coverage Additive Alternate <sup>(Note 1)</sup></del>	<del>\$ 19,109,375</del>	<del>\$ -</del>	<del>\$ 1,910,937</del>	<del>\$ 17,198,437</del>
<del>Mandatory Building Coverage Additive Alternate</del>	<del>\$ 29,828,448</del>	<del>\$ -</del>	<del>\$ 2,982,845</del>	<del>\$ 26,845,603</del>
<del>Metrorail Coverage Additive Alternate</del>	<del>\$ 4,792,260</del>	<del>\$ -</del>	<del>\$ 479,226</del>	<del>\$ 4,313,034</del>
<del>LMR System Maintenance for Additive Alternates</del>	<del>\$ 19,620,355</del>	<del>\$ -</del>	<del>\$ 1,962,036</del>	<del>\$ 17,658,320</del>
Source Code Software Escrow	\$ 1,304,000	\$ -	\$ 130,400	\$ 1,173,600
LMR Mitigation Monitoring and Reporting Plan		\$ 2,912,356	\$ -	\$ 2,912,356
LMR Change Order Modifications		\$ 3,562,906	\$ 356,291	\$ 3,206,616
LMR Unilateral Amendments		\$ 1,453,036	\$ 145,304	\$ 1,307,732
Multiprotocol Label Switching Mobile Backhaul		\$ 2,200,000	\$ 220,000	\$ 1,980,000
Channel 15 and Channel 16 Interference Mitigation		\$ 687,287		\$ 687,287
LMR Bridge Warranty		\$ 1,987,674		\$ 1,987,674
LMR Subsystem Bridge Warranty		\$ 1,912,039		\$ 1,912,039
<b>SUBTOTAL</b>	<b>\$ 130,552,956</b>	<b>\$ 176,879,024</b>	<b>\$ 21,692,207</b>	<b>\$ 285,739,770</b>
<b>TOTAL CONTRACT SUM:</b>	<b>\$176,879,024</b>			
<b>LMR Discounts <sup>(Note 2)</sup></b>	<b>-\$17,202,758</b>			
<b>MAXIMUM CONTRACT SUM(Total Unilateral Option Sum plus Total Contract Sum):</b>	<b>\$216,878,783</b>			

Note 1: The cost for the Project Descriptions for the Bounded Area Coverage only are reflected in Exhibit C.2 (Phase 1 - System Design) as amended and restated in Amendment No. 2., and included (\$173, 110) in Phase 1 Contract Sum - Full Payable Amount. The balance of the remaining Unilateral Option Sum for Bounded Area Coverage Additive Alternate Work is reflected in Exhibit C.7 (Bounded Area Coverage Additive Alternate).

Note 2: The total remaining balance of the LMR Discounts applied to the Max Contract Sum will be utilized at the discretion of the Authority.

## SCHEDULE OF PAYMENTS

### EXHIBIT C.21 - LMR UNILATERAL AMENDMENTS

Site ID	Previous RFQ No. or MSI Change Order No.	Unilateral COR No.	Amendment/ Unilateral Amendment No.	Description	Exhibit C.14 Unit Pricing/Section No. (Where Applicable )	Contract Sum - Payable Amount	10% Holdback Amount	Payable Amount Less 10% Holdback Amount
<b>Amendment No. 60 - Unilateral Amendment No. 1</b>								
DPK	LMR-COR 7047	DPK COR 002 Unilateral	Amendment No. 60/ Unilateral Amendment No. 1	Utility Power Work	Exhibit C.14 (Contractors Response to Appendix I (Pricing Requirements – Unscored Options), in particular Section 2.7.1.g	\$ 10,676	\$ 1,068	\$ 9,608
FRP	LMR-COR 7039	FRP COR 001 Unilateral	Amendment No. 60/ Unilateral Amendment No. 1	Utility Power Work	Exhibit C.14 (Contractors Response to Appendix I (Pricing Requirements – Unscored Options), in particular Section 2.7.1.g	\$ 10,676	\$ 1,068	\$ 9,608
MIR	RFQ-LMR-0046	MIR-COR-007- Unilateral	Amendment No. 60/ Unilateral Amendment No. 1	Existing Tower Removal	Exhibit C.14 (Contractors Response to Appendix I (Pricing Requirements – Unscored Options), in particular, Section 3.9.e, Section 1.3.5.B, and Section 1.2.a	\$ -	\$ -	\$ -
MTL2	LMR-COR 7040	MTL2 COR 006 Unilateral	Amendment No. 60/ Unilateral Amendment No. 1	Utility Power Work	Exhibit C.14 (Contractors Response to Appendix I (Pricing Requirements – Unscored Options), in particular Section 2.7.1.f	\$ 8,378	\$ 838	\$ 7,540
<b>Amendment No. 60 - Unilateral Amendment No. 1 Subtotal</b>						<b>\$ 29,730</b>	<b>\$ 2,973</b>	<b>\$ 26,757</b>
<b>Amendment No. 61 - Unilateral Amendment No. 2</b>								
RPVT	LMR-COR 7042/ LMR-COR 7048	RPVT COR 004 Unilateral	Amendment No. 61/ Unilateral Amendment No. 2	Concrete Debris Removal	Attachment B to Amendment No. 61/ Unilateral Amendment No. 2	\$ 257,862	\$ 25,786	\$ 232,076
<b>Amendment No. 61 - Unilateral Amendment No. 2 Subtotal</b>						<b>\$ 257,862</b>	<b>\$ 25,786</b>	<b>\$ 232,076</b>
<b>Amendment No. 62 - Unilateral Amendment No. 3</b>								
ESR	LMR-COR 7056	ESR COR 005 Unilateral	Amendment No. 62/ Unilateral Amendment No. 3	Access Road Improvement	Amendment No. 62/ Unilateral Amendment No. 3	\$ 14,205	\$ 1,421	\$ 12,785
<b>Amendment No. 62 - Unilateral Amendment No. 3</b>						<b>\$ 14,205</b>	<b>\$ 1,421</b>	<b>\$ 12,785</b>
<b>Amendment No. 65 - Unilateral Amendment No. 4</b>								
SPH	LMR-COR 7053	SPH COR 006 Unilateral	Amendment No. 65/ Unilateral Amendment No. 4	Reconciliation of Phase 2 Work	Attachment B to Amendment No. 65/ Unilateral Amendment No. 4 (\$1,190,563 Contemplated in C.3 - Phase 2, incremental increase of \$945,937 as \$244,626 was already contemplated in the Agreement)	\$ -	\$ -	\$ -
<b>Amendment No. 65 - Unilateral Amendment No. 4</b>						<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Amendment No. 66 - Unilateral Amendment No. 5</b>								

## SCHEDULE OF PAYMENTS

### EXHIBIT C.21 - LMR UNILATERAL AMENDMENTS

Site ID	Previous RFQ No. or MSI Change Order No.	Unilateral COR No.	Amendment/ Unilateral Amendment No.	Description	Exhibit C.14 Unit Pricing/Section No. <i>(Where Applicable )</i>	Contract Sum - Payable Amount	10% Holdback Amount	Payable Amount Less 10% Holdback Amount
MML	LMR-COR 7065	MML COR 006 Unilateral	Amendment No. 66/ Unilateral Amendment No. 5	Utility Power Work	Exhibit C.14 (Contractors Response to Appendix I (Pricing Requirements – Unsourced Options), in particular Section 2.7.4.g	\$ 76,587	\$ 7,659	\$ 68,928
					Attachment B to Amendment No. 66/ Unilateral Amendment No. 5	\$ 27,757	\$ 2,776	\$ 24,981
					Amendment No. 66 - Unilateral Amendment No. 5			\$ 104,344
Amendment No. 67 - Unilateral Amendment No. 6								
BJM	LMR-COR 7031	BJM COR 002 Unilateral	Amendment No. 67/ Unilateral Amendment No. 6	Rock Coring for Caisson	Amendment No. 67/ Unilateral Amendment No. 6	\$ 60,220	\$ 6,022	\$ 54,198
Amendment No. 67 - Unilateral Amendment No. 6						\$ 60,220	\$ 6,022	\$ 54,198
Amendment No. 68 - Unilateral Amendment No. 7								
CPK	LMR-COR 7026	CPK COR 009 Unilateral	Amendment No. 68/ Unilateral Amendment No. 7	Rock Coring for Caisson	Amendment No. 68/ Unilateral Amendment No. 7	\$ 78,061	\$ 7,806	\$ 70,255
Amendment No. 68 - Unilateral Amendment No. 7						\$ 78,061	\$ 7,806	\$ 70,255
Amendment No. 69 - Unilateral Amendment No. 8								
DPK	LMR-COR 7032	DPK COR 001 Unilateral	Amendment No. 69/ Unilateral Amendment No. 8	Rock Coring for Caisson	Amendment No. 69/ Unilateral Amendment No. 8	\$ 66,682	\$ 6,668	\$ 60,014
Amendment No. 69 - Unilateral Amendment No. 8						\$ 66,682	\$ 6,668	\$ 60,014
Amendment No. 70 - Unilateral Amendment No. 9								
GRM	LMR-COR 7030	GRM COR 003 Unilateral	Amendment No. 70/ Unilateral Amendment No. 9	Rock Coring for Caisson	Amendment No. 70/ Unilateral Amendment No. 9	\$ 31,320	\$ 3,132	\$ 28,188
Amendment No. 70 - Unilateral Amendment No. 9						\$ 31,320	\$ 3,132	\$ 28,188
Amendment No. 71 - Unilateral Amendment No. 10								
LACF072	LMR-COR 7034	LACF072 COR 003 Unilateral	Amendment No. 71/ Unilateral Amendment No. 10	Rock Coring for Caisson	Amendment No. 71/ Unilateral Amendment No. 10	\$ 3,367	\$ 337	\$ 3,030
Amendment No. 71 - Unilateral Amendment No. 10						\$ 3,367	\$ 337	\$ 3,030
Amendment No. 72 - Unilateral Amendment No. 11								
RPVT	LMR-COR 7029	RPVT COR 003 Unilateral	Amendment No. 72/ Unilateral Amendment No. 11	Rock Coring for Caisson	Amendment No. 72/ Unilateral Amendment No. 11	\$ 8,044	\$ 804	\$ 7,240

## SCHEDULE OF PAYMENTS

### EXHIBIT C.21 - LMR UNILATERAL AMENDMENTS

Site ID	Previous RFQ No. or MSI Change Order No.	Unilateral COR No.	Amendment/ Unilateral Amendment No.	Description	Exhibit C.14 Unit Pricing/Section No. (Where Applicable)	Contract Sum - Payable Amount	10% Holdback Amount	Payable Amount Less 10% Holdback Amount
<b>Amendment No. 72 - Unilateral Amendment No. 11</b>						\$ 8,044	\$ 804	\$ 7,240
<b>Amendment No. 73 - Unilateral Amendment No. 12</b>								
SPH	LMR-COR 7035	SPH COR 005 Unilateral	Amendment No. 73/ Unilateral Amendment No. 12	Rock Coring for Caisson	Amendment No. 73/ Unilateral Amendment No. 12	\$ 7,761	\$ 776	\$ 6,985
<b>Amendment No. 73 - Unilateral Amendment No. 12</b>						\$ 7,761	\$ 776	\$ 6,985
<b>Amendment No. 74 - Unilateral Amendment No. 13</b>								
TWR	LMR-COR 7033	TWR COR 001 Unilateral	Amendment No. 74/ Unilateral Amendment No. 13	Rock Coring for Caisson	Amendment No. 74/ Unilateral Amendment No. 13	\$ 54,558	\$ 5,456	\$ 49,102
<b>Amendment No. 74 - Unilateral Amendment No. 13</b>						\$ 54,558	\$ 5,456	\$ 49,102
<b>Amendment No. 75 - Unilateral Amendment No. 14</b>								
RPVT	LMR-COR 7068	RPVT COR 006 Unilateral	Amendment No. 75/ Unilateral Amendment No. 14	Utility Power Work	Attachment B to Amendment No. 75/ Unilateral Amendment No. 14	\$ 286,577	\$ 28,658	\$ 257,919
<b>Amendment No. 75 - Unilateral Amendment No. 14</b>						\$ 286,577	\$ 28,658	\$ 257,919
<b>Amendment No. 76 - Unilateral Amendment No. 15</b>								
TOP Relay	LMR-COR 7069	Relay COR 001R2 Unilateral	Amendment No. 76/ Unilateral Amendment No. 15	Zoning Application	Attachment A to Amendment No. 76/ Unilateral Amendment No. 15	\$ 24,740	\$ 2,474	\$ 22,266
<b>Amendment No. 76 - Unilateral Amendment No. 15</b>						\$ 24,740	\$ 2,474	\$ 22,266
<b>Amendment No. 78 - Unilateral Amendment No. 16</b>								
BUR	LMR-COR 7046	BUR1 COR 003- Unilateral	Amendment No. 78/ Unilateral Amendment No. 16	Utility Power Work	Exhibit C.14 (Contractors Response to Appendix I (Pricing Requirements—Unscored Options), in particular Section 2.7.1.e	\$ -	\$ -	\$ -
<b>Amendment No. 78 - Unilateral Amendment No. 16</b>						\$ -	\$ -	\$ -
<b>Amendment No. 79 - Unilateral Amendment No. 17</b>								
SPH	LMR-COR 7073	SPH COR 007 Unilateral	Amendment No. 79/ Unilateral Amendment No. 17	Utility Power Work	Exhibit C.14 (Contractors Response to Appendix I (Pricing Requirements – Unscored Options), in particular Section 2.7.4.g	\$ 41,045	\$ 4,105	\$ 36,941
<b>Amendment No. 79 - Unilateral Amendment No. 17</b>						\$ 41,045	\$ 4,105	\$ 36,941
<b>Amendment No. 80 - Unilateral Amendment No. 18</b>								
BUR1	LMR-COR 7054	BUR1 COR 004 Unilateral	Amendment No. 80/ Unilateral Amendment No. 18	Rock Coring for Caisson	Amendment No. 80/ Unilateral Amendment No. 18	\$ 18,960	\$ 1,896	\$ 17,064

**SCHEDULE OF PAYMENTS**  
**EXHIBIT C.21 - LMR UNILATERAL AMENDMENTS**

Site ID	Previous RFQ No. or MSI Change Order No.	Unilateral COR No.	Amendment/ Unilateral Amendment No.	Description	Exhibit C.14 Unit Pricing/Section No. (Where Applicable )	Contract Sum - Payable Amount	10% Holdback Amount	Payable Amount Less 10% Holdback Amount
<b>Amendment No. 80 - Unilateral Amendment No. 18</b>						<b>\$ 18,960</b>	<b>\$ 1,896</b>	<b>\$ 17,064</b>
<b>Amendment No. 84 - Unilateral Amendment No. 19</b>								
VARIOUS	LMR-COR-7074	LMR COR 041R1 Unilateral	Amendment No. 84/ Unilateral Amendment No. 19	USFS Sites Field Implementation of VIAMM	Attachment A to Amendment No. 84/ Unilateral Amendment No. 19	\$ 168,928	\$ 16,893	\$ 152,035
<b>Amendment No. 84 - Unilateral Amendment No. 19</b>						<b>\$ 168,928</b>	<b>\$ 16,893</b>	<b>\$ 152,035</b>
<b>Amendment No. 87 - Unilateral Amendment No. 20</b>								
RHT	LMR-COR-7081	LMR COR 005 Unilateral	Amendment No. 87/ Unilateral Amendment No. 20	Ice Bridge	Exhibit C.14 (Contractors Response to Appendix I (Pricing Requirements – Unscored Options), in particular Section 2.3A	\$ 5,266	\$ 527	\$ 4,739
<b>Amendment No. 87 - Unilateral Amendment No. 20</b>						<b>\$ 5,266</b>	<b>\$ 527</b>	<b>\$ 4,739</b>
<b>Amendment No. 89 - Unilateral Amendment No. 21</b>								
JPK2, LPC, MML	LMR-COR-7082	LMR COR 044 Unilateral	Amendment No. 89/ Unilateral Amendment No. 21	USFS Sites Field Implementation of VIAMM	Attachment A to Amendment No. 89/ Unilateral Amendment No. 21	\$ 22,297	\$ 2,230	\$ 20,067
<b>Amendment No. 89 - Unilateral Amendment No. 21</b>						<b>\$ 22,297</b>	<b>\$ 2,230</b>	<b>\$ 20,067</b>
<b>Amendment No. 93 - Unilateral Amendment No. 22</b>								
SGH	LMR-COR-7097	LMR COR 006R1 Unilateral	Amendment No. 93/ Unilateral Amendment No. 22	Additional EM Measurements	Amendment No. 93/ Unilateral Amendment No. 22	\$ 7,994	\$ 799	\$ 7,195
<b>Amendment No. 93 - Unilateral Amendment No. 22</b>						<b>\$ 7,994</b>	<b>\$ 799</b>	<b>\$ 7,195</b>
<b>Amendment No. 94 - Unilateral Amendment No. 23</b>								
BKK	LMR-COR-6021	BKK COR 003R Unilateral	Amendment No. 94/ Unilateral Amendment No. 23	Tower Equipment Removal	Attachment A to Amendment No. 94/ Unilateral Amendment No. 23	\$ 4,329	\$ 433	\$ 3,896
<b>Amendment No. 94 - Unilateral Amendment No. 23</b>						<b>\$ 4,329</b>	<b>\$ 433</b>	<b>\$ 3,896</b>
<b>Amendment No. 95 - Unilateral Amendment No. 24</b>								
LACFDEL	LMR-COR-6010	LACFDEL COR 006 Unilateral	Amendment No. 95/ Unilateral Amendment No. 24	Subsurface Investigation Soil Sampling	Attachment A to Amendment No. 95/ Unilateral Amendment No. 24	\$ 13,099	\$ 1,310	\$ 11,789
<b>Amendment No. 95 - Unilateral Amendment No. 24</b>						<b>\$ 13,099</b>	<b>\$ 1,310</b>	<b>\$ 11,789</b>
<b>Amendment No. 96 - Unilateral Amendment No. 25</b>								

## SCHEDULE OF PAYMENTS

### EXHIBIT C.21 - LMR UNILATERAL AMENDMENTS

Site ID	Previous RFQ No. or MSI Change Order No.	Unilateral COR No.	Amendment/ Unilateral Amendment No.	Description	Exhibit C.14 Unit Pricing/Section No. (Where Applicable )	Contract Sum - Payable Amount	10% Holdback Amount	Payable Amount Less 10% Holdback Amount
MIR	LMR-COR-6056	MIR COR 006R Unilateral	Amendment No. 96/ Unilateral Amendment No. 25	New Location Design/Permitting Phase 1 work and Additional Slope Stability	Attachment A to Amendment No. 96/ Unilateral Amendment No. 25	\$ 26,197	\$ 2,620	\$ 23,577
<b>Amendment No. 96 - Unilateral Amendment No. 25</b>						<b>\$ 26,197</b>	<b>\$ 2,620</b>	<b>\$ 23,577</b>
<b>Amendment No. 97 - Unilateral Amendment No. 26</b>								
SGH	LMR-COR-5092	SGH COR 005 Unilateral	Amendment No. 97/ Unilateral Amendment No. 26	Easement Termination Work	Attachment A to Amendment No. 97/ Unilateral Amendment No. 26	\$ 3,881	\$ 388	\$ 3,493
<b>Amendment No. 97 - Unilateral Amendment No. 26</b>						<b>\$ 3,881</b>	<b>\$ 388</b>	<b>\$ 3,493</b>
<b>Amendment No. 98 - Unilateral Amendment No. 27</b>								
ESR	LMR-COR-5009	ESR COR 002 Unilateral	Amendment No. 98/ Unilateral Amendment No. 27	Additional Topography Work	Attachment A to Amendment No. 98/ Unilateral Amendment No. 27	\$ 2,100	\$ 210	\$ 1,890
<b>Amendment No. 98 - Unilateral Amendment No. 27</b>						<b>\$ 2,100</b>	<b>\$ 210</b>	<b>\$ 1,890</b>
<b>Amendment No. 100 - Unilateral Amendment No. 28</b>								
DPK, TWR	LMR-COR-7102	LMR COR 051 Unilateral	Amendment No. 100/ Unilateral Amendment No. 28	Specialty Fencing	Attachment A to Amendment No. 100/ Unilateral Amendment No. 28	\$ 48,907	\$ 4,891	\$ 44,016
<b>Amendment No. 100 - Unilateral Amendment No. 28</b>						<b>\$ 48,907</b>	<b>\$ 4,891</b>	<b>\$ 44,016</b>
<b>Amendment No. 101 - Unilateral Amendment No. 29</b>								
PMT	LMR-COR-7105	PMT COR 005 Unilateral	Amendment No. 101/ Unilateral Amendment No. 29	Road Maintenance	Attachment A to Amendment No. 101/ Unilateral Amendment No. 29	\$ 4,887	\$ 489	\$ 4,398
<b>Amendment No. 101 - Unilateral Amendment No. 29</b>						<b>\$ 4,887</b>	<b>\$ 489</b>	<b>\$ 4,398</b>
<b>Amendment No. 105 - Unilateral Amendment No. 30</b>								



**SCHEDULE OF PAYMENTS**  
**EXHIBIT C.21 - LMR UNILATERAL AMENDMENTS**

Site ID	Previous RFQ No. or MSI Change Order No.	Unilateral COR No.	Amendment/ Unilateral Amendment No.	Description	Exhibit C.14 Unit Pricing/Section No. (Where Applicable )	Contract Sum - Payable Amount	10% Holdback Amount	Payable Amount Less 10% Holdback Amount
VARIOUS	VARIOUS	VARIOUS	Amendment No. 105/ Unilateral Amendment No. 30	Reconciliation of Work under Phase 1, Phase 2, LMR System Discounts, LMR Change Orders, Channel 15 & 16 Interference Mitigation and Holdback	Amendment No. 105/Unilateral Amendment No. 30 (\$122,264 Reduction contemplated in C.2 - Phase 1; \$121,819 Cost neutral transfer contemplated in C.3 - Phase 2; \$361,900 Cost neutral transfer contemplated in C.15 - LMR System Discounts; \$120,647 Reduction contemplated in C.17 LMR Change Orders; \$115,920 Reduction contemplated in C.19 - Channel 15 & 16 Interference Mitigation; \$64,774 Adjustment to holdback for all reconciliations. Total cost reduction resulting in the amount of \$358,831.	\$ -	\$ -	\$ -
<b>Amendment No. 105 - Unilateral Amendment No. 30</b>						\$ -	\$ -	\$ -
<b>Amendment No. 107 - Unilateral Amendment No. 31</b>								
MTL2	LMR-COR-7095	MTL2 COR 007R2 Unilateral	Amendment No. 107/ Unilateral Amendment No. 31	Tower Foundation Rock Excavation	Attachment B to Amendment No. 107/ Unilateral Amendment No. 31	\$ 57,675	\$ 5,768	\$ 51,908
<b>Amendment No. 112 - Unilateral Amendment No. 32</b>								
VARIOUS	RFQ LMR 0094 RFQ LMR 0081	--	Amendment No. 112/ Unilateral Amendment No. 32	Bridge Warranty for the Digital Trunked Voice Radio Subsystem (DTVRS), corresponding Backhaul Subsystem necessary for use of the DTVRS Subsystem, the CORE and DSR Systems, and Station B and Site on Wheels	Amendment No. 112/Unilateral Amendment No. 32 (Total cost in the amount of \$844,356 is contained within C.23 - LMR Subsystem Bridge Warranty)	\$ -	\$ -	\$ -
<b>Amendment No. 112 - Unilateral Amendment No. 32</b>						\$ -	\$ -	\$ -
<b>TOTAL FOR ALL LMR UNILATERAL AMENDMENTS</b>						<b>\$ 1,453,036</b>	<b>\$ 145,304</b>	<b>\$ 1,307,732</b>

## SCHEDULE OF PAYMENTS

### EXHIBIT C.23 - LMR SUBSYSTEM BRIDGE WARRANTY

Services and System Description	Provider	Sites	Units	Service Period	Contract Sum - Payable Amount
<b>AMENDMENT NO. 104</b>					
Common Platform Subsystem, Narrowband Mobile Data Network (NMDN) Subsystem (Phase 1), and Backhaul Subsystem for Use with NMDN Subsystem (Phase 1)					
<b>COMMON PLATFORM ENVIRONMENTAL &amp; SITE SUPPORT ELEMENTS</b> <b>3rd Party Services</b>				<b>12 Months</b>	
Generator Extended Warranties	Cummins	42	42	(12 Months)	\$ 53,066
Generator Preventative Maintenance Contract (Annual)	Cummins	42	42	(12 Months)	\$ 64,561
Generator Extended Warranty (PMT)	Kohler	1	1	(12 Months)	\$ 1,010
Generator Preventive Maintenance Contract (PMT) (Annual)	Kohler	1	1	(12 Months)	\$ 1,088
Generator Extended Warranty (SPH)	Generac	1	1	(12 Months)	\$ 1,100
Generator Preventative Maintenance Contract (SPH) (Annual)	Generac	1	1	(12 Months)	\$ 1,650
Automatic Transfer Switches Extended Warranties	Cummins	44	86	(12 Months)	\$ 24,895
Solar System Preventative Maintenance Contract (PMT) (Annual)	ISC	1	1	(12 Months)	\$ 8,800
AQMD/AVAQMD Permit Renewals (Annual as due )	Various	42	42	(12 Months)	\$ 42,258
CUPA-CERS Inspections & Permit Renewals (Annual as due)	Various	50	50	(12 Months)	\$ 41,107
Fuel Polishing and Delivery System Inspection (Annual)	Amber/Dion	44	44	(12 Months)	\$ 98,800
DPF Filter Inspection/Cleaning (POM/RHT/RPVT/LASDTEM) (Annual)	Amber/Dion	4	4	(12 Months)	\$ 6,600
Fuel Tank Monitoring System Calibration (Annual)	JDS Tank	44	44	(12 Months)	\$ 41,580
Fuel Tank Testing – Day Tanks (LACF072/RHT) (Annual)	JDS Tank	2	2	(12 Months)	\$ 3,300
Fire Suppression System Re-Certification (Semi-Annual)	FPS	47	47	(12 Months)	\$ 106,590
Fire Extinguisher Insp. (3/site) (Annual) Included with FSS Re-Certification)	FPS	47	141	(12 Months)	\$ -
HVAC Systems Preventative Maintenance Contract (Semi-Annual)	Flynn Air	61	175	(12 Months)	\$ 138,771
DC Systems & Battery Plant Preventative Maintenance Contract (Annual)	SEPS	47	47	(12 Months)	\$ 44,550
UPS & Battery Plant Preventative Maintenance Contract (PLM) (Annual)	SEPS	1	1	(12 Months)	\$ 4,469
Site/Compound Weed Abatement (Semi-Annual)	Airwave	33	33	(12 Months)	\$ 58,080
Asset Management (InforEAM) System Licenses (1-1-23 to 12-31-23)	Motorola	1	-	(12 Months)	\$ 49,023
Nokia MPLS Extended Warranty: (3-15-23 to 11-14-23)	Nokia	63	204	(12 Months)	\$ 93,385
<b>Subtotal for Common Platform Subsystem:</b>					<b>\$ 884,683</b>
<b>NMDN-1 – RADIO MOBILE SUB-SYSTEM</b> <b>Motorola and OEM Provided Warranty Services</b>				<b>12 Months</b>	
Motorola Advanced Package Provided Services:					
--Network Monitoring	Motorola				
--Dispatch	Motorola				
--Remote Technical Support (Covered by Radio Mobile Warranty)	OEM				
--On-Site	Motorola				
--Board, FRU & Spares Support (Repair/Return covered by Radio Mobile Warranty)	Motorola/OEM				
--Annual Preventative Maintenance Inspection	Motorola				
--System Reporting	Motorola				
NMDN-1 RADIO MOBILE EQUIPMENT	Motorola/OEM				
--RadioMobile Master Site Equipment (2) IQ Mobile Servers	Motorola/OEM	1	2		
--RadioMobile Site Base Radios (Tait) (2) per RF Site	Motorola/OEM	14	28		
--RadioMobile Site Base Station Controllers (2) Per RF Site, (2) Test Bed	Motorola/OEM	14	28		
--RF Sites--RFDS/APM/TTA/Combiners//Multi-couplers/antennas/Lines,etc.	Motorola/OEM	14	-		
<b>Subtotal for Narrowband Mobile Data Network (NMDN) Subsystem (Phase 1):</b>					<b>\$ 29,400</b>
<b>BACKHAUL SITES IN USE WITH NMDN-1</b> <b>Motorola and OEM Provided Warranty Services</b>				<b>12 Months</b>	
Motorola Advanced Package Provided Services:				(12 Months)	
--Network Monitoring	Motorola			(12 Months)	
--Dispatch	Motorola			(12 Months)	
--Remote Technical Support (Covered by NEC Warranty)	OEM			(12 Months)	
--On-Site	Motorola			(12 Months)	
--Board, FRU and Spares Support (Repair/Return covered by NEC Warranty)	Motorola/OEM			(12 Months)	
--Annual Preventative Maintenance Inspection	Motorola/OEM			(12 Months)	
--System Reporting	Motorola			(12 Months)	

Services and System Description	Provider	Sites	Units	Service Period	Contract Sum - Payable Amount
NMDN-1 BACKHAUL Network Equipment:	Motorola/OEM			(12 Months)	
--NEC Microwave; (4) ODU RF Stations, with (4) Modems, per site	Motorola/OEM	38	152	(12 Months)	
--NEC Microwave Site Support Equipment, MW Dishes, Trans Lines, etc.	Motorola/OEM	-	-	(12 Months)	
--NOKIA MPLS – (MSI NMO/NOC/Field Support, OEM Extended Warranty for devices)	Motorola/OEM	38	152	(12 Months)	
--Network, Routing and Switches and SMMS and Orderwire Equipment	Motorola/OEM	-	-	(12 Months)	
Subtotal for NMDN Backhaul Subsystem (Phase 1):					\$ 153,600
Total for Amendment No. 104:					\$ 1,067,683
<b>AMENDMENT NO. 112</b>					
CORE and DSR Systems and Equipment, Digital Trunked Voice Radio Subsystem (DTVRS) Subsystem, Common Platform Backhaul Subsystem, Station B and Site on Wheels					
<b>CORE AND DSR SITE SYSTEMS AND EQUIPMENT</b>				<b>7.5 Months</b>	
Motorola Advanced Package Provided Services:					
--Network Monitoring	Motorola			(7.5 Months)	
--Dispatch	Motorola			(7.5 Months)	
--Remote Technical Support	Motorola			(7.5 Months)	
--On-Site	Motorola			(7.5 Months)	
--Board, FRU and Spares Support	Motorola			(7.5 Months)	
--Annual Preventative Maintenance Inspection	Motorola			(7.5 Months)	
--SUS/RSUS (Core, DSR and Dispatch Sites)	Motorola			(7.5 Months)	
--System Reporting	Motorola			(7.5 Months)	
CORE and DSR SITE SYSTEMS, including but not limited to:	Motorola			(7.5 Months)	
--Master Site M-3 Core and support equipment	Motorola			(7.5 Months)	
--DSR Site M-3 Core and support equipment	Motorola			(7.5 Months)	
--ISSI Servers	Motorola			(7.5 Months)	
--MOSCAD NFM RTU's	Motorola			(7.5 Months)	
--Network Management Clients	Motorola			(7.5 Months)	
--Firewalls	Motorola			(7.5 Months)	
--Syslog	Motorola			(7.5 Months)	
--Unified Event Manager	Motorola			(7.5 Months)	
--UNC	Motorola			(7.5 Months)	
--UCS/Provisioning Manager	Motorola			(7.5 Months)	
--ZSS/SSS Statistical Servers	Motorola			(7.5 Months)	
--Network, Routing and Switch Equipment	Motorola			(7.5 Months)	
<b>DTVRS (Digital Trunked Voice Radio Subsystem)</b>				<b>7.5 Months</b>	
Motorola Advanced Package Provided Services:					
--Network Monitoring	Motorola			(7.5 Months)	
--Dispatch	Motorola			(7.5 Months)	
--Remote Technical Support	Motorola			(7.5 Months)	
--On-Site	Motorola			(7.5 Months)	
--Board, FRU and Spares Support	Motorola			(7.5 Months)	
--Annual Preventative Maintenance Inspection	Motorola			(7.5 Months)	
--System Reporting	Motorola			(7.5 Months)	
--(22) Simulcast Prime Sites	Motorola			(7.5 Months)	
--(96) RF Sites: Simulcast Sub-Sites and ASR Sites	Motorola			(7.5 Months)	
--(775) GTR Stations	Motorola			(7.5 Months)	
--RF Sites--RFDS/APM/TTA/Combiners//Multi-couplers/antennas/Trans Lines, etc.	Motorola			(7.5 Months)	
--Network, Routing and Switch Equipment	Motorola			(7.5 Months)	
--(4) Dispatch Sites, MCC7500 and associated equipment	Motorola			(7.5 Months)	
--(10) AIS Servers	Motorola			(7.5 Months)	
--Convention Channel Gateways	Motorola			(7.5 Months)	
--NICE Logging Recorder Equipment (Core and DSR)	Motorola/OEM			(7.5 Months)	
<b>COMMON PLATFORM - BACKHAUL SYSTEMS AND SITES ADDED FOR SUPPORT OF THE DTVRS SYSTEM</b>				<b>(7.5 Months)</b>	
Motorola and OEM Provided Warranty Services					
Motorola Advanced Package Provided Services:					
--Network Monitoring	Motorola			(7.5 Months)	
--Dispatch	Motorola			(7.5 Months)	
--Remote Technical Support (Covered by NEC Warranty)	Motorola/OEM			(7.5 Months)	
--On-Site	Motorola			(7.5 Months)	

Services and System Description	Provider	Sites	Units	Service Period	Contract Sum - Payable Amount
--Board, FRU and Spares Support (Repair/Return covered by NEC Warranty)	Motorola/OEM			(7.5 Months)	
--Annual Preventative Maintenance Inspection	Motorola/OEM			(7.5 Months)	
--System Reporting	Motorola			(7.5 Months)	
BACKHAUL Network Equipment:	Motorola/OEM			(7.5 Months)	
--NEC Microwave; (4) ODU RF/(4) Modems per site (MSI NOC & Field Support Services)	Motorola/OEM	21	84	(7.5 Months)	
--NEC Microwave Site Support Equipment, Transmission Lines, etc.	Motorola/OEM	21	-	(7.5 Months)	
--NOKIA MPLS – (MSI NMO/NOC/Field Support, OEM Extended Warranty for equipment)	Motorola/OEM	21	44	(7.5 Months)	
--Network, Routing and Switches and SMMS and Orderwire Equipment	Motorola/OEM	21	-	(7.5 Months)	
<b>STATION B AND SITE ON WHEELS</b>				<b>7.5 Months</b>	
Motorola Advanced Package Provided Services:					T&M Basis - Refer to Exhibit C.20 (Repair and Restoration Services on a Time and Material Basis Line Item)
--Dispatch	Motorola			(7.5 Months)	
--Remote Technical Support	Motorola			(7.5 Months)	
--On-Site	Motorola			(7.5 Months)	
--Board, FRU and Spares Support	Motorola			(7.5 Months)	
--Annual Preventative Maintenance Inspection	Motorola			(7.5 Months)	
--(4) RF Sites, Simulcast Sub-Sites and ASR Sites	Motorola			(7.5 Months)	
--(29) GTR RF Stations	Motorola			(7.5 Months)	
--RF Sites – RFDS/APM/TTA/Combiners//Multi-couplers/antennas/Trans Lines, etc.	Motorola			(7.5 Months)	
--Network, Routing and Switch Equipment	Motorola			(7.5 Months)	
<b>Total for Amendment No. 112:</b>					<b>\$ 844,356</b>
<b>TOTAL FOR ALL LMR SUBSYSTEM BRIDGE WARRANTIES:</b>					<b>\$1,912,039</b>

**ATTACHMENT A TO LMR AMENDMENT NO. 112  
BRIDGE WARRANTY MAINTENANCE SERVICE TERMS AND CONDITIONS**

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Motorola Solutions Inc. ("Motorola") and the customer named in this Bridge Warranty Maintenance Service 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 Bridge Warranty Maintenance Service Terms and Conditions; the cover page for the Service Agreement or the Installation Agreement, as applicable; and any other attachments attached to Amendment No. 112, 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 Bridge Warranty services in support of the DTVRS, Core, DSR and Dispatch Site Warranty Support Plan and the balance of the Common Platform Sub-systems as referenced in Amendment No. 82 and cutover for beneficial use of those Sub-systems until LA-RICS Final System Acceptance, which includes what is set forth in the DTVRS, Core, DSR and Dispatch Site Warranty Support Plan dated 02/28/23.

## **SECTION 3. ACCEPTANCE**

Customer accepts these Maintenance Service Terms and Conditions and agrees to pay the prices set forth in the Agreement. The term of this Agreement begins on the "Start Date" indicated in an NTP issued by Customer.

## **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.

**ATTACHMENT A TO LMR AMENDMENT NO. 112  
BRIDGE WARRANTY MAINTENANCE SERVICE TERMS AND CONDITIONS**

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- 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 MSI has confirmed that all Equipment is in good working order on the Start Date or when additional equipment is added to the Agreement. MSI will maintain the equipment as described in the DTVRS, Core, DSR and Dispatch Site Warranty Support Plan, dated 02/28/23.
- If Equipment is lost, damaged, stolen or taken out of service. Customer's obligation to pay Service fees for this Equipment will terminate, unless it is replaced during the Bridge Warranty period.
- 4.5 Customer must specifically identify any Equipment that is labeled intrinsically safe for use in hazardous environments.
- 4.6 The DTVRS, Core, DSR and Dispatch Site dated 02/28/23 prescribes notification procedures for equipment failures and break fix remedies.

## **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, 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 of Equipment; Exhibit D, Section 6 "Exclusion of Implied Warranties" further defines Warranty Exclusions.

Motorola has no obligations for any non-Motorola provided transmission medium, such as telephone lines, computer networks, the internet or the worldwide web, or for Equipment malfunction caused by the transmission medium.

**ATTACHMENT A TO LMR AMENDMENT NO. 112  
BRIDGE WARRANTY MAINTENANCE SERVICE TERMS AND CONDITIONS**

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## **SECTION 6. TIME AND PLACE OF SERVICE**

Service will be provided at the location specified in this Agreement. When Motorola performs service at Customer's 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. The Hours of Service and Response times for services to be provided under this Bridge Warranty quote are defined in the DTVRS, Core, DSR and Dispatch Site dated 02/28/23. 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, per the DTVRS, Core, DSR and Dispatch Site Warranty Support Plan dated 02/28/23.

## **SECTION 8. INVOICING AND PAYMENT**

- 8.1 Motorola will bill the Customer on a monthly basis for the Bridge Warranty services agreement in support of the DTVRS, Core, DSR and Dispatch Site Systems. Motorola will submit a Work Acceptance Certificate ("WAC") for these Bridge Warranty services, and the Authority will accept a WAC and invoice from Motorola on a monthly basis subsequent to the delivery of services of the previous month. The invoice will be paid in accordance with the terms of the Agreement.
- 8.2 Customer affirms that a Notice to Proceed is required for this Bridge Warranty service contract and will appropriate funds through the contract end date. Motorola will invoice Customer in accordance with the invoice and payment terms contained in Section 8.1.
- 8.3 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. The Customer will pay all invoices as received from Motorola. At the time of execution of this Agreement, the Customer will provide all necessary reference information to include on invoices for payment in accordance with this Agreement.

**ATTACHMENT A TO LMR AMENDMENT NO. 112  
BRIDGE WARRANTY MAINTENANCE SERVICE TERMS AND CONDITIONS**

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**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, Customer's sole remedy is to require Motorola to re-perform 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**

Default and Terminations are addressed and governed by Agreement No. LA-RICS 007.

**SECTION 11. LIMITATION OF LIABILITY**

Limitation of Liability is addressed and governed by Agreement No. LA-RICS 007.

**SECTION 12. EXCLUSIVE TERMS AND CONDITIONS**

This Agreement and the Warranty Support Plan dated **02/28/23** 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.

**SECTION 13. PROPRIETARY INFORMATION; CONFIDENTIALITY; INTELLECTUAL PROPERTY RIGHTS**

Proprietary Information, Confidentiality and Intellectual Property Rights are addressed and governed by Agreement No. LA-RICS 007.

**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. The Warranty Support Plan and the service offerings included in the NMDN1 Bridge Warranty Scope address regulatory agency interaction and responsibilities by each party.



**ATTACHMENT A TO LMR AMENDMENT NO. 112  
BRIDGE WARRANTY MAINTENANCE SERVICE TERMS AND CONDITIONS**

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**SECTION 15. COVENANT NOT TO EMPLOY**

Intentionally omitted.

**SECTION 16. MATERIALS, TOOLS AND EQUIPMENT**

Intentionally omitted.

**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 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.



# LA-RICS DTVRS DIGITAL TRUNKED VOICE RADIO SYSTEM WITH CORE, DSR, AND DISPATCH SITES WARRANTY SUPPORT PLAN

LA-RICS – DTVRS, CORE AND DSR WARRANTY SUPPORT PLAN

| FEBRUARY 28, 2023



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**AGENDA ITEM A - ENCLOSURE**

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# LA-RICS DTVRS, CORE, DSR, DISPATCH SITES WARRANTY SUPPORT PLAN

## A. INTRODUCTION

Your Warranty and Customer Support Plan contains the details of the services provided during the DIGITAL TRUNKED VOICE RADIO SYSTEM, Core, DSR and Dispatch Sites warranty period.

All of the Common Platform equipment and systems and 38 sites of the, Microwave Backhaul and MPLS system equipment, sites, and the warranty coverage terms, Preventative Maintenance plans and response times, etc. are covered by the NMDN Phase-1 Warranty Support Plan and Bridge Warranty for NMDN Phase-1 that was approved and incorporated in contract Amendment 104. This plan further addresses the Common Platform equipment and systems and sites specific to the DTVRS, Core, DSR and Dispatch Sites and 20 additional sites of Microwave and MPLS backhaul subsystem specific to DTVRS. The subsystems and equipment covered under Amendment 104 are included in this plan for clarity and reference only.

### 1. Service Delivery Manager

The Service Delivery Manager (SDM), is LA-RICS primary point of contact within Motorola for management of the System Warranties and related Services. The SDM serves as the primary liaison who will work closely with LA-RICS Authority and Motorola's internal organizations including the Centralized Management Support Operations Center (CMSO), the Network Operation Center (NOC), the Service Desk and Call Centers, Factories, System Engineering, System Integration, the Field Service Organization (FSO), the Customer Support Manager (CSM) as well as the service support networks of the OEM's and third-party contractors.

The SDM assists with ensuring the contract deliverables related to warranty obligations are met. The SDM will coordinate service activities and ensure compliance with various warranty elements such as response and restoration time commitments, coordination of resources, management of emergency service efforts and escalation procedures, etc. Any changes to the information in this document should be communicated to your Service Delivery Manager as soon as possible.

<b>Phone:</b>	818-262-7434
<b>Email:</b>	rick.galindo@motorolasolutions.com

### 2. Customer Support Manager

The Motorola Customer Support Manager (CSM) works in concert with the SDM to ensure quality-of-service delivery and customer satisfaction. The CSM is responsible for warranty contract preparation, submission and renewal, and will assist with oversight and execution of the warranty and support agreements as well as the fostering of the customer relationship and continuous improvement of services.



<b>Phone:</b>	714-853-2012
<b>Email:</b>	rob.russell1@motorolasolutions.com

### 3. Account Manager

Your Account Manager serves as your contact for information on new products and services, expansion of communications to meet growth needs for your organization, and ensure your satisfaction.

<b>Phone:</b>	954-605-3762
<b>Email:</b>	jeff.ashton@motorolasolutions.com

### 4. Warranty Support Plan Assumptions and Considerations

Following is a list of assumptions and considerations used in development of the warranty support plan.

- Warranty services will be delivered per the Contract with notations.
- “Services” means those warranty support services described in this Warranty Support Plan.
- If Motorola is providing Services for Equipment, Manufacturer 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 Manufacturer will be followed.
- 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.

## B. WARRANTY AGREEMENT DETAILS AND LA-RICS CONTACT INFORMATION

Customer Number:	1036733196
Billing Tag:	0001
DTVRS, Core and DSR warranty start date:	At commencement of DTVRS, Core and DSR and Console Sites Beneficial Use. Currently forecasted for March 15, 2023.
DTVRS, Core and DSR warranty end date:	At System Final Acceptance currently forecasted for October 19, 2023

<b><u>Warranty - Service Agreement Information</u></b>	
Service Agreement number:	TBD



<b><u>Motorola Contact for Service Escalations:</u></b>	
Name:	Rick Galindo
Email:	rick.galindo@motorolasolutions.com
Phone:	818-262-7434

**DTVRS, Core, DSR and Dispatch Sites (including the Common Platform, Microwave and MPLS Backhaul Sites as referenced in contract Amendment 104 and the NMDN Phase-1 Warranty Support Plan)**

**LA-RICS Contacts for Incident Dispatch Notification Procedure:**

Telephonic notifications by the MSI NOC/Service Desk of Incident Alarms are not possible.

The MSI NOC / Service Desk will facilitate notifications of Incident Alarms via e-mail to the e-mail address provided below. These e-mail notifications are timely and in parallel to a dispatch of an Incident Alarm to the MSI-FSO Field technicians who would be responding. The information in those notifications would include at a high-level; the Incident opening and the timestamp, Site information, Priority Level, Alarm Description, Dispatch status, Incident Status and subsequent Incident Closure, etc.

The below process will be followed regardless of any other notification process that may be able to be implemented.

MSI's Field Technicians (FSO) will facilitate the placing of phone calls to FCCF and SCC ISD technicians at the phone numbers specified in the table below when they are dispatched to an Incident Alarm. The FSO technicians will work with the ISD techs to log and track dispatched Incidents and to provide a level of detail specific to the Incident response, i.e., the Incident Number, Incident Priority, Site, the description of the Incident/Alarm, the ETA to site, site arrival/entry, details of the findings related to the alarm, work progress, resolution status and to verify final resolution and subsequent Incident closure.

Note : The Common Platform Site list, including the Microwave and MPLS Backhaul sites and subsystems are also all referenced in this Warranty Support Plan. Some of those sites and elements are addressed in the NMDN Phase-1 Warranty Support Plan, the support warranty scope for those sites remains unchanged.

The additional Microwave backhaul sites that support the DTVRS, Core, DSR and Dispatch systems as well as the Core, DSR and Dispatch Sites have been added in this Warranty Support Plan.

<b><u>LA-RICS Contact for Incident Dispatch Notifications</u></b>	<b>Monday – Friday, 0600am to 1630pm</b>
Name:	<b>FCCF ISD TECHNICIAN</b>
Phone:	<b>(323) 881-6124</b>
<b><u>LA-RICS Contact for Incident Notifications</u></b>	<b>24-7</b>
Name:	<b>SCC ISD TECHNICIAN</b>
Phone:	<b>(323) 881-8229</b>
<b><u>LA-RICS E-mail Contact for ALL Incidents</u></b>	<b>LARICS.NOC@LA-RICS.ORG</b>



DTVRS, Core and DSR Contacts Authorized for MyView Portal Access and points of contact for reports/alerts/updates.

If ISD technicians cannot be reached, please use an order wire

**LA-RICS will be monitoring TBD ", Motorola has provided the MSI service teams with Motorola APX radios and has completed the LA-RICS Radio ID Request Form to allow programming of four (4) Motorola-provided radios onto the LA-RICS System for operation on the TBD " talkgroup for communications as needed, as 2/1/2023 we are awaiting LA-RICS assistance with programming as the System Key is required to perform programming.**

Name	Email	Phone
<b>LA-RICS TO PROVIDE</b>		
Scott England	Scott.England@fire.lacounty.gov	
Ted Pao	tpao@lasd.org	
Justin Compito	jcompito@televate.com	
May Yau	Myau@isd.lacounty.gov	
Alejandro Loya Garcia	Aloyagarcia@isd.lacounty.gov	
Raul Corona Jr	RCoronajr@isd.lacounty.gov	
Gilbert Sung	Gsung@isd.lacounty.gov	
Manuel Segovia	Msegovia@isd.lacounty.gov	
Hugo Ballesteros	Hballesteros2@isd.lacounty.gov	
Tom Makowski	Tmakowski@isd.lacounty.gov	
Charlie Adams's De Los Santos	CAdamesdelossantos@isd.lacounty.gov	
Eric Steinberger	Eric.steinberger@jacobs.com	For 1-year warranty period

## C. SERVICE DELIVERY MANAGEMENT/SERVICE DESK CONTACT INFORMATION

### How to Obtain Service for events outside of monitored alarm activity

Action	Information
Call the Network Operations Center (NOC) Service Desk for issues, requests, or concerns. <b>The NOC and Service Desk is staffed 24 hours per day, 365/366 days per year.</b>	<b>800-814-0601, or dispatch@motorolasolutions.co</b>
Provide Your Information	Caller Name Contact Phone Number Description of problem Severity of system problem determined at this time. Time available for call back Email address





Action	Information
Field Service Dispatching	Motorola Field Service Organization (FSO) is the primary first responder and will be dispatched for all field service activities and provide escort for third-party service providers.
Motorola Notification of Incident Activity	<p>The following persons will be notified when events occur and an Incident is created and dispatched by the Service Desk:</p> <p>Motorola LA-RICS Field Service Team: <b>FSO T8 DO099 CA-LARICS</b></p> <p><b>Smoke Alarms only:</b> The Motorola Service Desk will telephone LA County Fire Dispatch and notify them of the site and address information and the Smoke Alarm status. The Motorola LA-RICS Field Service Team is also notified via the Motorola MOSS dispatch application, SMS and email. For those alarms, the FSO team ID is: <b>FSO T8 DO099 CA-LARICS FIRE</b></p>
LARICS Notification Process	<p>MSI's Field Technicians (FSO) will facilitate the placing of a phone call to the FCCF / SCC ISD technicians at the phone numbers specified when they are dispatched to an Incident Alarm. The FSO technicians will work with the ISD techs to log and track dispatched Incidents and to provide a level of detail specific to the Incident response.</p> <p>Incident Number, Incident Priority, Site, description of the Incident/Alarm, Incident response timestamp, ETA to site, site arrival / entry, details of the findings related to the alarm, work progress, resolution status, and to verification of final resolution, and subsequent incident closure.</p>
Coordination of Incident Restoration	Motorola FSO personnel will respond and take appropriate action to restore the system, which may include dispatching and escorting of third-party servicers as needed to support Common Platform Equipment and systems. FRU's and/or spares utilized will be provided via Motorola's FRU and Spare equipment stock during the warranty period.
Verification Contact:	<b>FCCF ISD TECHNICIAN</b>
Monday – Friday 0600am to 1630pm	<b>(323) 881-6124</b>
Verification Contact:	<b>SCC ISD TECHNICIAN</b>
24-7	<b>(323) 881-8229</b>

## D. OVERVIEW OF SERVICES

This section briefly describes the services LA-RICS will receive during the DTVRS Warranty period.



## Warranty Support Services

Services	Included
Dispatch and Incident Management	√
Technical Support	√
DTVRS, Core, DSR and Dispatch Site Monitoring and Event Management	√
DTVRS, Core, DSR and Dispatch Site Infrastructure Repair and /Hardware Warranty Services	√
Common Platform System Monitoring and Event Management per contract Amendment 104	√
Common Platform Systems Repair and Warranty Services per contract Amendment 104	√
On-Site Incident Response and Management	√
DTVRS, Core, DSR, and Dispatch Site Preventative Maintenance	√
Common Platform Site Preventative Maintenance per contract Amendment 104	√
Customer Support Plan	√

## 1. Incident Management

Incident Management represents those standardized processes responsible for managing the lifecycle of all incidents. Incidents can be reported by users through the Service Desk function, or communicated directly through the interface from the Universal Event Management (UEM) tool to the Motorola Network Operations Center (NOC).

## Incident Management and Dispatch Service

Incident Management and Dispatch	Activity
24x7x365/366 availability	√
Coordination and tracking of incident activity to ticket	√
Dispatch of field technical personnel	√
Notification and escalation of customer and management personnel	√
Final resolution and incident closure	√
Root Cause analysis as requested by LA-RICS	√
Performance Reports and Documentation	√



## 2. Technical Support Operations

Technical Support Operations
<ul style="list-style-type: none"> <li>• Motorola Solutions</li> <li>• Aviat (NEC Microwave)</li> <li>• Nokia MPLS</li> <li>• Nokia Microwave (3) Sites per Amendment 110</li> <li>• Sub-System OEM's</li> <li>• NICE</li> </ul>

Motorola's Field Service Organization will utilize the Technical Support Operations (TSO) services provided by Motorola for the DTVRS, Core, DSR, and Dispatch Sites and the Sub-System OEMs for the Common Platform sub-systems; including but not limited to; Microwave: (Aviat/NEC) and (Nokia), and MPLS: (Nokia), Logging Recorders: (NICE). Telephone technical support is available 24x7x365/366 to assist with response to technical issues and questions regarding deployed systems. Motorola Field Service personnel who perform warranty services on the system shall have completed required manufacturer-approved training and specialize in the diagnosis and resolution of system performance issues. The OEM technical operations teams will provide troubleshooting guidance over the telephone and work with the Field Service technicians to affect an efficient resolution to the system issue. When remote access is available, the technologists will connect to the affected system to troubleshoot and restore the network as quickly and efficiently as possible.

Motorola will perform the activities to deliver technical support services as shown in the table below.

**Technical Support Service**

Technical Support Operations	Activity
Respond to requests for technical support for the restoration of failed systems and diagnosis of operation problems.	√
Determine additional requirements for issue characterization, restoration, including providing a known fix for issue resolution when available.	√
Coordinate technical resolutions with agreed upon third-party vendors as needed.	√
Escalate and manage support issues, including systemic issues, to Motorola engineering and product groups, as applicable.	√
Provide configuration change support and workflow changes to systems that have remote access capability.	√
Determine when a case requires more than the technical support services described here and notify customer of an alternative course of action.	√
Escalate issue to Motorola and third-party Technical Support Operations.	√



### 3. Monitoring and Event Management

There are several Event Monitoring systems that monitor the health and fault conditions of the various systems and equipment that comprise the DTVRS, Core, DSR and Dispatch sites, as well as the elements that comprise the Common Platform support systems equipment, including Microwave and MPLS Backhaul systems.

Event monitoring for the DTVRS, Core, DSR and Dispatch Site systems is done via the Universal Event Manager (UEM) and events are sent to the Motorola NOC. The Nokia MPLS system can be monitored locally via the Service Aware Manager (SAM). The SMMS and T/MON Systems monitor the support elements and site environmental equipment as well as the NEC Microwave system. The UEM also provides the alarm monitoring gateway to the centralized Event Management Services as described below.

The Centralized Monitoring service provides active monitoring of the overall health of the network through alarms and events, and collects and analyses system generated messages in order to detect possible problems to the network and or network elements.

Event Management focuses responding to events as quickly as possible, ensuring early detection of potential impacts to service quality. This ensures all the events are analyzed and categorized to determine the appropriate control actions, and providing information to support other business processes.

#### 3.1 Network Monitoring

Located in Schaumburg, Illinois, Motorola's Network Operations Center (NOC) is the heart of the Centralized Management Support Operations Center (CMSO). The systems described will be monitored 24 hours per day and 7 days per week and 365/366 days a year. The systems are proactively and continuously monitored for activities and events. An event, once detected, is forwarded to the Technical Support Operations (TSO) teams where highly trained system technologists acknowledge the event, run available diagnostic routines (if applicable), and initiate the appropriate response. Motorola's enterprise-oriented system supervisory tools provide a complete view of the status of the system and are configured to monitor all Motorola-supplied network equipment. Once an event or activity is received at the NOC, the TSO system technologist will forward the incident to the Service Desk operations team and place the incident in the applicable priority status.

For the monitored DTVRS, Core, DSR and Dispatch Site Sub-Systems and the Common Platform Systems (defined as all Site Improvement Work for the Subsystem, including but not limited to Phase-2 Site civil infrastructure for the entire Site, Phase-3 and Phase-4 equipment implementations, backhaul links, and system management and monitoring applications required for the Subsystem operation) the NOC may forward alarm incidents directly to the Service Desk for dispatch to the Motorola Field Service team for appropriate response and action. The dispatch system is continuously monitored for status throughout the troubleshooting and repair process.

#### Alarm Thresholds for DTVRS, Core, DSR and Dispatch Site Sub-System Alarms

Standard Threshold
<p>An incident will be triggered if an event fulfills one of the two following criteria:</p> <ul style="list-style-type: none"> <li>▪ Event occurs 5 times in 30 minutes.</li> <li>▪ Event causes 10 minutes of continuous downtime for a monitored component.</li> </ul>

The CMSO NOC agent assigns a priority level to an incident, then initiates a response in accordance with the Warranty Support Plan. Depending on the incident, Motorola Solutions' response may include continued monitoring for further incident development, remote remediation by technical



support, dispatching a field service technician, or other actions Motorola Solutions determines necessary.

To prevent duplicate incidents from being generated by the same root cause, Motorola Solutions employs an auto triage process that groups related incidents. The auto triage process therefore automatically assigns grouped incidents to a field service technician, enabling the resolution of these incidents together if the root alarm has been addressed.

The table below defines the DTVRS, Core, DSR, Dispatch Site and Common Platform elements, including the Microwave and MPLS Backhaul systems monitored at the NOC:

**DTVRS, Core, DSR and Common Platform Site Alarms and Network Monitoring Components**

System Components	Monitored
DTVRS Simulcast Prime Sites, Simulcast Sub-Sites, ASR Remote Sites	√
RFDS, Advanced Power Monitors and TTA's	√
MCC7500 Dispatch Equipment and Sites	√
Conventional Channel Gateways (CCGW's)	√
AIS Servers and NICE Logging Recorder Equipment (Core and DSR Sites)	√
Network, routing and switch equipment	√
Common Platform Sites that Support NMDN-1 and DTVRS, Core and DSR Systems	√
NEC Microwave and Nokia MPLS Backhaul	√
SMMS and DPS T/MON Site / Environmental Monitoring Systems and Sensors	√
DPS Orderwire Equipment	√
Generator Equipment, ATS and Fuel Tanks and Tank Monitoring Systems (1)	√
DC/Inverter/Battery System alarms	√
HVAC and EVS Systems	√
Fire Suppression Systems	√
Tower Light controllers/beacons four sites: (FCCF, LASDTEM, MLM, BJM),	√
Shelters, Shelter Doors and Site Support Equipment Alarms	√

**(1) Exceptions for monitoring of roll-up generators, ATS and fuel tanks for the BUR1, GRM and SPN/MCI Sites are defined in Section 6.**

**Note: Network Monitoring Operations will monitor alarm activity provided through microwave backhaul system. The detailed lists of monitored alarms is detailed beginning in Section F.**



**DTVRS, Core, DSR, Dispatch and Common Platform Infrastructure Repair and Hardware Warranty Program**

Hardware Warranty Support Plan	Activity
Determine root cause of problem and provide report to LA-RICS within 20 days	√
Restore or replace failed units or equipment with Field Replaceable Units (FRU's) or spare inventory. Spares may include Motorola owned spares equipment and Advance Replacement equipment provided by Motorola or other Common Element System OEM's. Replacement Equipment and FRU's may be new or refurbished during the warranty. Pursuant to the contract provisions; during the warranty period if a customer owned spare or FRU is permitted to be used the item will be replaced with a new, not refurbished item that is then returned to the LA-RICS spares inventory within 15 days.	√
Ship failed unit to/from Motorola repair facility, or ship to third party service provider	√
Perform operational check on failed unit	√
Repair or replace infrastructure equipment	√
Verify infrastructure equipment is operating to manufacturer specifications	√
Perform system test on all select manufacturer equipment, as needed	√
Return repaired item to the Motorola owned spares inventory. If customer spare was utilized item is replaced with a new item and is returned to LA-RIC's spares inventory.	√
Update Asset Management and System Documentation pursuant to the contract provisions as applicable.	√

## 4. On-Site Incident Management

Motorola's On-Site Incident Management service is triggered by a dispatch initiated by the Network Operations Center (NOC) and Service Desk. It provides incident management and technical service support to enable on-site incident resolution. The service is delivered in conjunction with Motorola Field Service Organization (FSO) technicians. They are responsible for providing On-Site support through the On-Site Incident Management process based upon response and resolution times.

## 5. Motorola Field Service Organization (FSO) Los Angeles Area Personnel

The Los Angeles Area FSO technical team consists of 14 technicians geographically located throughout the greater Los Angeles Area. Three of the team will have primary responsibility for response for the LA-RICS LMR system with back-up and coverage available on an as-needed basis from area team members. In the event of a disaster or other emergency, additional technical resources from other western region FSO technical teams can be called upon to augment the local resources as-needed.

The FSO teams will be equipped with appropriate service and test equipment. The test equipment will be maintained and calibrated based upon the equipment manufacturer's specified calibration schedules.

The local service team will also have at their disposal Motorola and OEM engineering support services and personnel which will be available during the warranty period as-needed to support the covered systems, sub-systems and equipment.



Los Angeles Area FSO Technicians	
Geographic Area	Headcount
(LA) North County	2
(LA) San Fernando Valley Area	2
(LA) Metro Area	2
(LA) East County Area	2
San Bernardino County	4
Riverside County	1
Orange County	1
LA-RICS FSO Technicians	
Technician Name	Current Badging
Norma Moscoso	LASD (Y), JCC (Y) LACOFD (Y)
Tony Harris	LASD (Y), JCC(Y) LACOFD (Y)
Paul K. Yaros	LASD (Y), JCC (Y) LACOFD (Y)
Robert Alvarado	LASD PENDING, JCC (Y), LACOFD PENDING

## 6. DTVRS, Core, DSR, Dispatch, Common Platform and Microwave and MPLS Backhaul Site Codes and Names

Site Code	Site Name	Site Code	Site Name
AGH	Agoura Hills	MDI	Mount Disappointment
APC	Airport Courthouse	MIR	Mirador
BHS	Baldwin Hills	MLM	Mira Loma Detention Facility
BJM	Black Jack Mountain	MMC	Mount McDill
BKK	BKK Landfill	MML	Magic Mountain Link
BMT	Bald Mountain (3)	MTL2	Mount Lukens 2 (3)
BUR1	Burnt Peak 1 (1)	MVS	LA Sheriff Monte Vista Star Center (3)
CCB	Compton Courthouse	OAT	Oat Mountain
CCT	Criminal Courts Building	ONK	Oat Nike
CLM	Claremont	PHN	Puente Hills (3)
CPK	Castro Peak	PLM	LA Sheriff Palmdale Station
CRN	Cerro Negro	PMT	Pine Mountain (3)
CTYWLK	City Walk (3)	POM	Pomona Courthouse (3)
DPK	Dakin Peak	PRG	Portal Ridge
DPW38	Dept. of Public Works Pump Sta 38	RHT	Rolling Hills Transmit
ESR	East Sunset Ridge (3)	RIH	Rio Hondo (3)
FCCF	Fire Command and Control Facility	RPVT	Rancho Palos Verdes Golf Course





Site Code	Site Name	Site Code	Site Name
FRP	Frost Peak	SCC	Sheriff Command Center
GMT	Grass Mountain (3)	SDW	San Dimas Water Tank (3)
GRM	Green Mountain (1)	SGH	Signal Hill
HPK	Hauser Peak	SPN	Saddle Peak (1) (2) (3)
INDWT	Industry Water Tank (3)	TOP	Topanga
JPK2	Johnstone Peak 2	TPK	Tejon Peak
LACF072	LA County Fire Station 72 (3)	TWR	Tower Peak
LACFDEL	LA County Fire Station Del Valle (3)	UCLA	UCLA Factor Building
LAN	LA Sheriff Station Lancaster	UNIV	Universal Studios (3)
LARICS HQ	LA-RICS Headquarters	VPK	Verdugo Peak (3)
LASDTEM	LA Sheriff Temple Station	WMP	Whittaker Middle Peak
LDWP243	LA Dept. of Water & Power Sta 243 (3)	WTR	Whittaker Ridge
LPC	Loop Canyon (3)		

**Note (1):** The Emergency Power Back-Up Generator subsystems and fuel tanks are non-operational at the BUR-1 and GRM sites and were not provided by Motorola for the SPN site. The sites are utilizing roll-up Generators and Fuel Tanks and Fuel provided by the LA-RICS Authority and are not monitored by Motorola. Amendment 92 to the LMR Contract Sections 6 (subsections: 6.3 and 6.4) and Section 8 (subsections: 8.2, 8.3 and 8.4) detail the specifics related to the BUR-1 and GRM sites.

**6.3** The Parties agree that, when permanent commercial power becomes available at the BUR1 and the GRM site, the initial startup generator commissioning will be provided by Cummins, the generator supplier, at a date to be determined between Cummins and the Authority. The Parties further agree that Contractor has prepaid Cummins for these initial startup generator commissioning services, and that the generators have a two (2) year base warranty, which is referenced as follows:

- (i) BUR1 – Generator's Serial Number L200852199 and starts 18 months from the delivery date of 12/17/2020 or upon start up, whichever occurs first. Based on the delivery date of 12/17/2020, the 2-year base warranty end date is 6/17/2024.
- (ii) GRM – Generator's Serial Number J200832561 and starts 18 months from the delivery date of 11/6/2020 or upon start up; whichever occurs first. Based on the delivery date of 11/6/2020, the 2-year base warranty end date is 5/6/2024.

**6.4** The BUR1 and GRM generator and fuel tank and associated equipment and infrastructure required for an emergency backup subsystem (e.g. standby generator/fuel tank/ATS) shall continue to be included in Contractor's one-year warranty after Subsystem acceptance, but only if the emergency backup system is put into service before the one-year warranty period; and contingent upon inspection and approval by Contractor of the emergency backup system at the time of commissioning.





- 8.2 Contractor assumes that portable roll-up generators in conjunction with the DC Power System (battery bank) shall provide uninterrupted, interim primary electrical power at the BUR1 and the GRM sites. The Authority agrees that roll-up generators will run continuously except for planned generator swap outs and short maintenance that shall not exceed 4 hours of battery runtime. LA-RICS shall provide Contractor with a 48-hour written notice prior to generator maintenance or other shutdown.
- 8.3 The Contractor assumes, and the Authority agrees that the Authority shall be solely responsible for servicing, maintaining, monitoring, and operating portable roll-up generators through Final System Acceptance and Phase 5 LMR System Maintenance of the LA-RICS Project.
- 8.4 The Contractor assumes, and the Authority agrees, that the Authority shall be responsible for any and all risks and liability arising from the use of portable roll-up generators for interim primary power, including but not limited to, builders risk of loss or damage to equipment or site infrastructure, warranty, EPA emission levels, noise ordinances, and compliance with any Federal, State or local environmental laws.

Note (2) Specific to the environmental/shelter related equipment for the SPN Site (formerly MCI), Contract Amendment 85 and Attachment A define the specifics of the SPN site and the provisioning and installation of Phase-2 related equipment. With the exception of the DC Plant and Batteries which Motorola provided and installed, LA-RICS provided and installed the balance of the Phase-2 equipment as defined in the Amendment. Motorola agreed to monitor the equipment depicted in the table below which denotes the equipment/systems that Motorola is responsible to monitor or maintain and the equipment that LA-RICS is responsible to repair and maintain. Note that any generators, fuel tanks or ATS equipment at SPN is excluded from what Motorola is responsible to monitor or maintain.

For the included monitored elements shown in the table below, Motorola will notify the personnel that LA-RICS specifies as to monitored alarm events requiring attention.

In addition, LA-RICS is responsible for any and all environmental permits, including but not limited to the AQMD, CUPA and CERS permit renewals and inspections as well as compliance with EPA emission levels, noise ordinance(s), and compliance with any Federal, state and/or local environmental laws.

ENVIRONMENTAL MONITORED SYSTEMS	MONITORED BY MOTOROLA (Y/N)	ENVIRONMENTAL EQUIPMENT	RESPONSIBLE FOR SERVICE	CONTACT FOR SERVICE
Door Entry	Y	Two Entry Doors	MSI	MSI
DC Power/Battery Plant	Y	DC Plant/Batteries	MSI	MSI
FSS Smoke/Hydrogen Detection	Y	Fire Suppression System	LA-RICS	LA-RICS
HVAC Controller/Thermostat	Y	HVAC Controllers	MSI	MSI
HVAC Units	Y	HVAC Units	LA-RICS	LA-RICS
TVSS 1 and TVSS 2	Y	TVSS Units	LA-RICS	LA-RICS
Generator(s)	N	Generators	LA-RICS	LA-RICS
ATS	N	ATS	LA-RICS	LA-RICS
Fuel Tank(s)	N	Fuel Tanks	LA-RICS	LA-RICS
NetGuardian	Y	NG480	MSI	MSI
DPS VOIP	Y	VOIP System	MSI	MSI

Note (3) Denotes sites with the additional Microwave and MPLS Backhaul added for support of the DTVRS subsystem specifically. The Microwave and MPLS backhaul was not part of the NMDN-1 Bridge Warranty approved under Amendment 104. Coverage of the Microwave and MPLS has been quoted separately in the DTVRS Bridge Warranty quote submitted via Prolog dated: 1-13-2023.

NOTE: The Demarcation point for all monitored alarm sensors and relays is the SMMS Punchblocks.



## 7. Severity Definitions (From LA-RICS Contract Exhibit B.1)

### Contract Sections:

**4.9.1.30. A Severity Level 1** problem is a major system Deficiency and is defined as one that results in the inability of any portion of the LMR System to conduct business as usual. This includes, but is not limited to:

- 4.9.1.30.1. Loss of Master Site or switchover to Backup Master Site.
- 4.9.1.30.2. Loss of one Master Controller or switchover to Redundant Master Controller.
- 4.9.1.30.3. Master Site LAN/WAN/Audio Distribution Equipment Failure.
- 4.9.1.30.4. Loss of one Simulcast Trunking Controller or switchover to Redundant Simulcast Trunking Controller.
- 4.9.1.30.5. Failure resulting in any Simulcast sub-system reverting to Site-Trunking.
- 4.9.1.30.6. Loss of two (2) or more System Manager/Alarm Terminals.
- 4.9.1.30.7. If purchased from Contractor, loss of two (2) or more Dispatch Consoles or loss of one (1) Dispatch Console where only one (1) exists.
- 4.9.1.30.8. Loss of Full-Featured Dispatch capability (revert to RF Dispatch control).
- 4.9.1.30.9. Logging Recorder or Interface failure.
- 4.9.1.30.10. Microwave system failure resulting in path switch or revert to standby radio.
- 4.9.1.30.11. Loss of Simulcast or Multicast Repeater site.
- 4.9.1.30.12. Repeater Site Antenna System Failure adversely affecting multiple channels.
- 4.9.1.30.13. Any component or module failure which results in loss of 20% or more of trunked channel resources.
- 4.9.1.31. If users on the LMR System report a Severity Level 1 problem, the Authority will notify the Contractor and the remediation of the problem will occur based on the Severity Level 1 timetable

**4.9.1.32. A Severity Level 2** problem is a minor system malfunction and is defined as, one in which some system features are inoperative but LA-RICS is able to conduct its business as usual. This includes, but is not limited to:

- 4.9.1.32.1. Loss of single Repeater, loss of one (1) System Manager/Alarm Terminal.
- 4.9.1.32.2. Loss of one (1) Dispatch Console (except where a location only has one (1) console), or any component or module failure that results in loss of the availability of a single trunked channel resource.
- 4.9.1.32.3. If users on the LMR System report a Severity Level 2 problem, the Authority will notify the Contractor and the remediation of the problem will occur based on the Severity Level 2 timetable.

**4.9.1.33. A Severity Level 3** is defined as any type non-emergency, non-user effecting problem, including but not limited to:

- 4.9.1.34. Questions or inquiries on system upgrades or intermittent problems.
- 4.9.1.35. Questions or inquiries on system problems currently being monitored.
- 4.9.1.36. Questions or inquiries regarding parts or work to be performed later.
- 4.9.1.37. Any failure of a component of the System Management and Monitoring Subsystem, Inventory and Maintenance subsystem, or other supporting systems, where such failure does not rise to the level of Severity Level 1 or 2.

**4.9.1.38. A Severity Level 4** is defined as scheduled maintenance or upgrades.

**4.9.1.39.** Scheduled maintenance and/or upgrades will be conducted during off-peak hours and approved by the Authority.



## 8. Contract Severity Level to Motorola Priority Level Conversion Table

Severity Level to Motorola Priority Level	
Severity Level	Motorola Incident Priority Level
Severity Level-1	Critical P1
Severity Level-2	High P2
Severity Level-3	Medium P3
Severity Level-4	Low P4

## 9. Response Timetables

System	Priority Telephone Response	Priority Technical Support and/or Field Dispatch	On-Site Response	Restoration
Severity Level-1 Major System issue(s) as defined in Contract Exhibit (B.1) Section 4.9.1.30 referenced above.	T=5 minutes	Major Alarm :Critical P1 Within T=15 minutes	Within T=2 hrs	Restoration Time T=6 hrs
Severity Level-2 Minor System issue(s) as defined in Contract Exhibit (B.1) Section 4.9.1.32 referenced above.	T=5 minutes	Minor Alarm: High P2 Within T=60 minutes	Within T=4 hrs	Restoration Time T=24 hrs, *- Please reference approved Amendment 104 which covered response and restore times as stated here.
Transport Network (Microwave and MPLS)	T=5 minutes	Major Alarm: Critical P1 Within T=15 minutes  Minor Alarm: High P2 Within T=60 minutes	Within T=2 hrs  Within T=4hrs	Restoration Time T=6 hrs  Restoration Time T=24 * Please reference approved Amendment 104 which covered response and restore times as stated here.
System LAN/WAN Equipment/Switches	T=5 minutes	Major Alarm: Critical P1 Within T=15 minutes  Minor Alarm: High P2 Within T=60 minutes	Within T=2 hrs  Within T=4 hrs	Restoration Time T=6 hrs  Restoration Time=24 hrs * Please reference approved Amendment 104 which covered response and restore times as stated here.



System	Priority Telephone Response	Priority Technical Support and/or Field Dispatch	On-Site Response	Restoration
Fire Suppression (Smoke Detect Alarm-Dispatch to LA County Fire and FSO). <b>Note (2) Reference SPN</b>	T=5 minutes	All Smoke Detect Alarms: Critical P1 / Within T=15 minutes	Within T=2 hrs	Restoration T=6 hrs
Critical Common Platform Equipment; Shelter / Equipment Room Subsystems-TVSS, FSS, HVAC, EVS, Generator/ATS, etc <b>Note (1) (2) reference Generators/ATS at BUR1, GMT, SPN.</b>	T=5 minutes	High P2 Within T=60 minutes	Within T=4 hrs	Restoration T=24 hrs <ul style="list-style-type: none"> <li>• Please reference approved Amendment 104 which covered response and restore times as stated here.</li> </ul>
Door Alarms <b>Note (3)</b>	T=5 minutes	High P2 within T=60 minutes	Within T=4 hrs	N/A
Emergency Power Systems; DC Power Plant/Batteries <b>Note (2) Reference SPN</b>	T=5 minutes	Critical P1 / Within T=15 minutes	Within T=2 hrs	Restoration T=6 hours
Tower Lighting System (FCCF, LASDTEM, MLM, BJM,) LADWP243	T=5 minutes	High P2 Within T=60 minutes NOTAM initiated with FAA / FCC rules. Please reference approved Amendment 104 which covered response and restore times as stated here.	Within T=4 hrs	Restoration T= hrs; weather permitting  Reference U.S. Department of Transportation Federal Aviation Administration ADVISORY CIRCULAR AC 70/7460-1M and reference approved Amendment 104 which covered response and restore times as stated here.



System	Priority Telephone Response	Priority Technical Support and/or Field Dispatch	On-Site Response	Restoration
Tower Systems; Antennas, Transmission Lines, TTA's and RFDS	T=5 minutes	Critical P1 Within T=15 Minutes	Within T=2 hrs	Restoration T=6 hrs for ground level equipment. Tower climb related work restore within T=48 hrs; based on soonest tower crew availability and weather conditions.
System Interfaces Equipment, SMMS / T/MON Monitoring Systems / Sensors	T=5 minutes	Medium P3 / Within T=8 hrs	Standard Business Day Within T=8 hrs	Restoration T=24 hrs
Questions and Inquiries	T=5 minutes	Medium P3 Standard Business Day / Within T=8 hrs	Standard Business Day Within T=8 hrs	N/A
Non-Critical Shelter Systems (Lighting, etc).	T=5 minutes	Low P4 Standard Business Day T=24 Hours	Standard Business Day T=24 hrs	Restoration T=24 hrs
Scheduled PM's and upgrades	N/A	Low P4 Standard Business Day T=24 hours	As scheduled	N/A

**Note (1):** The Emergency Power Back-Up Generator subsystems and fuel tanks are non-operational at the BUR-1 and GRM sites and were not provided by Motorola for the SPN site. The sites are utilizing roll-up Generators and Fuel Tanks and Fuel provided by the LA-RICS Authority and are not monitored by Motorola. Amendment 92 to the LMR Contract Sections 6 (subsections: 6.3 and 6.4) and Section 8 (subsections: 8.2, 8.3 and 8.4) detail the specifics related to the BUR-1 and GRM sites.

**6.3** The Parties agree that, when permanent commercial power becomes available at the BUR1 and the GRM site, the initial startup generator commissioning will be provided by Cummins, the generator supplier, at a date to be determined between Cummins and the Authority. The Parties further agree that Contractor has prepaid Cummins for these initial startup generator commissioning services, and that the generators have a two (2) year base warranty, which is referenced as follows:

(iii) BUR1 – Generator's Serial Number L200852199 and starts 18 months from the delivery date of 12/17/2020 or upon start up, whichever occurs first. Based on the delivery date of 12/17/2020, the 2-year base warranty end date is 6/17/2024.

(iv) GRM – Generator's Serial Number J200832561 and starts 18 months from the delivery date of 11/6/2020 or upon start up; whichever occurs first. Based on the delivery date of 11/6/2020, the 2-year base warranty end date is 5/6/2024.

**6.4** The BUR1 and GRM generator and fuel tank and associated equipment and infrastructure required for an emergency backup subsystem (e.g. standby generator/fuel tank/ATS) shall continue to be included in Contractor's one-year warranty after Subsystem acceptance, but only if the emergency backup system is put into service before the one-year warranty period; and contingent upon



inspection and approval by Contractor of the emergency backup system at the time of commissioning.

- 8.2 Contractor assumes that portable roll-up generators in conjunction with the DC Power System (battery bank) shall provide uninterrupted, interim primary electrical power at the BUR1 and the GRM sites. The Authority agrees that roll-up generators will run continuously except for planned generator swap outs and short maintenance that shall not exceed 4 hours of battery runtime. LA-RICS shall provide Contractor with a 48-hour written notice prior to generator maintenance or other shutdown.
- 8.3 The Contractor assumes, and the Authority agrees that the Authority shall be solely responsible for servicing, maintaining, monitoring, and operating portable roll-up generators through Final System Acceptance and Phase 5 LMR System Maintenance of the LA-RICS Project.
- 8.4 The Contractor assumes, and the Authority agrees, that the Authority shall be responsible for any and all risks and liability arising from the use of portable roll-up generators for interim primary power, including but not limited to, builders risk of loss or damage to equipment or site infrastructure, warranty, EPA emission levels, noise ordinances, and compliance with any Federal, State or local environmental laws.

Note (2) Specific to the environmental/shelter related equipment for the SPN Site (formerly MCI), Contract Amendment 85 and Attachment A define the specifics of the SPN site and the provisioning and installation of Phase-2 related equipment. With the exception of the DC Plant and Batteries which Motorola provided and installed, LA-RICS provided and installed the balance of the Phase-2 equipment as defined in the Amendment. Motorola agreed to monitor the equipment depicted in the table below which denotes the equipment/systems that Motorola is responsible to monitor or maintain and the equipment that LA-RICS is responsible to repair and maintain. Note that any generators, fuel tanks or ATS equipment at SPN is excluded from what Motorola is responsible to monitor or maintain.

For the included monitored elements shown in the table below, Motorola will notify the personnel that LA-RICS specifies as to monitored alarm events requiring attention.

In addition, LA-RICS is responsible for any and all environmental permits, including but not limited to the AQMD, CUPA and CERS permit renewals and inspections as well as compliance with EPA emission levels, noise ordinance(s), and compliance with any Federal, state and/or local environmental laws.

ENVIRONMENTAL MONITORED SYSTEMS	MONITORED BY MOTOROLA (Y/N)	ENVIRONMENTAL EQUIPMENT	RESPONSIBLE FOR SERVICE	CONTACT FOR SERVICE
Door Entry	Y	Two Entry Doors	MSI	MSI
DC Power/Battery Plant	Y	DC Plant/Batteries	MSI	MSI
FSS Smoke/Hydrogen Detection	Y	Fire Suppression System	LA-RICS	LA-RICS
HVAC Controller/Thermostat	Y	HVAC Controllers and Units	LA-RICS	LA-RICS
TVSS 1 and TVSS 2	Y	TVSS Units	LA-RICS	LA-RICS
Generator(s)	N	Generators	LA-RICS	LA-RICS
ATS	N	ATS	LA-RICS	LA-RICS
Fuel Tank(s)	N	Fuel Tanks	LA-RICS	LA-RICS
NetGuardian	Y	NG480	MSI	MSI
DPS VOIP	Y	VOIP System	MSI	MSI

Note (3) Door Alarms: LA-RICS will supply information on all sites where entry will be made by non-Motorola personnel. All such non-Motorola personnel will need to open a Change Request (CRQ) with the Motorola Service Desk/NOC for a "Site Visit" before entry to the shelter is made so that the door alarm is





suppressed and is not dispatched out for a field response. The CRQ process is defined in the Change Management section of this Warranty Plan.

Motorola shall verify dispatch for door based alarms with the LA-RICS NOC prior to dispatching. In addition, costs incurred by Motorola for an on-site response to sites for Door Alarm that was caused as the result of access being made without a CRQ will be billed to LA-RICS on a Time and Material Basis.

Motorola understands and acknowledges LA-RICS desire to meet to address and develop a site access table. LA-RICS is the owner and holder of the Site Access agreements for all of the sites, as such, LA-RICS needs to define the access procedures for each site. Motorola will collaborate on the access list with LA-RICS, and will cooperate with LA-RICS to provide documentation needed allow for badging or access by Motorola service personnel. Once LA-RICS defines the site access document and it is agreed upon we can incorporate it into the support plan. \* add an exhibit to this plan which contains all of the site access instructions for each site. LA-RICS as of 1-27-2023 has not provided the Site Access plan to Motorola for review or inclusion as an attachment to this Warranty Support Plan. Upon receipt and mutual agreement of a plan it will be incorporated herein.

### SPECIFIC SITE RESPONSE / RESTORATION TIME LIMITATIONS:

Motorola will consult with LA-RICS regarding site access issues, but Motorola is not responsible for alternative transportation to any site. Alternative transportation is defined as that which will allow safe transportation of personnel and equipment to a site not accessible by a standard four-wheel drive vehicle, this may include non-commercial helicopter, non-commercial Snowcat, non-commercial boat transportation, etc., made available to Motorola at no cost to Motorola.

#### Specific Sites with access issues:

- **CATALINA ISLAND SITES: BJM (Blackjack) DPK (Dakin Peak), TWR (Tower Peak):** Motorola will make commercially reasonable efforts to meet the response/restore timetables for service incidents. Motorola shall maintain a four-wheel drive vehicle to access the Catalina Sites. The Catalina Island sites and transportation to the island is dependent upon commercial ferry service which is not available on a 24/7 basis. Pursuant to Section 6.3 and Section 4.4.2 of the Base Agreement, Motorola is not responsible for response time delays to perform warranty or Phase 5 Maintenance work caused by LA-RICS. Upon receipt of an on-site dispatch Motorola will book the first available passage to the island including but not limited to other non-commercial means such as by LAcoFD, or LASD, etc. Non-Commercial means provided by LA County Fire or LA County Sheriff, if provided, will be at no cost to Motorola. Motorola has placed a permitted Service Vehicle on the island which is available for immediate use once on Catalina Island.
- **FRP (Frost Peak):** This site is reliant upon an access road controlled by the U. S. Forest Service and the Mountain High Ski Resort. During the winter months and snow/ski season the access road is closed due to its' traversing of the ski slopes. Closure prevents access to the site. While the Resort does have a Snowcat, communications from the Mountain High Ski Resort have confirmed to Motorola that they do not provide rides nor allow use by outside parties in the Snowcat. If LA-RICS is able to negotiate an agreement with the Mountain High Ski Resort for transportation of Motorola personnel and equipment via the Mountain High Ski Resort Snowcat, then LA-RICS will provide those details and the agreement and permission in writing to Motorola. Other alternate methods of access such as Snow Mobile or hiking in will not be undertaken as those are not practical nor safe to get test equipment and technical resources to the site. Mountain High has also confirmed that the use on Snow Mobiles are not permitted by the Resort due to liability issues. Section 4.4.2 of the Base Agreement provides site access requirements by LA-RICS.
- **JUDICIAL COUNSEL OF CALIFORNIA (JCC) SITES:** APC (Airport Courthouse), CCB (Compton Court Building), CCT, (Criminal Courts Building), POM, (Pomona Court Building), Motorola will make commercially reasonable efforts to meet response/restore timetables for service incidents. However, the JCC



requires advance notice and granted permission for access to the JCC sites; so long as Motorola timely requires advance notice, the response and restoration timetables are deemed to begin upon granted access and technician arrival at the Courthouse site. RPVT (Ranch Palos Verdes Golf Course): Access requires traversing of the golf course fairways/greens by use of a golf cart or walking. While access for most routine equipment service and repairs can be made in that manner, in the event that a service truck or other heavier vehicle is required for service performance 48-hour advance notice will be made to LA-RICS who will be responsible to communicate the heavy-vehicle service request to the golf course to provide access. Motorola will not be responsible for any damage and/or any restoration of the fairways or greens due to use of a service vehicle required for performance of work when following the site access methods prescribed by LA-RICS or the golf course.

Motorola shall notify LA-RICS as soon as possible when site access is deemed inaccessible for Motorola's response. Provided Motorola timely requests access within the advance notification requirements of a site, where applicable, Motorola's on-site response and restoration timelines shall begin once LA-RICS has provided site access to Motorola. For any site that requires an escort from any party, Motorola's on-site response and restoration timetables are deemed to begin upon arrival of the escort at the site access gate or access road with the Motorola technician.

LA-RICS shall be responsible to provide all site-specific access badging, identification cards, keys, or cardkeys, and/or escorts that are required for any site. Motorola will cooperate with LA-RICS to facilitate Motorola technicians in the obtaining of such badging or other access instruments.

There are other remote sites located in the mountains that require travel on rough, unpaved, unlit, narrow mountain roads with no safety guard rails. These conditions may make these mountain roads unsafe to travel on after dark. Additionally, some sites and access roads may become inaccessible due to the impact of extreme or adverse weather conditions; road washouts; rock slides, fires, or other issues causing a closures. Access issues may also apply to sites with roads controlled and maintained by other agencies or entities such as the U.S. Forest Service, Santa Catalina Island Conservancy, etc., Motorola will submit written Site Access Notices to LA-RICS for sites that have been deemed to have, or been reported to have site access issues that impact Motorola's ability to gain access to a site. We request that LA-RICS provide follow-up information and details to Motorola on when sites with impaired or impassable roads will be able to be accessed safely, and/or what alternate site access Motorola will be provided with by LA-RICS. Motorola will then make commercially reasonable efforts to access such sites on a case-by-case basis. Pursuant to Contract Section: 2.2.20.1.1: The Contractor will assume that existing Member-provided sites have adequate existing roads.

Unless Motorola causes or contributes to the source of the delay, Motorola shall not be held to the response and restoration timetable delays that are attributable to Contract Section 6.3. delays and Section 38.1 delays where Member facilities cannot be accessed for reasons including:

- a. Force Majeure
- b. Issues caused by employees other than Motorola or Motorola Subcontractors
- c. Delays caused by other than Motorola or Motorola Subcontractors
- d. Site Commercial Power Issues

## E. PERFORMANCE MANAGEMENT

### Warranty Services Activity Reporting

During the warranty period a monthly status report will be prepared and submitted to the Authority. The report will itemize DTVRS, Core, DSR, and Dispatch Site System Availability, a listing of Incidents/Outages or failures that occurred since the last report, as well as any outstanding problems not resolved since the last report.





The report will detail who reported the Incident, the Incidents number, date and time of incident alarm, date and time of incident initial response, incident priority assignment, date and time of actions performed, the duration of incident/outage, the diagnosis and corrective action taken, date and time of the resolution and the resources required to correct the malfunction/failure and technician names of who resolved/closed the incident.

The System Availability report will provide metrics for the previous reporting cycle, showing percentage of System availability measured on a monthly basis at a rate 99.99%.

## 1. Preventive Maintenance (PM) Management

Infrastructure Preventative Maintenance (PM) service provides a scheduled operational testing and alignment of the infrastructure equipment. The purpose of preventive maintenance testing is to ensure that the infrastructure equipment meets original manufacturer specifications and to confirm that all subsystems in the network are fully operational. Our field support team will ensure that the test is scheduled and executed in cooperation with the appropriate LA-RICS Authority personnel. Upon completion, test results will be submitted to the Authority and kept as part of the ongoing maintenance records for the system. The maintenance check and any discrepancies and corrective actions taken shall be noted in the Inventory and Maintenance Tracking Subsystem (IMTS). Preventative Maintenance testing is performed as recommended by the equipment manufacturer and is scheduled by the Motorola FSO team through the Service Desk at the CMSO.

The Table below outlines the Preventative Maintenance services starting with at inception of the Warranty Period for the DTVRS, Core, DSR and Dispatch Site as well as those previously included in the NMDN Phase-1 System and affiliated Common Platform Equipment Warranty Support Plan. Any additional recommended annual preventive maintenance procedures from the equipment manufacturer that are not described here shall also be incorporated into these procedures and executed during each scheduled inspection and/or site visit.

Preventative Maintenance shall be performed at the regularly-scheduled intervals identified in accordance with the recommendations of the Supplier or third-party OEMs as detailed in the Preventative Maintenance Schedule.

A monthly Preventative Maintenance status report will be prepared and submitted to the Authority. The report will itemize all preventative maintenance services provided during the previous month for the DTVRS, Core, DSR, and Dispatch Site System.

A detailed listing of preventative maintenance services performed that occurred since the last report, as well as any outstanding problems noted during the performance of services. The report will detail who performed the service, the description of the service performed, date and time, a diagnostic report (where available). If equipment needed corrective action taken, date and time of the resolution and the resources required to correct the malfunction/failure and technician names of who resolved/closed the incident.

The report shall also indicate planned preventative maintenance activities for the current month to comply with the preventive maintenance service intervals recommended by the equipment manufacturer and/or best industry practices. The report shall include an overall summary to indicate preventative maintenance activities are meeting the required service intervals.



## Preventative Maintenance Schedule and System Impact

Infrastructure Equipment Covered (Note: May vary by site)	PM Schedule Interval	System Downtime/ Impact	Service Hours
Core (Master Site)	Annual	Minimal	Standard Business Day (8amx5pm)
DSR (Redundant Master Site)	Annual	Minimal	Standard Business Day (8x5)
Dispatch Sites (MCC7500)	Annual	Minimal	Standard Business Day (8x5)
Remote Sites; Prime, Simulcast and ASR	Annual	Minimal	Standard Business Day (8x5)
TTA, Advanced Power Monitors/ RFDS	Annual	Minimal	Standard Business Day (8x5)
Microwave Backhaul	Annual	Minimal	Standard Business Day (8x5)
Nokia MPLS	Annual	Minimal	Standard Business Day (8x5)
DPS T/MON Monitors	Annual	None	Standard Business Day (8x5)
DPS VOIP Orderwire	Annual	None	Standard Business Day (8x5)
DPS NetGuardian 480 Alarm Monitors	Annual	None	Standard Business Day (8x5)
DPS HVAC G3 Controllers	Annual	None	Standard Business Day (8x5)
Generators and ATS Units Note (1)	Annual (or as required based on generator runtime)	None	Standard Business Day (8x5)
Heating, Ventilation, Air Conditioning Note (1)	Bi-Annual	None	Standard Business Day (8x5)
DC Power / Battery System Equipment	Annual	None	Standard Business Day (8x5)
Visual Battery Inspection Note (2)	Quarterly	None	Standard Business Day (8x5)
Omnitec Fuel Tank Monitor Re-calibration	Annual	None	Standard Business Day (8x5)
Visual Fuel Tank Inspection/Report	Bi-Annual	None	Standard Business Day (8x5)
Fuel Polishing/Decontamination (Diesel)	Annual – Prior to winter (no bio-diesel products)	None	Standard Business Day (8x5)
Fire Suppression Systems Note (1)	Bi-Annual	None	Standard Business Day (8x5)
Tower Lighting Controllers and Beacons	Bi-Annual	None	Standard Business Day (8x5)
Visual Tower Inspections	Bi-Annual	None	Standard Business Day (8x5)
Visual Antenna/Transmission Line/Mount and Tape Drop Inspections	Bi-Annual	None	Standard Business Day (8x5)
General Site Inspections Note (4)	Bi-Annual	None	Standard Business Day (8x5)
Site / Compound Weed Abatement (3)	Bi-Annual	None	Standard Business Day (8x5)
TVSS - Surge Suppression Equipment	Annual	None	Standard Business Day (8x5)



**Note (1): PM and Warranty Maintenance for Generators, ATS, HVAC and FSS units applies only to Motorola provided, installed and commissioned units.**

**Note (2): Visual Battery Inspections for leaks or cracks will be made whenever a site is visited, as well as quarterly in the event a site was not visited in a given quarter.**

**Note (3): Weed Abatement is provided for the specific sites outlined in the Bridge Warranty Agreement approved in Amendment 104, including sites ESR, GMT, LPC, MTL2, PMT, and RHT.**

**Note (4): General Shelter custodial inspections will be made at the site shelters on a quarterly basis and during routine or other visits, trash or other items for disposal from the shelter or compound area will be removed and disposed of.**

### **DTVRS, Core, DSR and Dispatch Systems Preventative Maintenance Checks**

The PM checks will be conducted and recorded utilizing Motorola developed PM Checklists and Method of Procedure documents for specific equipment and system types. The table below outlines the preventative maintenance checks to be performed on the DTVRS, Core, DSR and Dispatch Site Systems and equipment. All PM activities will be recorded within a logbook and made accessible to the Authority in the monthly report.

<b>MASTER SITE CHECKLIST</b>	
<b>Servers</b>	
Equipment Alarms	Check LED and/or other status indicators for fault conditions.
Equipment Housings	Inspect and clean fans and cooling pathways as needed, utilize antistatic vacuum or other manufacturer approved methods as required.
Capture Diagnostics	Perform recommended diagnostic tests based on server type. Capture available diagnostic logs.
Network Management ("NM") Client Applications	Review Unified Event Manager ("UEM") events and verify backhaul links are reported as operational. Review event log for persistent types. Verify all NM client applications are operating correctly.
Verify System software physical media	Perform audit of software media on site. Verify that versions, KC numbers, and types match what is deployed to Customer server.
Complete Backup	Verify backups have been completed or scheduled, and that data has been stored in accordance with the Customer's backup plan. Check that adequate storage space is available for backups. Perform a restore from backup once a year.
Network Time Protocol ("NTP")	Verify operation and syncing all devices.
Data Collection Devices ("DCD") check (if present)	Verify data collection.
Anti-Virus	Verify anti-virus is enabled and that definition files on core security management server were updated within two weeks of current date.
<b>Routers</b>	
Equipment Alarms	Check LED and/or other status indicators for fault conditions.
Capture Diagnostics	Perform recommended diagnostic tests based on router type. Capture available diagnostic logs.
Verify Redundant Routers	Test redundancy in cooperative routers. Carry out core router switchover in coordination with Customer.



MASTER SITE CHECKLIST	
Switches	
Equipment Alarms	Check LED and/or other status indicators for fault conditions.
Capture Diagnostics	Perform recommended diagnostic tests based on switch type. Capture available diagnostic logs.
Verify Redundant Switches	Test redundancy in backhaul switches. Carry out core router switchover in coordination with Customer.
Domain Controllers (non-Common Server Architecture)	
Equipment Alarms	Check LED and/or other status indicators for fault conditions.
Capture Diagnostics	Perform recommended diagnostic tests based on server type. Capture available diagnostic logs.
Verify System software physical media	Perform audit of software media on site. Verify that versions, KC numbers, and types match what is deployed to Customer server.
Firewalls	
Equipment Alarms	Check LED and/or other status indicators for fault conditions.
Capture Diagnostics	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 Diagnostics	Perform recommended diagnostic tests based on server type. Capture available diagnostic logs.
Server CPU Health	Check memory, HDD, CPU, and disk space utilization.

PRIME SITE CHECKLIST	
Software	
Verify System software physical media	Perform audit of software media on site. Verify that versions, KC numbers, and types match what is deployed to Customer server.
Switches	
Equipment Alarms	Check LED and/or other status indicators for fault conditions.
Capture Diagnostics	Perform recommended diagnostic tests based on switch type. Capture available diagnostic logs.
Clean Fans and Equipment	Use antistatic vacuum to clean cooling pathways.
Routers	
Equipment Alarms	Check LED and/or other status indicators for fault conditions.
Capture Diagnostics	Perform recommended diagnostic tests based on router type. Capture available diagnostic logs.
Clean Fans and Equipment	Use antistatic vacuum to clean cooling pathways.



PRIME SITE CHECKLIST	
Miscellaneous Equipment	
Equipment Alarms	Check LED and/or other status indicators for fault conditions.
Capture Diagnostics	Perform recommended diagnostic tests based on server type. Capture available diagnostic logs.
Site Frequency Standard Check (Timing Reference Unit)	Check LEDs for proper operation.
Site Controllers	
Capture Diagnostics	Perform recommended diagnostic tests based on server type. Capture available diagnostic logs.
Equipment Alarms	Check LED and/or other status indicators for fault conditions.
Clean Fans and Equipment	Use antistatic vacuum to clean cooling pathways.
Site Controller Redundancy (Trunking)	Roll site controllers with no dropped audio.
Comparators	
Equipment Alarms	Verify no warning/alarm indicators.
Capture Diagnostics	Perform recommended diagnostic tests based on server type. Capture available diagnostic logs.
Clean Fans and Equipment	Use antistatic vacuum to clean cooling pathways.

DISPATCH SITE CHECKLIST	
General	
Inspect all Cables	Inspect all cables and 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 Operator Position Time	Verify console operator position time is consistent across all operator positions.
Screensaver	Verify screensaver set as Customer prefers.
Screen Performance	Verify screen operational and is not suffering from dead pixels or image burn-in that prevent user operation.
Touchscreen	Verify touchscreen operation, if present.
Cabling/Lights/Fans	Visual inspection of all equipment cabling, lights, and fans
Filters/Fans/Dust	Clean all equipment filters and fans and remove dust.
Monitor and Hard Drive	Confirm monitor and hard drive do not "sleep".



DISPATCH SITE CHECKLIST	
DVD/CD	Verify and clean DVD or CD drive.
Time Synchronization	Verify console time is synchronized with NTP server
Anti-Virus	Verify anti-virus is enabled and that definition files have been updated within two weeks of current date.
<b>Headset Unplugged Testing</b>	
Speakers	Test all speakers for audio quality, volume, static, drop-outs, and 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).
<b>Headset Plugged In Testing</b>	
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 speaker mutes when muted.
Telephone Operation	Verify telephone operational through both headset jacks. Check volume controls for noise, static, or drop-outs.
Audio Switches	Verify audio switches to speaker when phone off-hook if interfaced to phones.
Radio Takeover in Headset	Verify radio-takeover in headset mic when phone is off-hook, with mic switching to radio and muting phone during push-to-talk.
<b>Other Tests</b>	
Phone Status Light	Verify phone status light comes on when phone is off-hook (if applicable).
Desk Microphone Operation	Confirm desk mic operation (if applicable).
Radio Instant Recall Recorder ("IRR") Operation	Verify radio IRR operational on Motorola Solutions dispatch (if applicable).
Telephone IRR Operation	Verify telephone IRR operational on Motorola Solutions dispatch, if on radio computer.
Recording	Verify operator position being recorded on long term logging recorder, if included in service agreement
<b>Computer Performance Testing</b>	
Computer Reboot	Reboot operator position computer.
Computer Operational	Confirm client computer is fully operational (if applicable).
<b>Audio Testing</b>	
Conventional Resources	Confirm all conventional resources are functional, with adequate audio levels and quality.
Secure Mode	Confirm any secure talkgroups are operational in secure mode.



DISPATCH SITE CHECKLIST	
Trunked Resources	Confirm all trunked resources on screen are functioning by placing a call in both directions, at the Customer's discretion, and at a single operator position
Backup Resources	Confirm backup resources are operational.
Logging Equipment Tests	
Recording - AIS Test	Verify audio logging of trunked calls.
Recording	With Customer assistance, test operator position logging on recorder.
System Alarms	Review alarm system on all logging equipment for errors.
Capture Diagnostics	Perform recommended diagnostic tests based on equipment, and capture available diagnostic logs.
Verify System software Physical media	Perform audit of software media on site. Verify that versions, KC numbers, and types match what is deployed to Customer server.
Playback Station (Motorola Solutions Provided)	
Capture Diagnostics	Perform recommended diagnostic tests based on equipment, and capture available diagnostic logs.
Recall Audio	Verify that radio and telephone audio can be recalled.

RF SITE CHECKLIST	
RF PM Checklist	
Equipment Alarms	Verify no warning or alarm indicators.
Clean Fans and Equipment	Use an antistatic vacuum to clean cooling pathways.
Site Frequency Standard Check	Check LEDs for proper operation.
Basic Voice Call Check	Voice test each voice path, radio to radio.
Trunking Control Channel Redundancy	Roll control channel, test, and roll back.
Trunking Site Controller Redundancy, ASTRO 25 Site Repeater only	Roll site controllers with no dropped audio.
PM Optimization Workbook and for GTR tests. Note (1)	Complete Base Station Evaluation tests - Frequency Error, Modulation Fidelity, Forward at Set Power, Reverse at Set Power, and Gen Level Desense no TX. Update station logs.





ASTRO 25 GTR ESS SITE PERFORMANCE	
Antennas	
Transmit Antenna Data	
Receive Antenna System Data	
Tower Top Amplifier Data	
FDMA Mode	
Base Radio Transmitter Tests	
Base Radio Receiver Tests	
Base Radio Transmit RFDS Tests	
Receive RFDS Tests with TTA (if applicable)	
Receive RFDS Tests without TTA (if applicable)	
TDMA Mode	
Base Radio TDMA Transmitter Tests	
Base Radio TDMA Receiver Tests	
TDMA Transmit RFDS Tests	
TDMA Receive RFDS Tests with 432 Diversity TTA	
TDMA Receive RFDS Tests with 2 Independent TTA's (if applicable)	
TDMA Receive RFDS Tests without TTA (if applicable)	

**Note (1): Measured RF Site PM data results will be compared to the initial Site Optimization documentation to confirm measured equipment is within the parameters of the initial site commissioning as well as published equipment specifications. Test results are recorded in Motorola's pre-developed PM and Site Performance Workbooks.**

### Microwave Backhaul Preventative Maintenance Checks

The table outlines the preventative maintenance checks to be performed on the Microwave backhaul system equipment.

#### NEC iPASOLINK 650 Microwave Backhaul Preventative Maintenance Checks

##### MICROWAVE RADIOS AND EQUIPMENT

- Preventative Maintenance of the NEC Microwave system will be done in accordance with the equipment manufacturer's specified System Manual.
- Check UEM for alarms and warnings and event history
- Monitor Alarm Display on MDP (Indoor Unit)
- Monitor/ Measure Transmit Power
- Monitor/ Measure Receive Signal Level
- Monitor/Measure TRP (Outdoor Unit) Power Supply Voltages
- Monitor/Measure BER
- Monitor/Measure Main Receive Level
- Check Fan Operation on MDP, clean fan screens
- Visually Inspect transmission line, RF and power connectors for TRP (ODU) for condition
- Visually Inspect antenna for condition
- Confirm switching of the RF and control units to ensure paths work properly.





### MPLS Preventative Maintenance Checks

The table outlines the preventative maintenance checks to be performed on the MPLS system equipment.

#### Nokia MPLS Mobile Backhaul Preventative Maintenance Checks

##### MPLS SAR ROUTERS AND NETWORK LAN SWITCH EQUIPMENT

- Preventative Maintenance of the MPLS / LAN system will be done in accordance with the equipment manufacturer's specified PM procedures if applicable.
- NSP Network Services Platform
- Service Aware Manager (SAM) with servers.
- SAR Routers
- System Firewalls
- LAN Switches
- Verify automated backups are functioning

##### SWITCHES, ROUTERS AND FIREWALLS

- Check device for alarms and status indicators for fault conditions
- Capture diagnostic logs as necessary
- Visually inspect Modular Connectors and assure they are secure
- Visually inspect condition of power and interconnect cabling
- Clean fans, cooling pathways and filters on devices as-needed
- Visually inspect ground connections
- Verify backups are available for each equipment. If backup does not exist, then create a new backup

### Heating, Ventilation and Air Conditioning (HVAC) Preventative Maintenance Checks

The table outlines the preventative maintenance checks to be performed on the HVAC system equipment.

#### HVAC Preventative Maintenance Checks

##### AIR FILTERS

- Change filters when the pressure drop across the filters exceeds the recommended allowable pressure drop. The media used for replacement shall be equal to or shall exceed the efficiency rating of the original equipment.

##### AIR HANDLERS

- Check blower mounting and tighten if necessary.
- Check shaft alignment to motor.
- Check blower pulley for security to shaft.
- Check blower belt for condition and tension (adjust or replace).
- Check blower rotation.
- Oil or grease blower bearing.
- Check blower scroll for dirt and clean.
- Check housing for rust and repair as necessary.
- Clean coil faces.
- Visual inspection on condensate line (full pathway to drain or earth) to confirm no clogs or excessive scaling/ corrosion requiring maintenance.

##### THERMOSTATS

- Remove cover and remove all foreign particles.
- Clean thermostat cover.



- Check set point of control.
- Calibrate as necessary.
- Check general condition.
- Check electrical connections.

**ELECTRIC MOTORS**

- Check motor mounting and tighten if necessary.
- Check motor pulley for security, alignment and tighten if necessary.
- Check bearing wear.
- Check wiring and conduit (from motor to starter) for condition.
- Check rotation of motor.
- Check motor for excessive heat and noise.
- Check air passages and winding.
- Measure current draw and record.

**CONDENSER COIL**

- Check coil and fins for debris
- Chemically clean condenser coil
- Check coil for oil leaks

**EVAPORATOR**

- Check and clean tubes or fins as required.
- Blow out coils with CO2.

**RELAYS**

- Energize relay to insure operation.
- Inspect contacts and clean if required.
- Replace if necessary.

**REFRIGERATION COMPRESSOR**

- Check for oil leaks.
- Check refrigerant charge condition through sight glass.
- Check for unusual noise or vibration.
- Check for refrigeration compressor and refrigeration piping leaks.
- Check operation of safety and capacity controls for proper operation including high and low pressure cut –outs.
- Check compressor mounting.
- Check condition of refrigeration insulation.
- Perform start-up procedure per manufacturer's recommendation.
- Perform efficiency test and record results.
- Check operation pressure of system.

**DC Power and Battery Systems Preventative Maintenance Checks**

The table outlines the preventative maintenance checks to be performed on DC Power and Battery Systems equipment.

**DC Power and Battery Systems Preventative Maintenance Checks**

**ELTEK SMARTPACK DC CONTROLLER AND RECTIFIERS**

- Record site info – DC power system – Manufacturer, Model Number, Serial Number
- Check alarm buffer for active alarms.
- Record AC Input/Supply Voltage.
- Record DC Output Voltage.
- Record AC Input Currents.
- Record DC Voltage at battery plant.
- Record DC Current at battery plant.
- Record AC Ripple Voltage and Current at battery plant.
- Verify rectifier voltage and amperage settings.
- Verify alarms are set properly
- Verify operation and calibration of Rectifier Volt and Amp Meter
- All mechanical connections are checked for tightness.
- Visually inspect Power Bays and Rectifiers for loose or foreign objects.
- Perform a thermal point scan with a thermal scanner.
- Inspect all modules and cabling for damage.
- Check components for swelling or leakage including capacitors if present.
- Perform a thermal point scan with an infrared device.
- Repeat previous steps for all remaining DC-plants

**BATTERIES**

- Record site info – Battery Plant – Manufacturer, Model Number, Serial Number, Date Codes
- Perform visual battery inspection.
- Record site info – DC power system & battery – Manufacturer, Model Number, Serial Number, Date Codes
- Record individual Cell/Jar voltages, impedance/conductance using approved battery analyzer.
- Check battery terminal connections. Re-torque as necessary.
- Check all batteries for post corrosion or electrolyte leakage.
- Check that battery cabinet is clean and free of debris.
- Check battery string area for good ventilation and overall battery condition.
- Check battery temperature and post temperature with a thermal scanner.
- Check that battery cabinet is clean and free of debris.
- Check battery string area for good ventilation and overall battery condition.
- Check battery temperature and post temperature with a thermal scanner.
- Repeat previous steps for all remaining batteries.

**INVERTERS**

- Proceed to inverters.
- Record DC Input/Supply voltage.
- Record AC Output voltage.
- Record DC Input currents.
- Record AC Output currents.
- Perform temperature scan of internal components, circuitry, and all inverter related cabling and connections.
- Verify all meters and screen functions are working.
- Perform temperature scan of internal components, circuitry, and all inverter related cabling and connections.
- Verify all meters and screen functions are working.
- Check and record any alarms indicating problems.
- Repeat steps for all remaining inverters.

**SITE CLOSEOUT**

- Review all recorded findings with site contact and make corrective recommendations as necessary, provide written report.



## Generator / ATS Preventative Maintenance Checks

The table outlines the preventative maintenance checks to be performed on the system Generator and Automatic Transfer Switch equipment.

### System Generator/ATS Preventative Maintenance Checks

#### **BATTERIES AND BATTERY CHARGER**

- Visually inspect battery terminal connections
- Verify electrolyte level, vent caps of all cells in the starting battery system
- Visually inspect wiring, connections and insulation
- Record battery charging functions
- Record battery information
- Record battery condition test

#### **FUEL SYSTEM**

- Record primary tank fuel level
- Inspect engine fuel system for leaks
- Visually inspect all engine fuel hoses, clamps, pipes, components and fittings
- Visually inspect rupture/ containment basin
- Inspect day tank and controls (if applicable)
- Any equipment catch basins shall be drained at frequency determined by Motorola service agents. However, the Authority does not consider rust normal wear and tear and shall consider any rust as damage needing repair by MSI. SPCC requirements for logging and reporting during drainage shall be followed.

#### **COOLING SYSTEM**

- Record coolant level
- Visually inspect for coolant leaks
- Visually inspect drive belts condition
- Verify for proper coolant heater operation
- Record jacket water temperature
- Visually inspect fan, water pump, drives and pulleys
- Visually inspect all coolant hoses, clamps and connections
- Visually inspect radiator condition
- Visually inspect louver for damage
- Visually inspect fan hub and drive pulley for mechanical damage
- Record freeze point of antifreeze protection
- Record DCA level prior to changing coolant filter

#### **LUBRICATION SYSTEM**

- Visually inspect engine oil leaks
- Visually inspect engine oil lines and connections
- Record oil level

#### **GENSET CONTROLS AND ACCESSORIES**

- Visually inspect all engine mounted wiring, senders and devices
- Visually inspect all control mounted components and wiring
- Verify all connecting plugs are tightened and in a good condition
- Visually inspect all accessory components and wiring
- Visually inspect and test lighting indicators

#### **INTAKE AND EXHAUST SYSTEMS**

- Visually inspect air filter and housing
- Visually inspect all engine piping and connections



- Record air cleaner restriction
- Visually inspect engine exhaust system for leaks
- Visually inspect rain cap
- Optional – Air filter replacement
- Optional - Clean crankcase breather or replace filters
- **Diesel Particulate Filters (DPF):** There are (3) sites with DPF Systems on the site generator; LASDTEM, POM, and RHT. The DPF's at those sites will be inspected and serviced annually, as well as if a Soot Alarm is active/received between the annual servicing's. The DPF Filter Elements will be removed, cleaned and reinstalled with new gaskets. A four-hour load bank test will be performed to regenerate the DPF System. LA-RICS as the AQMD permit holders are responsible for environmental regulatory compliance and/or any reporting requirements as applicable. Motorola shall be responsible for providing any supporting information required, including notification to comply with AQMD permitting conditions and regulations.

#### **GENERAL CONDITIONS**

- Visually inspect governor linkage and oil level
- Visually inspect guards
- Visually inspect enclosure
- Visually inspect Ice Shields/Ice Bridges and Structural Coverings of Generators and Fuel Tanks for damage as applicable. Damage as the result of weather, Acts of Nature or other Force Majeure are not covered by warranty.
- Visually inspect engine and generator mounts
- Verify emergency stop operation

#### **AFTERTREATMENT (Upon request)**

- Verify DEF level N/A
- Record DPF restriction
- Visually inspect aftertreatment and controls

#### **SWITCHGEAR**

- Inspection and Full Service

#### **OPERATIONAL & FUNCTIONAL REVIEW OF GENERATOR CRITICAL COMPONENTS**

- Inspect engine cooling fan & fan drives for excessive wear or shaft wobble
- Check all pulleys, belt tensioners, slack adjusters & idler pulleys for travel, wear & overall condition
- Inspect / lubricate drive bearings, gear or belt drives, and other shaft connecting hardware.
- Inspect outdoor Camlock and other electrical equipment and enclosures, visually inspect hinges, and inspect enclosures for water intrusion.
- Inspect Supply and Return Fuel Lines and Fuel Lines with heat trace.
- If applicable, inspect/clean DPF filters and inspect auxiliary pumps for proper operation. (Preventative Maintenance of the DPF's include inspection of the DPF and cleaning done in accordance with the Generator OEM and DPF OEM recommendations.
- Visually inspect outdoor camlock for hinge condition, water intrusion, etc.
- Visually inspect electrical equipment enclosures for damage, water intrusion, etc.
- Inspect fuel lines with heat trace (both the supply/return lines and heat trace).

#### **LUBRICATION OIL & FILTRATION SERVICE**

- Change engine oil
- Change oil, fuel and water filters
- Post lube services operations of genset (unloaded) at rated temperature



**AIR QUALITY MANAGEMENT PERMITS & GENERATOR LOGGING**

- During the warranty period specified, Motorola will monitor and renew expiring Air Quality Management permits as-needed that are required for operation of the generator units.
- During the warranty period Motorola will update and maintain the generator operation / run-time log books and documentation for the applicable generator sites as required by the permits.
- In addition, during the warranty period, Motorola will track generator run times and notify the specified LA-RICS personnel when a generator run time exceeds 150 and at 180 hours per year.
- As named holder of the permits, LA-RICS shall be responsible to file for any required variances or waivers.

**Shelter, Compound and Fuel Tank Systems Preventative Maintenance Checks**

The table outlines the preventative maintenance checks to be performed at the system Site Monitoring equipment, Shelters, Compounds and Fuel Tank Systems.

**Shelters, Compounds, and Fuel Tanks Systems****ALARM MONITORING SYSTEMS**

- **DPS Orderwire, DPS NetGuardian 480, DPS HVAC Controllers, Omntec Fuel Monitors, Alarm Sensors. Cordex Controller (at PMT Only).**

Preventative Maintenance of the site monitoring equipment and system will be done in accordance with the equipment manufacturer's specified System Manuals

**SHELTERS**

- Inspections and any required maintenance will be completed per Preventive Maintenance Schedule annually for each shelter.
- Items such as exterior lights, boxes, penetrations, GFIs and waterproof covers, HVAC units, Exhaust Fans, EVS units, Motorized dampers and louvers will be inspected and tested for proper operation. Door drip caps, etc. will be inspected and re-sealed if required. Sites with duct work will be inspected as-needed.
- Door gasket, locking mechanism hardware, hydraulic closure, caulk sealant, alignment (hinge) inspections are performed periodically to ensure a proper seal.
- Signage, building interior, exterior and emergency lighting shall be inspected during periodic site visits and corrected as required.
- Inspect TVSS/Surge Suppression equipment for alarms
- Visually inspect condition of interior of shelter, floors to be swept if needed and interior of shelter will be kept orderly.
- The maintenance check and any discrepancies and corrective actions taken shall **be** noted.

**COMPOUNDS**

- Gates, Fencing and Signage and Shelters shall be visually inspected during periodic site visits. Specialty finishes on gates, fencing, shelters and other site appurtenances will be inspected where applicable. Warranty will not apply to remediation of normal wear and tear, weathering, fading, etc.
- Sites will be inspected for missing or malfunctioning locks, and sites subject to weather damage from ice and snow will be inspected as-appropriate. Damage found as the result of weather and/or other Acts of Nature and Force Majeure are not covered by warranty.
- If applicable Weed Abatement within the compound grounds and areas at any Motorola built sites will be performed on a bi-annual basis if needed. Non-Motorola build and/or co-located sites are exceptions.
- Condition of Rodent Cages if applicable, will be visually inspected for damage.



- Sites will be inspected for rodent nesting, and rodent traps if applicable, will be cleaned out and/or reset as needed.

#### **FUEL TANK SYSTEMS**

- The fuel tanks, fuel levels and refuel/overfill conditions are monitored by the Omntec Monitoring systems and are alarm reported via the T/MON system.
- On an annual basis during the warranty the Omntec will be recalibrated if needed
- Any equipment catch basins shall be drained at frequency determined by Motorola service agents. However, the Authority does not consider rust normal wear and tear and shall consider any rust as damage needing repair by MSI. SPCC requirements for logging and reporting during drainage shall be followed.
- On a bi-annual basis in accordance with the SPCC's for the applicable fuel tank sites Motorola will perform a visual inspection of the tank conditions and confirm there is no leaking or accumulation of fuel and that all parts of the tank are in working order. They will also inspect the tank foundation, containment curb area and generator enclosure. A bi-annual AST inspection checklist record (industry standard) will be completed and kept with the SPCC Plan for records keeping purposes for the period of time required by the SPCC Permit.
- Fuel Polishing / decontamination of the fuel supplies in the fuel tanks will be performed on an annual basis for applicable diesel fuel tanks and systems.
- During the warranty period specified, Motorola will monitor and renew expiring CUPA/CERS permits that are required for operation of the fuel tanks and battery plants. Motorola will provide support for on-site visits for the CUPA permitting agencies to carry out inspections as applicable. LA-RICS agrees to provide assistance to Motorola to help facilitate and schedule the inspections with those jurisdictional agencies if needed.

### **Suppression Systems and Site Safety Equipment Preventative Maintenance Checks**

The table outlines the preventative maintenance checks to be performed on the Fires Suppression and Site Safety equipment.

#### **FSS and Site Safety Systems and Equipment**

##### **CA-1 - CLEAN AGENT FIRE SUPPRESSION SYSTEM**

(CA-1 service performed is adapted from the following codes and standards: NFPA 70, 72, 75, and 2001).

##### **FREQUENCY OF SERVICE AND INSPECTION**

- Semi-annually by authorized and certified FSS Technician.

##### **SYSTEM DEVICES FOR SERVICE AND INSPECTION (as applicable)**

- Clean Agent Control Panel
- Battery Back-Up Systems
- Alarm Bells
- Alarm and Discharge Horns
- Alarm and Discharge Strobe Lights/Beacons
- Manual Discharge Pull Stations
- Smoke Detectors
- Agent Storage Containers
- Agent Distribution Piping and Nozzles
- Abort Stations
- Maintenance Bypass Switches

##### **INSPECTION PROCEDURES**

- Meet at site with Motorola FSO Representative/Escort
- Motorola FSO will Notify the Motorola NOC that a functional system test is about to be conducted and have FSS alarms suppressed for duration of testing.





- FSS Technician will perform an inspection of the system for installation integrity, both electrically and mechanically.
- FSS Technician will perform and complete the Testing and Service
- Motorola FSO will notify the Motorola NOC that the service is complete and return the FSS System to full operational condition.
- Submit to the Motorola FSO representative a fully itemized service report with any recommendations for safety updates and repairs as required.

#### **SERVICE PROCEDURES PERFORMED ON AN ANNUAL BASIS**

- Smoke Detectors
- Sequence each detector in an alarm condition. Each detector will be set in the alarm mode using a test gas, external magnet or appropriate device.

#### **SERVICE PROCEDURES PERFORMED ON A SEMI-ANNUAL BASIS**

##### **Control Panel and Battery System.**

- Verify LED operation for power, trouble and alarm conditions.
- Test battery for charge and automatic switch-over capability.
- Operate test and reset switches for sequence and function.
- Visual inspection of terminations and wiring within the panel.

##### **Smoke Detectors**

- Visually inspect detectors.

##### **Alarm Bells and Discharge Horns/Strobes**

- Check individually for proper operation and sound level.
- Manual Pull and Abort Stations, verify individual operation

##### **Auxiliary Devices and Systems Shut-Downs**

- Air conditioning, heating, ventilating systems and power equipment shutdowns; will be performed at the request from the customer.
- Check Room Integrity
- Agent Storage Containers/Distribution Piping-Nozzles
- Check agent quantity and pressure of Clean Agent containers.
- Visually inspect accessible discharge piping and nozzles for integrity and corrosion.

##### **Periodic Site Visit Inspections (Motorola FSO)**

- During site visits Motorola personnel will visually inspect the following:
- Pressure gauge on agent storage container.
- General condition of both electrical and mechanical system.

##### **SITE FIRE EXTINGUISHERS**

- Site fire extinguishers will be inspected annually per manufacturer schedule, inspection tags and Fire Code.
- Site fire extinguishers' will be recharged as-needed based on annual inspection and condition.

##### **SITE FIRST AID KITS AND EYE WASH STATIONS**

- First Aid kits at sites will be inspected and replenished annually.
- Eye Wash Station Solutions will be inspected and replenished annually.





## Towers and Antenna Structure Preventative Maintenance Checks

The table outlines the preventative maintenance checks to be performed on the towers and antenna structures.

### Towers and Antenna Structures

#### GROUND LEVEL VISUAL INSPECTION OF TOWERS AND ANTENNA STRUCTURES

Visually Inspect General Tower Conditions for damage, rust or service issues:

- Tower Legs and Cross Members
- Safety Climb / Ladder
- Tower Finishes, including specialty finishes will be visually inspected for rust, at all sites where applicable. The warranty plan does not require Motorola to wire brush or paint hardware showing signs of rust. Tower Lighting Controllers and Lights, verify lights/markers are operational/day-night mode as applicable at four Sites (BJM,FCCF,LASDTEM, MLM)
- Tower Base Foundation surfaces for spalling and fracturing
- Cable Trays
- LMR antennas and Feedlines
- Antenna mounts
- Microwave antennas and radomes and mountings
- Microwave Dish strut/stiff arms secured to tower members
- Microwave ice bridges and supporting members secure
- Waveguide and connectors for any sign of damage, dents, etc.
- RF lines supported and securely held in place
- Ensure that ground connections are not corroded

## 2. Repair Management

Repair Management is a repair / exchange service for Motorola equipment and OEM third party equipment and infrastructure supplied by Motorola. Motorola will utilize Motorola owned or provided spares and/or Field Replacement Units (FRU's) as-needed to service and restore malfunctioning equipment during the warranty period.

## 3. Security Updates

As applicable to each system and sub-system covered by this Warranty Plan security updates and patches will be applied to applicable devices and equipment. This service will include remote installation of the updates and local installation where necessary.

## 4. Remote Security Update Service

Motorola Solutions' ASTRO 25 Remote Security Update Service ("RSUS") provides pretested security updates, minimizing cyber risk and software conflicts. These security updates contain operating system security patches and antivirus definitions that have been validated for compatibility with ASTRO 25 systems. Motorola Solutions will remotely deliver tested security updates to the Customer using a network connection.

The ASTRO 25 Security Update Service ("SUS") and Network Event Monitoring service are prerequisites for RSUS. These prerequisites are included as part of this service package.



## Description of Service

Motorola Solutions remotely installs pretested security updates on the applicable ASTRO 25 system components. Motorola Solutions tests security updates for compatibility with ASTRO 25 in a dedicated information assurance lab.

Motorola Solutions will install compatible ASTRO 25 security updates using a remote connection. After installing tested security updates remotely, Motorola Solutions provides the Customer with a report outlining the updates made to the Customer's system. This report will inform the Customer of security update network transfers and installation.

## Remote Update Requirements

An always on, reliable connection from the Customer's network to Motorola Solutions is required to enable this service. Recommended Internet bandwidth of 20 Mbps or higher. Additional hardware (such as a secure router) may be provided to deliver the services. If the Customer is unable to install the equipment or provide a suitable Internet connection, please contact your CSM to discuss options. Please note, if an existing connection is available, this may be suitable to deliver the service.

Customer systems with slow and/or unreliable remote site links may impact our ability to deliver the service.

In some instances, Motorola Technical Notices ("MTN") must be applied to enable Motorola Solutions to remotely deploy the latest security updates. MTN installation is not part of RSUS. In the event Motorola Solutions cannot deploy security updates unless one or more MTNs are installed, Motorola Solutions will communicate this to the Customer. The Customer and their Service Delivery Manager ("SDM") will determine how to apply necessary MTNs. Once necessary MTNs are applied to the Customer's system, Motorola Solutions will continue to remotely deploy security updates.

Connections to other networks, herein referred to as Customer Enterprise Network ("CEN"), are delineated by firewalls. All security updates deployed by RSUS are specific to the equipment included in the ASTRO 25 radio network with only the following exceptions: Key Management Facility ("KMF").

The Customer may request, via the SDM, that Motorola Solutions remotely update the KMF in the Customer's CEN as part of RSUS, or designate Customer IT resources to install the security updates. The Customer must make the appropriate configuration changes to their firewall allowing access.

## Reboot Support

Reboot Support is included with this Warranty Support Plan RSUS, Motorola Solutions provides technician support to reboot impacted Microsoft Windows servers and workstations after operating system security patches have been installed.

## 5. Scope

RSUS includes pretested security updates for the software listed in the table below and the release cadence for security updates.



**Update Table and Cadence**

Software	Update Release Cadence
Antivirus Definition Files	Weekly
Microsoft Windows	Monthly
Microsoft Windows SQL Server	Quarterly
Microsoft Windows third party (Adobe Reader)	Monthly
Red Hat Linux (RHEL)	Quarterly
VMWare ESXi Hypervisor	Quarterly
McAfee Patch(es)	Quarterly
Dot Hill DAS Firmware	Quarterly
HP SPP Firmware	Quarterly

Motorola Solutions installs security updates during normal business hours. Normal business hours are defined as 8 a.m. to 5 p.m. Central Standard Time on Monday through Friday, excluding Public Holidays. The Customer may submit a formal request that Motorola Solutions personnel work outside of these hours. The Customer may need to pay additional costs for work to be completed outside of normal business hours.

Motorola Solutions will provide an Impact Timeline (“ITL”) to show installation tasks scheduled during normal business hours, including preparation work and the transfer of security updates to local storage or memory. Server and workstation reboots or zone controller rollover will be initiated at the times shared in the ITL.

Intrusive security updates require Customer coordination, may require hardware reboots and zone controller rolling (switching from one zone controller to the other) to fully implement. 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. While rolling the zone controllers, the system will operate in “Site trunking” mode. Motorola will discuss and coordinate with LA-RICS operational impacts and work with LA-RICS to coordinate events and minimize impact to users.

## 5.1 Inclusions

Supported ASTRO 25 core types and security update delivery methods are included in Table 1. This table indicates if Motorola Solutions will provide any RSUS optional services to the Customer. RSUS supports the current Motorola Solutions ASTRO 25 system release and aligns with the established Software Support Policy (SwSP).

Motorola Solutions reserves the right to determine which releases are supported as business conditions dictate. Additional charges may apply in the event of supporting older releases. Contact Motorola Solutions’ assigned Customer Support Manager (“CSM”) for the latest supported releases.

**Table 1: SUS Packages**

Service	ASTRO 25 Core Type	Included
Remote Security Update Service with Reboot Support	M Core	X



## 5.2 Motorola Solutions Responsibilities

- ◆ Remotely deploy patches listed in the update Table on the Customer's system. Patches will be installed on the cadence described in that Table.
  - As outlined, coordinate and communicate with the Customer when installing updates that will require server reboots, workstation reboots, or both.
  - Install non-intrusive updates, like antivirus definitions, as released without coordination.
  - Motorola shall provide a report identifying if and when any updates have been made to the LA-RICS network along with the monthly maintenance report.
- ◆ In the event no security updates are released by the Original Equipment Manufacturers ("OEM") during the usual time period, Motorola Solutions will send a notice that no new security updates were deployed.

## 5.3 Limitations and Exclusions

- ◆ Systems with non-standard configurations that have not been certified by Motorola Solutions' Systems Integration and Test ("SIT") team are specifically excluded from this service, unless otherwise agreed in writing by Motorola Solutions. Please provide list of what is excluded.
- ◆ Interim or unplanned releases outside the supported release cadence.
- ◆ This service does not include releases for Motorola Solutions products that are not ASTRO 25 L, M, and Simplified Core radio network infrastructure equipment. The following are examples of excluded products: WAVE PTX™, Critical Connect, and VESTA® solutions.
- ◆ Motorola Solutions product updates are not included in these services.
- ◆ Shared network infrastructure firmware, such as transport and firewall firmware are not included in these services.
- ◆ This service excludes the delivery MTNs determined not to be applicable to the customer system. MTN Notices will contain instructions and references as to installation and application to impacted equipment and or systems.
- ◆ Motorola Solutions does not represent that it will identify, fully recognize, discover, or resolve all security events or threats, system vulnerabilities, malicious codes or data, backdoors, or other system threats or incompatibilities as part of the service, or that the agreed upon cadence/time of delivery will be sufficient to identify, mitigate or prevent any cyber incident.

## 5.4 Customer Responsibilities

- ◆ This service requires connectivity from Motorola Solutions to the Customer's ASTRO 25 system. If required, procure internet connectivity before the service commences, and maintain it for the duration of the service contract.
- ◆ Refrain from making uncertified changes to the ASTRO 25 system. Consult with Motorola Solutions before making changes to the ASTRO 25 system.
- ◆ Be aware of the operational impacts of RSUS update installation, and coordinate the update process with users.
- ◆ Coordinate any maintenance or other updates that are not part of RSUS with Motorola Solutions to minimize downtime and redundant efforts.

## 5.5 Reboot Responsibilities

Microsoft Windows servers and workstations often need to be rebooted before security updates take full effect and mitigate vulnerabilities. Reboot responsibilities are determined by the specific RSUS package being purchased. Table-2 contains the breakdown of responsibilities. Table-2 indicates which services are included.



**Table-2: Reboot Responsibilities Matrix**

Remote SUS Package	Motorola Solutions Responsibilities	Customer Responsibilities
Remote Security Update Service with Reboot Support	<ul style="list-style-type: none"> <li>When a security update requires a reboot, Motorola may perform the reboots remotely or as needed dispatch a technician to reboot servers and workstations after security updates are installed.</li> </ul>	Provide access to all sites, equipment and devices required to fulfill any reboot requirements as needed.

## 5.6 Disclaimer

This service tests OEM security updates. Delivering security updates for specific software depends on OEM support for that software. If an OEM removes support (e.g., end-of-life) from deployed software, Motorola Solutions may work with the OEM to reduce the impact, but may remove support for the affected software from this service without notice.

OEMs determine security update schedules, supportability, or release availability without consultation from Motorola Solutions. Motorola Solutions will obtain and test security updates when they are made available, and incorporate those security updates into the next appropriate release.

All security updates are important. This service is intended to balance the security and compatibility of tested updates with agreed upon time/cadence of delivery. Customer assumes the risk of this inherent tradeoff. Motorola Solutions disclaims any warranty with respect to pretested database security updates, hypervisor patches, operating system software patches, intrusion detection sensor signature files, or other third-party files, express or implied. Further, Motorola Solutions disclaims any warranty concerning non-Motorola Solutions software and does not guarantee Customers' systems will be error-free or immune to security breaches as a result of these services

## 6. System and Network Updates

The DTVRS Core, DSR, Remote RF and Dispatch Sites and associated Common Platform Subsystems are at the latest version and ship releases and no upgrades are planned during the DTVRS, Core, DSR and Dispatch Site Bridge Warranty Period. During the DTVRS, Core, DSR and Dispatch Site Warranty Period published service bulletins and mandatory and/or non-mandatory software, firmware or bug fixes may be made to system components, application of such changes or updates will be made based upon the recommendation of the OEM's and published update or service bulletins.

Changes and updates will be reviewed in advance with designated LA-RICS Authority personnel prior to implementation and require the associated Change Request process be followed including Authority authorization prior to implementation. Implementation will be scheduled and performed as part of scheduled maintenance activity. Updates shall follow the requirements outlined in contact sections Exhibit D 2. Maintenance Services and Exhibit B.1 5. Phase – 5 LMR System maintenance

### **Systems and Equipment Covered Under the DTVRS, Core, DSR and Dispatch Sites Warranty Support Plan**

The table outlines a high-level view of equipment covered by the DTVRS, Core, DSR and Dispatch Sites System Warranty Support plan.



DTVRS Core (Master Site-FCCF) and DSR Redundant Masters Site (PLM) Site	DTVRS Prime, Simulcast, and ASR Remote Site Equipment (UHF and 700/800MHz Systems)	Dispatch Site Equipment	Common Platform Site Equipment
Servers & Back up Servers	GTR8000 Remote Site Base and Repeaters Stations	MCC7500 Operator Positions	NEC/Nokia Microwave Network
Controllers	Advanced Power Monitors (APM) and RF Distribution Systems (RFDS)	Voice Processing Module (VPM)	Nokia MPLS Network & Service Aware Managers (SAM)
Network Time Protocol (NTP) TRAK	Tower Top Amps (TTA)	MCC PC's	DPS VOIP Orderwire
Genesis Servers and Workstations		Aux I/O	DPS T/MON
Core LAN Switch and Routers	Site Controllers (Prime and Simulcast)	CCGW	NetGuardian NG480
Packet Data Gateway (PDG)	Site Routers and Firewalls and LAN Switches	Site Gateway Routers	HVAC and EVS Systems Note (1)
Radio Network Gateway (RNG)	Site Gateway Routers	Site LAN Switches	DC Power Plants Note (1)
Zone Database Server (ZDS)	Network Time Protocol (NTP) TRAK	NM Clients	DC Battery Plants Note (1)
Gateway & Terminal Routers	Comparators	AIS Servers	Generators Note (1)
Firewalls & Manager Servers	Antennas		Automatic Transfer Switches Note (1)
Air Traffic Router (ATR)	Transmission Lines		TVSS/Surge Suppression Note (1)
UNC and UCS Managers			Omntec Fuel Tank Monitors
Unified Event Manager (UEM)			Fuel Tanks & Equipment Note (2)
Zone Statistical Server (ZSS)			Fire Suppression Systems (1)
ISSI Server			Shelters and Shelter Equip.
Network Manager Servers			Site Compounds
Network Manager Clients			Towers/Antennas Structures
Core Backhaul Switches			Tower Beacons (Five Sites)
AIS Servers			
MCC7500 VPM for Logger			
NICE IP Logging Recorders Note (3)			
NICE Logging Servers Note (3)			
NICE Inform Servers Note (3)			

**Note (1) See notes in Sections 6 and 9 of this Warranty Support Plan in reference to the BUR-1, GRM, and SPN site roll-up Generators.**

**Note (2) Exhibit B.1, Section 2.2.18.35 of the LA-RICS contract states that the Motorola will deliver fuel tanks that are full upon Provisional Subsystem Acceptance.**





Fuel Tank refueling is not in the scope of the Bridge Warranty, nor any subsequent Warranty or Maintenance obligations. Should LA-RICS desire to have Motorola provide fuel service and fuel delivery to any site during the Bridge Warranty, or any subsequent Warranty or Maintenance period, that service can be quoted upon request. acceptance.

Note (3) The NICE Logging Recorder System was part of the Early Deployment systems and covered by previous Bridge Warranty agreements. Coverage was subsequently not renewed by LA-RICS. Maintenance contract coverage of the NICE Logging recorder system equipment was quoted to LA-RICS in the DTVRS Bridge Warranty quotation not yet approved or purchased by LA-RICS. Coverage is NOT included in this Warranty Support Plan and is referenced here for example of coverage only.

## 1. DTVRS, Core, DSR and Dispatch Site - Site ID and Address Table

The table outlines the sites that comprise the DTVRS, Core, DSR and Dispatch Site ID and Site Name and addresses. Sites will also have unique Common Platform Microwave, MPLS and Site Support Equipment Sites IDs as detailed in the tables associated below.

SITE ID	SITE CODE	DTVRS SITE NAME	SITE TYPE	SITE ADDRESS	CITY	ZIP CODE	SUBSYSTEM
A069F1	FCCF	FCCF Redundant Active	CORE	1320 N Eastern Ave	Los Angeles	90063	M3 CORE
A069F1B1_(DSR)	PLM	PLM Redundant Inactive	DSR	750 East Avenue Q	Palmdale	93550	DSR
A069F1D1	FCCF	FCCF DISP 1	Dispatch	1320 N Eastern Ave	Los Angeles	90063	DISPATCH
A069F1D3	FCCF	SCC DISP 1	Dispatch	1277 N Eastern Ave	Los Angeles	90063	DISPATCH
A069F1D4	LARICS HQ	LARICSHQ	Dispatch	2525 Corporate Place	Monterey Pk	91754	DISPATCH
A069F1D105	FCCF	FCCF Nice 1	Logging	1320 N Eastern Ave	Los Angeles	90063	LOGGING
A069F1D106	FCCF	FCCF Nice 2	Logging	1320 N Eastern Ave	Los Angeles	90063	LOGGING
A069F1D7	PLM	PLM NICE 1	Logging	750 East Avenue Q	Palmdale	93550	LOGGING
A069F1D8	PLM	PLM NICE 2	Logging	750 East Avenue Q	Palmdale	93550	LOGGING
A069F130	BUR1	BUR1 700	ASR	22554U Pine Canyon Rd.	Lake Hughes	93532	DTVRS 700
A069F160	BUR1	BUR1 UHF	ASR	22554U Pine Canyon Rd.	Lake Hughes	93532	DTVRS UHF
A069F131	DPW38	DPW38 700	ASR	39750 163rd Street E. Lake	Los Angeles	93591	DTVRS 700
A069F161	DPW38	DPW38 UHF	ASR	39750 163rd Street E. Lake	Los Angeles	93591	DTVRS UHF
A069F132	FRP	FRP 700	ASR	Blue Ridge Road 3N06	Wrightwood	92397	DTVRS 700
A069F162	FRP	FRP UHF	ASR	Blue Ridge Road 3N06	Wrightwood	92397	DTVRS UHF
A069F134	JPk2	JPk2 700	ASR	Sycamore Flats Motorway	San Dimas	91741	DTVRS 700
A069F164	JPk2	JPk2 UHF	ASR	Sycamore Flats Motorway	San Dimas	91741	DTVRS UHF
A069F135	MML	MML 700	ASR	Magic Mountain Link	Santa Clarita	91387	DTVRS 700
A069F165	MML	MML UHF	ASR	Magic Mountain Link	Santa Clarita	91387	DTVRS UHF
A069F166	PMT	PMT UHF	ASR	Pine Mountain Road	Monrovia	91016	DTVRS UHF
A069F12001	HPK	ANF ND 700 HPK	Prime	7 Hauser Mtn Rd.	Palmdale	93510	DTVRS 700
A069F12001	HPK	ANF ND 700 HPK	Remote	7 Hauser Mtn Rd.	Palmdale	93510	DTVRS 700
A069F12002	MMC	ANF ND 700 MMC	Remote	Sierra Pelona West Mountain Way	Palmdale	91390	DTVRS 700
A069F150	HPK	ANF ND UHF HPK	Prime	7 Hauser Mtn Rd.	Palmdale	93510	DTVRS UHF
A069F15001	HPK	ANF ND UHF HPK	Remote	7 Hauser Mtn Rd.	Palmdale	93510	DTVRS UHF
A069F15002	MMC	ANF ND UHF MMC	Remote	Sierra Pelona West Mountain Way	Palmdale	91390	DTVRS UHF
A069F128	DPK	Catalina 700 DPK	Prime	177U Divide Rd.	Avalon	90704	DTVRS 700
A069F12801	DPK	Catalina 700 DPK	Remote	177U Divide Rd.	Avalon	90704	DTVRS 700
A069F12802	BJM	Catalina 700 BJM	Remote	2124U Orizaba Rd.	Avalon	90704	DTVRS 700
A069F12803	TWR	Catalina 700 TWR	Remote	10007U Banning House Rd.	Avalon	90704	DTVRS 700
A069F158	DPK	Catalina UHF DPK	Prime	177U Divide Rd.	Avalon	90704	DTVRS UHF
A069F15801	DPK	Catalina UHF DPK	Remote	177U Divide Rd.	Avalon	90704	DTVRS UHF
A069F15802	BJM	Catalina UHF BJM	Remote	2124U Orizaba Rd.	Avalon	90704	DTVRS UHF
A069F15803	TWR	Catalina UHF TWR	Remote	10007U Banning House Rd.	Avalon	90704	DTVRS UHF





# ATTACHMENT B

SITE ID	SITE CODE	DTVRS SITE NAME	SITE TYPE	SITE ADDRESS	CITY	ZIP CODE	SUBSYSTEM
A069F121	FCCF	Downtown 700 FCCF	Prime	1320 N Eastern Ave	Los Angeles	90063	DTVRS 700
A069F12101	FCCF	Downtown 700 FCCF	Remote	1320 N Eastern Ave	Los Angeles	90063	DTVRS 700
A069F12102	BHS	Downtown 700 BHS	Remote	4100 S. La Cienega Ave	Los Angeles	90056	DTVRS 700
A069F12103	CCT	Downtown 700 CCT	Remote	210 W. Temple St.	Los Angeles	90012	DTVRS 700
A069F12104	CTYWLK	Downtown700 CTYWLK	Remote	1000 Universal Studios Bl. Bldg 4505/N4	Universal City	91608	DTVRS 700
A069F12105	UCLA	Downtown 700 UCLA	Remote	700 Tiverton Ave.	Los Angeles	91773	DTVRS 700
A069F151	FCCF	Downtown UHF FCCF	Prime	1320 N Eastern Ave	Los Angeles	90063	DTVRS UHF
A069F15101	FCCF	Downtown UHF FCCF	Remote	1320 N Eastern Ave	Los Angeles	90063	DTVRS UHF
A069F15102	BHS	Downtown UHF BHS	Remote	4100 S. La Cienega Ave	Los Angeles	90056	DTVRS UHF
A069F15103	CCT	Downtown UHF CCT	Remote	210 W. Temple St.	Los Angeles	90012	DTVRS UHF
A069F15104	CTYWLK	Downtown UHF CTYWLK	Remote	1000 Universal Studios Bl. Bldg 4505/N4	Universal City	91608	DTVRS UHF
A069F122	RIH	East 700 RIH	Prime	2970U Workman Mill Rd.	Whittier	90601	DTVRS 700
A069F12201	RIH	East 700 RIH	Remote	2970U Workman Mill Rd.	Whittier	90601	DTVRS 700
A069F12202	PHN	East 700 PHN	Remote	18794 Vantage Point Dr.	Rowland Hts	91748	DTVRS 700
A069F12203	POM	East 700 POM	Remote	400 Civic Center Plaza	Pomona	91766	DTVRS 700
A069F12204	SDW	East 700 SDW	Remote	308 Via Blanca	San Dimas	91773	DTVRS 700
A069F12205	ESR	East 700 ESR	Remote	Angeles National Forest	Los Angeles	90711	DTVRS 700
A069F12206	BKK	East 700 BKK	Remote	2220 South Azusa Ave	West Covina	91792	DTVRS 700
A069F12207	LASDTEM	East 700 LASDTEM	Remote	8838 Las Tunas Dr.	Temple City	91780	DTVRS 700
A069F12208	INDWT	East 700 INDWT	Remote	20905 Running Branch Road	Diamond Bar	91765	DTVRS 700
A069F12209	MVS	East 700 MVS	Remote	11515 Colima Rd.	Whittier	90604	DTVRS 700
A069F152	RIH	East UHF RIH	Prime	2970U Workman Mill Rd.	Whittier	90601	DTVRS UHF
A069F15201	RIH	East UHF RIH	Remote	2970U Workman Mill Rd.	Whittier	90601	DTVRS UHF
A069F15202	PHN	East UHF PHN	Remote	18794 Vantage Point Dr.	Rowland Hts	91748	DTVRS UHF
A069F15203	POM	East UHF POM	Remote	400 Civic Center Plaza	Pomona	91766	DTVRS UHF
A069F15204	SDW	East UHF SDW	Remote	308 Via Blanca	San Dimas	91773	DTVRS UHF
A069F15205	ESR	East UHF ESR	Remote	Angeles National Forest	Los Angeles	90711	DTVRS UHF
A069F15206	MVS	East UHF MVS	Remote	11515 Colima Rd.	Whittier	90604	DTVRS UHF
A069F123	BMT	I5N 700 BMT	Prime	46811 Ridge Route Rd.	Gorman	93243	DTVRS 700
A069F12301	BMT	I5N 700 BMT	Remote	46811 Ridge Route Rd.	Gorman	93243	DTVRS 700
A069F12302	TPK	I5N 700 TPK	Remote	Tejon Mountain Rd.	Lebec	93243	DTVRS 700
A069F12401	WTR	I5W 700 WTR	Prime	33507U Whitaker Ridge Road	Castaic	91384	DTVRS 700
A069F12401	WTR	I5W 700 WTR	Remote	33507U Whitaker Ridge Road	Castaic	91384	DTVRS 700
A069F12402	WMP	I5W 700 WMP	Remote	Whitaker Peak Rd (6N53)	Castaic	91384	DTVRS 700
A069F15301	BMT	I5N UHF BMT	Prime	46811 Ridge Route Rd.	Gorman	93243	DTVRS UHF
A069F15301	BMT	I5N UHF BMT	Remote	46811 Ridge Route Rd.	Gorman	93243	DTVRS UHF
A069F15302	TPK	I5N UHF TPK	Remote	Tejon Mountain Rd.	Lebec	93243	DTVRS UHF
A069F15401	WTR	I5W UHF WTR	Prime	33507U Whitaker Ridge Road	Castaic	91384	DTVRS UHF
A069F15401	WTR	I5W UHF WTR	Remote	33507U Whitaker Ridge Road	Castaic	91384	DTVRS UHF
A069F15402	WMP	I5W UHF WMP	Remote	Whitaker Peak Rd (6N53)	Castaic	91384	DTVRS UHF
A069F12501	LACFDEL	North 700 LACFDEL	Prime	28101 Chiquito Canyon Rd.	Castaic	98101	DTVRS 700
A069F12501	LACFDEL	North 700 LACFDEL	Remote	28101 Chiquito Canyon Rd.	Castaic	98101	DTVRS 700
A069F12502	LDWP243	North 700 LDWP243	Remote	16310 Silver Oaks Drive	Sylmar	91342	DTVRS 700
A069F12503	LPC	North 700 LPC	Remote	16482U Santa Clara Truck Trail	Santa Clarita	91321	DTVRS 700
A069F12504	OAT	North 700 OAT	Remote	22000 Palo Sola Truck Rd.	Chatsworth	91311	DTVRS 700
A069F12505	ONK	North 700 ONK	Remote	26814U Oat Mountain Motorway	Chatsworth	91381	DTVRS 700
A069F155	ONK	North UHF ONK	Prime	26814U Oat Mountain Motorway	Chatsworth	91381	DTVRS UHF
A069F15501	ONK	North UHF ONK	Remote	26814U Oat Mountain Motorway	Chatsworth	91381	DTVRS UHF
A069F15502	LDWP243	North UHF LDWP243	Remote	16310 Silver Oaks Drive	Sylmar	91342	DTVRS UHF
A069F127	MLM	Northern Desert 700 MLM	Prime	44902 60th St W	Lancaster	93536	DTVRS 700
A069F12701	MLM	Northern Desert 700 MLM	Remote	44902 60th St W	Lancaster	93536	DTVRS 700

# ATTACHMENT B

SITE ID	SITE CODE	DTVRS SITE NAME	SITE TYPE	SITE ADDRESS	CITY	ZIP CODE	SUBSYSTEM
A069F12702	PRG	Northern Desert 700 PRG	Remote	16046U Portal Ridge Rd.	Lake Hughes	93532	DTVRS 700
A069F12703	PLM	Northern Desert 700 PLM	Remote	750 East Avenue Q	Palmdale	93550	DTVRS 700
A069F12704	GMT	Northern Desert 700 GMT	Remote	Grass Mountain Fire Road	Green Valley	91390	DTVRS 700
A069F157	MLM	Northern Desert UHF MLM	Prime	44902 60th St W	Lancaster	93536	DTVRS UHF
A069F15701	MLM	Northern Desert UHF MLM	Remote	44902 60th St W	Lancaster	93536	DTVRS UHF
A069F15702	PRG	Northern Desert UHF PRG	Remote	16046U Portal Ridge Rd.	Lake Hughes	93532	DTVRS UHF
A069F15703	GMT	Northern Desert UHF GMT	Remote	Grass Mountain Fire Road	Green Valley	91390	DTVRS UHF
A069F119	CRN	San Gb 700 CRN	Prime	1528 Sugar Loaf Dr.	La Canada Flintridge	91011	DTVRS 700
A069F11901	CRN	San Gb 700 CRN	Remote	1528 Sugar Loaf Dr.	La Canada Flintridge	91011	DTVRS 700
A069F11902	MDI	San Gb 700 MDI	Remote	14404U Mount Disappointment Rd.	Altadena	91001	DTVRS 700
A069F11903	MIR	San Gb 700 MIR	Remote	2000 Glen Oaks Blvd	Pasadena	91105	DTVRS 700
A069F11904	MTL2	San Gb 700 MTL2	Remote	5150 Mount Lukens Truck Trail	Los Angeles	91214	DTVRS 700
A069F11905	VPK	San Gb 700 VPK	Remote	8010 Verdugo Mountain Way	Glendale	91352	DTVRS 700
A069F149	CRN	San Gb UHF CRN	Prime	1528 Sugar Loaf Dr.	La Canada Flintridge	91011	DTVRS UHF
A069F14901	MDI	San Gb UHF MDI	Remote	14404U Mount Disappointment Rd.	Altadena	91001	DTVRS UHF
A069F14902	MIR	San Gb UHF MIR	Remote	2000 Glen Oaks Blvd	Pasadena	91105	DTVRS UHF
A069F14903	MTL2	San Gb UHF MTL2	Remote	5150 Mount Lukens Truck Trail	Los Angeles	91214	DTVRS UHF
A069F14904	VPK	San Gb UHF VPK	Remote	8010 Verdugo Mountain Way	Glendale	91352	DTVRS UHF
A069F126	RHT	South 700 RHT	Prime	5741 W Crestridge Rd.	Rancho Palos Verdes	90275	DTVRS 700
A069F12601	RHT	South 700 RHT	Remote	5741 W Crestridge Rd.	Rancho Palos Verdes	90275	DTVRS 700
A069F12602	CCB	South 700 CCB	Remote	200 W. Compton Blvd.	Compton	90220	DTVRS 700
A069F12603	SPH	South 700 SPH	Remote	3860 E Crest Rd.	Rancho Palos Verdes	90275	DTVRS 700
A069F12604	SGH	South 700 SGH	Remote	2321 Stanley Ave.	Signal Hill	90755	DTVRS 700
A069F12605	APC	South 700 APC	Remote	11701 S. La Cienega Blvd.	Los Angeles	90045	DTVRS 700
A069F12606	RPVT	South 700 RPVT	Remote	7000 Los Verdes Dr. (Los Verdes Golf Course)	Rancho Palos Verdes	90275	DTVRS 700
A069F156	RHT	South UHF RHT	Prime	5741 W Crestridge Rd.	Rancho Palos Verdes	90275	DTVRS UHF
A069F15601	RHT	South UHF RHT	Remote	5741 W Crestridge Rd.	Rancho Palos Verdes	90275	DTVRS UHF
A069F15602	CCB	South UHF CCB	Remote	200 W. Compton Blvd.	Compton	90220	DTVRS UHF
A069F15603	SPH	South UHF SPH	Remote	3860 E Crest Rd.	Rancho Palos Verdes	90275	DTVRS UHF
A069F15604	SGH	South UHF SGH	Remote	2321 Stanley Ave.	Signal Hill	90755	DTVRS UHF
A069F129	SPN	West 700 SPN	Prime	23501 Saddle Peak Rd.	Topanga	90290	DTVRS 700
A069F12901	SPN	West 700 SPN	Remote	23501 Saddle Peak Rd.	Topanga	90290	DTVRS 700
A069F12902	GRM	West 700 GRM	Remote	900 N Temescal Canyon Fire Rd.	Los Angeles	90272	DTVRS 700
A069F12903	LACF072	West 700 LACF072	Remote	1832 Decker Cyn Rd.	Malibu	90265	DTVRS 700
A069F12905	AGH	West 700 AGH	Remote	29650 Kimberly Drive	Agoura Hills	91301	DTVRS 700
A069F12906	SPN	West 700 SPN	Remote	24574 W Saddle Peak Rd.	Malibu	91302	DTVRS 700
A069F12907	CPK	West 700 CPK	Remote	928 Latigo Canyon Road	Malibu	90265	DTVRS 700
A069F159	SPN	West UHF SPN	Prime	23501 Saddle Peak Rd.	Topanga	90290	DTVRS UHF
A069F15901	SPN	West UHF SPN	Remote	23501 Saddle Peak Rd.	Topanga	90290	DTVRS UHF
A069F15902	GRM	West UHF GRM	Remote	900 N Temescal Canyon Fire Rd.	Los Angeles	90272	DTVRS UHF
A069F15903	LACF072	West UHF LACF072	Remote	1832 Decker Cyn Rd.	Malibu	90265	DTVRS UHF
A069F15905	AGH	West UHF AGH	Remote	29650 Kimberly Drive	Agoura Hills	91301	DTVRS UHF
A069F15906	SPN	West UHF SPN	Remote	24574 W Saddle Peak Rd.	Malibu	91302	DTVRS UHF
A069F15907	CPK	West UHF CPK	Remote	928 Latigo Canyon Road	Malibu	90265	DTVRS UHF



## 2. Common Platform Sites – Microwave and MPLS Site ID and Address Table covered in the NMDN-1 Warranty Support Plan with added sites supporting DTVRS, Core, DSR and Dispatch Sites

The table outlines the sites that comprise all previously covered NMDN-1 Sites with Common Platform Microwave and MPLS monitored equipment. The additional sites with Microwave and MPLS that now support DTVRS, Core, DSR and Dispatch Sites have been incorporated.

SITE ID/ALARM	SITE CODE	SITE NAME	ADDRESS	CITY	ZIP
A069F1M1_(MW)	AGH	Agoura Hills	29650 Kimberly Drive	Agoura Hills	91301
A069F1M1_(MPLS)	AGH	Agoura Hills	29650 Kimberly Drive	Agoura Hills	91301
A069F1M2_(MW)	APC	Airport Courthouse	11701 S. La Cienega Blvd.	Los Angeles	90045
A069F1M2_(MPLS)	APC	Airport Courthouse	11701 S. La Cienega Blvd.	Los Angeles	90045
A069F1M3_(MW)	BHS	Baldwin Hills	4100 S. La Cienega Ave	Los Angeles	90056
A069F1M3_(MPLS)	BHS	Baldwin Hills	4100 S. La Cienega Ave	Los Angeles	90056
A069F1M4_(MW)	BJM	Black Jack Mountain	3124 U Orizaba Rd	Avalon	90704
A069F1M4_(MPLS)	BJM	Black Jack Mountain	3124 U Orizaba Rd	Avalon	90704
A069F1M5_(MW)	BKK	BKK Landfill	2220 South Azusa Ave	West Covina	91792
A069F1M5_(MPLS)	BKK	BKK Landfill	2220 South Azusa Ave	West Covina	91792
A069F1M7_(MW)	BUR1	Burnt Peak 1	22554 U Pine Canyon Rd.	Lake Hughes	93532
A069F1M7_(MPLS)	BUR1	Burnt Peak 1	22554 U Pine Canyon Rd.	Lake Hughes	93532
A069F1M8_(MW)	CCB	Compton Court Building	200 W. Compton Blvd.	Compton	90220
A069F1M8_(MPLS)	CCB	Compton Court Building	200 W. Compton Blvd.	Compton	90220
A069F1M9_(MW)	CCT	Criminal Court Building	210 W. Temple St.	Los Angeles	90012
A069F1M9_(MPLS)	CCT	Criminal Court Building	210 W. Temple St.	Los Angeles	90012
A069F1M10_(MW)	CLM	Claremont	1616 Monte Vista	Claremont	91711
A069F1M10_(MPLS)	CLM	Claremont	1616 Monte Vista	Claremont	91711
A069F1M11_(MW)	CPK	Castro Peak	928 Latigo Canyon Road	Malibu	90265
A069F1M11_(MPLS)	CPK	Castro Peak	928 Latigo Canyon Road	Malibu	90265
A069F1M12_(MW)	CRN	Cerro Negro	1528 Sugar Loaf Dr.	La Canada Flintridge	91011
A069F1M12_(MPLS)	CRN	Cerro Negro	1528 Sugar Loaf Dr.	La Canada Flintridge	91011
A069F1M63_(MW)	CTYWLK	City Walk	1000 Universal Studios Bl. Bldg 4505/N4	Universal City	91608
A069F1M63_(MPLS)	CTYWLK	City Walk	1000 Universal Studios Bl. Bldg 4505/N4	Universal City	91608
A069F1M13_(MW)	DPK	Dakin Peak	177 U Divide Rd.	Avalon	90704
A069F1M13_(MPLS)	DPK	Dakin Peak	177 U Divide Rd.	Avalon	90704
A069F1M14_(MW)	DPW38	DPW - Pump Station 38	39750 163rd Street E. Lake	Los Angeles	93591
A069F1M14_(MPLS)	DPW38	DPW - Pump Station 38	39750 163rd Street E. Lake	Los Angeles	93591
A069F1M54_(MW)	ESR	East Sunset Ridge	Angeles National Forest	Los Angeles	90711
A069F1M54_(MPLS)	ESR	East Sunset Ridge	Angeles National Forest	Los Angeles	90711
A069F1M15_(MW)	FCCF	Fire Command and Control Fac.	1320 N. Eastern Ave.	Los Angeles	90063
A069F1M15_(MPLS)	FCCF	Fire Command and Control Fac.	1320 N. Eastern Ave.	Los Angeles	90063
A069F1M16_(MW)	FRP	Frost Peak	Blue Ridge Road 3N06	Wrightwood	92397
A069F1M16_(MPLS)	FRP	Frost Peak	Blue Ridge Road 3N06	Wrightwood	92397
A069F1M17_(MW)	GMT	Grass Mountain	Grass Mountain Fire Road	Green Valley	91390
A069F1M17_(MPLS)	GMT	Grass Mountain	Grass Mountain Fire Road	Green Valley	91390
A069F1M18_(MW)	GRM	Green Mountain	900 N Temescal Canyon Fire Rd.	Los Angeles	90272
A069F1M18_(MPLS)	GRM	Green Mountain	900 N Temescal Canyon Fire Rd.	Los Angeles	90272
A069F1M19_(MW)	HPK	Hauser Peak	7 Hauser Mtn Rd.	Palmdale	93510
A069F1M19_(MPLS)	HPK	Hauser Peak	7 Hauser Mtn Rd.	Palmdale	93510
A069F1M20_(MW)	INDWT	Industry Hills Water Tank	20905 Running Branch Road	Diamond Bar	91765
A069F1M20_(MPLS)	INDWT	Industry Hill Water Tank	20905 Running Branch Road	Diamond Bar	91765
A069FM22_(MW)	JPK2	Johnstone Peak 2	Sycamore Flats Motorway	San Dimas	91741
A069F1M22_(MPLS)	JPK2	Johnstone Peak 2	Sycamore Flats Motorway	San Dimas	91741
A069F1M23_(MW)	LACF072	LA County Fire Station 72	1832 Decker Cyn Rd.	Malibu	90265



SITE ID/ALARM	SITE CODE	SITE NAME	ADDRESS	CITY	ZIP
A069F1M23_(MPLS)	LACF072	LA County Fire Station 72	1832 Decker Cyn Rd.	Malibu	90265
A069F1M24_(MW)	LACFDEL	LA County Fire Station Del Valle	28101 Chiquito Canyon Rd.	Castaic	98101
A069F1M24_(MPLS)	LACFDEL	LA County Fire Station Del Valle	28101 Chiquito Canyon Rd.	Castaic	98101
A069F1M28_(MW)	LDWP243	LA DWP Station 243	16310 Silver Oaks Drive	Sylmar	91342
A069F1M28_(MPLS)	LDWP243	LA DWP Station 243	16310 Silver Oaks Drive	Sylmar	91342
A069F1M25_(MW)	LAN	Lancaster Sheriff Station	501 W. Lancaster Blvd.	Lancaster	93534
A069F1M25_(MPLS)	LAN	Lancaster Sheriff Station	501 W. Lancaster Blvd.	Lancaster	93534
A069F1M26_(MW)	LARICSHQ	LARICS Headquarters	2525 Corporate Place	Monterey Park	91754
A069F1M26_(MPLS)	LARICSHQ	LARICS Headquarters	2525 Corporate Place	Monterey Park	91754
A069F1M27_(MW)	LASDTEM	–Temple Sheriff Station	8838 Las Tunas Dr.	Temple City	91780
A069F1M27_(MPLS)	LASDTEM	–Temple Sheriff Station	8838 Las Tunas Dr.	Temple City	91780
A069F1M30_(MW)	LPC	Loop Canyon	16482U Santa Clara Truck Trail	Santa Clarita	91321
A069F1M30_(MPLS)	LPC	Loop Canyon	16482U Santa Clara Truck Trail	Santa Clarita	91321
A069F1M31_(MW)	MDI	Mount Disappointment	14404 U Mount Disappointment Rd.	Altadena	91001
A069F1M31_(MPLS)	MDI	Mount Disappointment	14404 U Mount Disappointment Rd.	Altadena	91001
A069F1M32_(MW)	MIR	Mirador	2000 Glen Oaks Blvd	Pasadena	91105
A069F1M32_(MPLS)	MIR	Mirador	2000 Glen Oaks Blvd	Pasadena	91105
A069F1M33_(MW)	MLM	Mira Loma Detention Ctr	44902 60th St W	Lancaster	93536
A069F1M33_(MPLS)	MLM	Mira Loma Detention Ctr	44902 60th St W	Lancaster	93536
A069F1M34_(MW)	MMC	Mount McDill	Sierra Pelona West Mountain Way	Palmdale	91390
A069F1M34_(MPLS)	MMC	Mount McDill	Sierra Pelona West Mountain Way	Palmdale	91390
A069F1M35_(MW)	MML	Magic Mountain Link	Magic Mountain Link	Santa Clarita	91387
A069F1M35_(MPLS)	MML	Magic Mountain Link	Magic Mountain Link	Santa Clarita	91387
A069F1M36_(MW)	MTL2	Mount Lukens2	5150 Mount Lukens Truck Trail	Los Angeles	91214
A069F1M36_(MPLS)	MTL2	Mount Lukens2	5150 Mount Lukens Truck Trail	Los Angeles	91214
A069F1M37_(MW)	MVS	Monte Vista (Star Center)	11515 Colima Rd.	Whittier	90604
A069F1M37_(MPLS)	MVS	Monte Vista (Star Center)	11515 Colima Rd.	Whittier	90604
A069F1M38_(MW)	OAT	Oat Mountain	22000 Palo Sola Truck Rd.	Chatsworth	91311
A069F1M38_(MPLS)	OAT	Oat Mountain	22000 Palo Sola Truck Rd.	Chatsworth	91311
A069F1M40_(MW)	ONK	Oat Mountain Nike	26814 U Oat Mountain Motorway	Chatsworth	91381
A069F1M40_(MPLS)	ONK	Oat Mountain Nike	26814 U Oat Mountain Motorway	Chatsworth	91381
A069F1M41_(MW)	PHN	Puente Hills	18794 Vantage Point Dr.	Rowland Hts	91748
A069F1M41_(MPLS)	PHN	Puente Hills	18794 Vantage Point Dr.	Rowland Hts	91748
A069F1M42_(MW)	PLM	Palmdale Sheriff Station	750 East Avenue Q	Palmdale	93550
A069F1M42_(MPLS)	PLM	Palmdale Sheriff Station	750 East Avenue Q	Palmdale	93550
A069F1M43_(MW)	PMT	Pine Mountain	Pine Mountain Road	Monrovia	91016
A069F1M43_(MPLS)	PMT	Pine Mountain	Pine Mountain Road	Monrovia	91016
A069F1M44_(MW)	POM	Pomona Courthouse	Pine Mountain Road	Monrovia	91016
A069F1M44_(MPLS)	POM	Pomona Courthouse	Pine Mountain Road	Monrovia	91016
A069F1M45_(MW)	PRG	Portal Ridge	16046U Portal Ridge Rd.	Lake Hughes	93532
A069F1M45_(MPLS)	PRG	Portal Ridge	16046U Portal Ridge Rd.	Lake Hughes	93532
A069F1M46_(MW)	RHT	Rolling Hills Transmit	5741 W Crestridge Rd.	Rancho Palos Verdes	90275
A069F1M46_(MPLS)	RHT	Rolling Hills Transmit	5741 W Crestridge Rd.	Rancho Palos Verdes	90275
A069F1M47_(MW)	RIH	Rio Hondo	2970U Workman Mill Rd.	Whittier	90601
A069F1M47_(MPLS)	RIH	Rio Hondo	2970U Workman Mill Rd.	Whittier	90601
A069F1M48_(MW)	RPVT	Rancho Palos Verdes – GC	7000 Los Verdes Dr. (Los Verdes GC)	Rancho Palos Verdes	90275
A069F1M48_(MPLS)	RPVT	Rancho Palos Verdes - GC	7000 Los Verdes Dr. (Los Verdes GC)	Rancho Palos Verdes	90275
A069F1M49_(MW)	SCC	Sheriff Communications Center	1277 N Eastern Ave	Los Angeles	90063
A069F1M49_(MPLS)	SCC	Sheriff Communications Center	1277 N Eastern Ave	Los Angeles	90063
A069F1M50_(MW)	SDW	San Dimas Water Tank	308 Via Blanca	San Dimas	91773
A069F1M50_(MPLS)	SDW	San Dimas Water Tank	308 Via Blanca	San Dimas	91773
A069F1M51_(MW)	SGH	Signal Hill	2321 Stanley Ave.	Signal Hill	90755
A069F1M51_(MPLS)	SGH	Signal Hill	2321 Stanley Ave.	Signal Hill	90755
A069F1M52_(MW)	SPH	San Pedro Hill	3860 E Crest Rd.	Rancho Palos Verdes	90275
A069F1M52_(MPLS)	SPH	San Pedro Hill	3860 E Crest Rd.	Rancho Palos Verdes	90275





SITE ID/ALARM	SITE CODE	SITE NAME	ADDRESS	CITY	ZIP
A069F1M53_(MW)	SPN/MCI	Saddle Peak	24574 W Saddle Peak Rd.	Malibu	91302
A069F1M53_(MPLS)	SPN/MCI	Saddle Peak	24574 W Saddle Peak Rd.	Malibu	91302
A069F1M55_(MW)	TOP	Topanga Peak	23501 Saddle Peak Rd.	Topanga	90290
A069F1M55_(MPLS)	TOP	Topanga Peak	23501 Saddle Peak Rd.	Topanga	90290
A069F1M56_(MW)	TPK	Tejon Peak	Tejon Mountain Rd.	Lebec	93243
A069F1M56_(MPLS)	TPK	Tejon Peak	Tejon Mountain Rd.	Lebec	93243
A069F1M57_(MW)	TWR	Tower Peak	10007 U Banning House Rd.	Avalon	90704
A069F1M57_(MPLS)	TWR	Tower Peak	10007 U Banning House Rd.	Avalon	90704
A069F1M58_(MW)	UCLA	UCLA (Factor Building)	700 Tiverton Ave.	Los Angeles	91773
A069F1M58_(MPLS)	UCLA	UCLA (Factor Building)	700 Tiverton Ave.	Los Angeles	91773
A069F1M59_(MW)	UNIV	Universal Studios	10 Universal City Pl.	Studio City	91608
A069F1M59_(MPLS)	UNIV	Universal Studios	10 Universal City Pl.	Studio City	91608
A069F1M60_(MW)	VPK	Verdugo Peak	8010 Verdugo Mountain Way	Glendale	91352
A069F1M60_(MPLS)	VPK	Verdugo Peak	8010 Verdugo Mountain Way	Glendale	91352
A069F1M61_(MW)	WMP	Whitaker Middle Peak	Whitaker Peak Rd (6N53)	Castaic	91384
A069F1M61_(MPLS)	WMP	Whitaker Middle Peak	Whitaker Peak Rd (6N53)	Castaic	91384
A069F1M62_(MW)	WTR	Whitaker Ridge	33507U Whitaker Ridge Road	Castaic	91384
A069F1M62_(MPLS)	WTR	Whitaker Ridge	33507U Whitaker Ridge Road	Castaic	91384

### 3. NMDN-1, DTVRS, Core, DSR and Dispatch Common Platform Sites - T/MON Site ID and Address Table

The table outlines the sites that comprise the NMDN-1, DTVRS, Core, DSR, and Dispatch Sites with Common Platform T/Mon monitored Site Support Equipment and Systems.

SITE ID	SITE CODE	ALARM TYPE	SITE NAME	ADDRESS	CITY	ZIP
MOS069F12904	AGH	AGH TMON	Agoura Hills	29650 Kimberly Drive	Agoura Hills	91301
MOS069F12605	APC	APC TMON	Airport Courthouse	11701 S. La Cienega Blvd.	Los Angeles	90045
MOS069F12102	BHS	BHS TMON	Baldwin Hills	4100 S. La Cienega Ave	Los Angeles	90056
MOS069F12802	BJM	BJM TMON	Black Jack Mountain	3124 U Orizaba Rd	Avalon	90704
MOS069F12206	BKK	BKK TMON	BKK Landfill	2220 South Azusa Ave	West Covina	91792
MOS069F130	BUR1	BUR1 TMON	Burnt Peak 1	22554U Pine Canyon Rd.	Lake Hughes	93532
MOS069F12602	CCB	CCB TMON	Compton Court Building	200 W. Compton Blvd.	Compton	90220
MOS069F12103	CCT	CCT TMON	Criminal Court Building	210 W. Temple St.	Los Angeles	90012
MOS069F1100	CLM	CLM TMON	Claremont	1616 Monte Vista	Claremont	91711
MOS069F12907	CPK	CPK TMON	Castro Peak	928 Latigo Canyon Road	Malibu	90265
MOS069F119	CRN	CRN TMON	Cerro Negro	1528 Sugar Loaf Dr.	La Canada Flintridge	91011
MOS069F12104	CTYWLK	CTYWLK TMON	City Walk	1000 Universal Studios Bl. Bldg 4505	Universal City	91608
MOS069F12801	DPK	DPK TMON	Dakin Peak	177 U Divide Rd.	Avalon	90704
MOS069F131	DPW38	DPW38 TMON	DPW - Pump Station 38	39750 163rd Street E. Lake	Los Angeles	93591
MOS069F12205	ESR	ESR TMON	East Sunset Ridge	Angeles National Forest	Los Angeles	90711
MOS069F151	FCCF	FCCF TMON	Fire Command & Control Fac	1320 N. Eastern Ave.	Los Angeles	90063
MOS069F132	FRP	FRP TMON	Frost Peak	Blue Ridge Road 3N06	Wrightwood	92397
MOS069F12704	GMT	GMT TMON	Grass Mountain	Grass Mountain Fire Road	Grass Valley	91390
MOS069F12902	GRM	GRM TMON	Green Mountain	900 N Temescal Canyon Fire Road	Los Angeles	90272
MOS069F12001	HPK	HPK TMON	Hauser Peak	7 Hauser Mtn Rd.	Palmdale	93510
MOS069F12208	INDWT	INDWT TMON	Industry Hills Water Tank	20905 Running Branch Road	Diamond Bar	91765
MOS069F164	JPK2	JPK2 TMON	Johnstone Peak 2	Sycamore Flats Motorway	San Dimas	91741
MOS069F12903	LACF072	LACF072 TMON	LA County Fire Station 72	1832 Decker Canyon Road	Malibu	90265
MOS069F12501	LACFDEL	LACFDEL TMON	LA County Fire Sta Del Valle	28101 Chiquito Canyon Road	Castaic	98201
MOS069F12502	LDWP243	LDWP243 TMON	LA DWP Station 243	16310 Silver Oaks Drive	Sylmar	91342
MOS069F1101	LAN	LAN TMON	Lancaster Sheriff Station	501 W. Lancaster Blvd.	Lancaster	93534



SITE ID	SITE CODE	ALARM TYPE	SITE NAME	ADDRESS	CITY	ZIP
MOS069F1D4	LARICSHQ	LARICSHQ TMON	LARICS Headquarters	2525 Corporate Place	Monterey Park	91754
MOS069F12207	LASDTEM	LASDTEM TMON	Temple Sheriff Station	8838 Las Tunas Dr.	Temple City	91780
MOS069F12503	LPC	LPC TMON	Loop Canyon	16482U Santa Clara Truck Trail	Santa Clarita	91321
MOS069F11902	MDI	MDI TMON	Mount Disappointment	14404 U Mount Disappointment Rd.	Altadena	91001
MOS069F14902	MIR	MIR TMON	Mirador	2000 Glen Oaks Blvd	Pasadena	91105
MOS069F12701	MLM	MLM TMON	Mira Loma Detention Ctr	44902 60th St W	Lancaster	93536
MOS069F15002	MMC	MMC TMON	Mount McDill	Sierra Pelona West Mountain Way	Palmdale	91390
MOS069F135	MML	MML TMON	Magic Mountain Link	Magic Mountain Link	Santa Clarita	91387
MOS069F11904	MTL2	MTL2 TMON	Mount Lukens2	5150 Mount Lukens Truck Trail	Los Angeles	91214
MOS069F15206	MVS	MVS TMON	Monte Vista Star Center	11515 Colima Road	Whittier	90604
MOS069F12504	OAT	OAT TMON	Oat Mountain	22000 Palo Sola Truck Trail	Chatsworth	91311
MOS069F12505	ONK	ONK TMON	Oat Mountain Nike	26814 U Oat Mountain Motorway	Chatsworth	91381
MOS069F15202	PHN	PHN TMON	Puente Hills	18794 Vantage Point Drive	Roland Heights	91748
MOS069F12703	PLM	PLM TMON	Palmdale Sheriff Station	750 East Avenue Q	Palmdale	93550
MOS069F166	PMT	PMT TMON	Pine Mountain	Pine Mountain Road	Monrovia	91016
MOS069F12203	POM	POM TMON	Pomona Courthouse	400 Civic Center Plaza	Pomona	91766
MOS069F12702	PRG	PRG TMON	Portal Ridge	16046U Portal Ridge Rd.	Lake Hughes	93532
MOS069F15201	RIH	RIH TM	Rio Hondo	2970U Workman Mill Road	Whittier	90601
MOS069F12601	RHT	RHT TMON	Rolling Hills Transmit	5741 W Crestridge Rd.	Rancho Palos Verdes	90275
MOS069F12606	RPVT	RPVT TMON	Rancho Palos Verdes - GC	7000 Los Verdes Dr. (Los Verdes	Rancho Palos Verdes	90275
MOS069F15204	SDW	SDW TMON	San Dimas Water Tank	308 Via Blanca	San Dimas	91773
MOS069F15604	SGH	SGH TMON	Signal Hill	2321 Stanley Ave.	Signal Hill	90755
MOS069F1D3	SCC	SCC TMON	Sheriff Communications Ctr	1277 N Eastern Ave	Los Angeles	90063
MOS069F12901	TOP	TOP TMON	Topanga Peak	23501 Saddle Peak Rd.	Topanga	90290
MOS069F12302	TPK	TPK TMON	Tejon Peak	Tejon Mountain Rd.	Lebec	93243
MOS069F12803	TWR	TWR TMON	Tower Peak	10007 U Banning House Rd.	Avalon	90704
MOS069F12105	UCLA	UCLA TMON	UCLA (Factor Building)	700 Tiverton Ave.	Los Angeles	91773
MOS069F1590	UNIV	UNIV TMON	Universal Studios	10 Universal City Place	Studio City	91608
MOS069F11905	VPK	VPK TMON	Verdugo Peak	8010 Verdugo Mountain Way	Glendale	91352
MOS069F12402	WMP	WMP TMON	Whitaker Middle Peak	Whitaker Peak Rd (6N53)	Castaic	91384
MOS069F12401	WTR	WTR TMON	Whitaker Ridge	33507U Whitaker Ridge Road	Castaic	91384

## F. NETWORK MONITORING: DTVRS, CORE, DSR, AND DISPATCH SITES MONITORED ELEMENTS TABLE

The table outlines a high-level view of the Monitored Element specific to the DTVRS, Core, DSR and Dispatch Sites

Monitored Element Alarms		
Active Directory	Domain Controllers	NTP/TRAK
Agent	DSR Servers	PDG
AIS	Exit Routers	Prime Site Controllers
APM	Firewalls	RDM
Application Servers	GAS Servers	RFDS
ATR	Gateway Routers	Simulcast Controllers
Backup Servers	GIS Servers	Statistical Servers
Border Routers	GTR Base / Repeater Radios	Storage Networking



Monitored Element Alarms		
Call Processor	Install Servers	Terminal Servers
CCGW	LAN Switches and Routers	Trap Forwarder
Channels	Licensing Service	UCS/UNC
Client PC Stations	Logging Recorders	UEM
Core / Master Site Servers	Logging Replay Stations	Virtual Machines
Core Routers	MCC7500 OP Positions	VMS
Database Servers		VPMs
Data Warehouse Servers		ZDS
Device Configuration Servers	Network Devices	Prime Site Controllers
DNS	NM Server and Clients	Zone Controllers

## G. NETWORK MONITORING: DTVRS, CORE, DSR, DISPATCH SITE COMMON PLATFORM - NEC MICROWAVE MONITORED ELEMENTS TABLE

### Alarm Overview/Definitions from iPASONET650 Service Manual:

#### Critical (CR) :

The Critical severity level indicates that a service affecting condition has occurred and an immediate corrective action is required. Such a severity can be reported, for example, when a managed object becomes totally out of service and its capability must be restored.

#### Major (MJ) :

The Major severity level indicates that a service affecting condition has developed and an urgent corrective action is required. Such a severity can be reported, for example, when there is a severe degradation in the capability of the managed object and its full capability must be restored.

#### Minor (MN) :

The Minor severity level indicates the existence of a non-service affecting fault condition and that corrective action should be taken in order to prevent a more serious (for example, service affecting) fault. Such a severity can be reported, for example, when the detected alarm condition is not currently degrading the capacity of the managed object.

#### Warning (WR) :

The Warning severity level indicates the detection of a potential or impending service affecting fault, before any significant effects have been felt. Action should be taken to further diagnose (if necessary) and correct the problem in order to prevent it from becoming a more serious service affecting fault.

These tables outline the NEC Microwave Common Platform System Alarms for DTVRS, Core, DSR, Dispatch Site Systems

SI NUMBER	ALARM NAME-OBJECT AFFECTED	SEVERITY	SI NUMBER	ALARM NAME-OBJECT AFFECTED	SEVERITY
	EQUIPMENT ALARMS				





SI NUMBER	ALARM NAME-OBJECT AFFECTED	SEVERITY	SI NUMBER	ALARM NAME-OBJECT AFFECTED	SEVERITY
1	Temperature too high Card	Critical	39	Database Save Failed Card	Major
2	System Reboot Card	Critical	40	Database Restore Failed Card	Major
3	Fan Failed Card	Critical	41	Inter-card Suspected Card	Major
4	System Reboot Card	Critical	42	Work Fan Failed Card	Major
5	Provisioning Disabled -FileSyst	Critical	43	Cold Restart Required: FPGA Changed Card	Major
6	Card not supported in this slot Card	Critical	44	Circuit Pack Below Baseline Card	Major
7	Provisioning Disabled Hardware Card	Critical	45	Card Unusable Card	Major
8	Upgrade in progress Card	Critical	46	Improper Card Jackin Card	Major
9	Plugin card 1 is missing or removed Card	Critical	47	LAN Port Down Network Interface	Major
10	Plugin card 2 is missing or removed Card	Critical	48	Input Voltage High on PSU Card Card Voltage Monitor	Major
11	Telecombus Allocation conflict Card	Critical	49	Input Voltage Low on PSU Card Card Voltage Monitor	Major
12	External Alarm Occurred External Alarm	Critical	50	Derived Voltage High Card_PSU	Major
13	SFP Mismatch SFP	Critical	51	Derived Voltage Low Card_PSU	Major
14	SFP missing or removed SFP	Critical	52	Input Voltage High on PSU Card Card_PSU	Major
15	SFP Auto Provision Mismatch SFP	Critical	53	Input Voltage Low on PSU Card Card_PSU	Major
16	SFP Failure SFP	Critical	54	Switched off/No Input Voltage Card_PSU	Major
17	SFP Unknown SFP	Critical	55	Routing table near capacity Node	Major
18	Laser Failure Port	Major	56	Database is corrupted/improper Node	Major
19	ALS Triggered - Laser is shutdown Port	Major	57	XPIC Type Mismatch XPIC Group	Major
20	Laser temperature high threshold crossed Port	Major	58	Configuration File Not Found Card	Minor
21	Laser temperature low threshold crossed Port	Major	59	File system almost full Card	Minor
22	Laser supply voltage high threshold crossed Port	Major	60	Software Downloading Card	Minor
23	Laser supply voltage low threshold crossed Port	Major	61	SW version mismatch Card	Minor
24	Laser Bias current lower threshold crossed Port	Major	62	Config out of sync Card	Minor
25	Laser Bias current upper threshold crossed Port	Major	63	Redundant pair communication failure Card	Minor
26	Transmitted Power lower threshold crossed Port	Major	64	Bus Error Card	Minor
27	Transmitted Power upper threshold crossed Port	Major	65	Config Downloading Card	Minor
28	Received Power lower threshold crossed Port	Major	66	Db prepared statement step failed Card	Minor
29	Received Power upper threshold crossed Port	Major	67	Software Committing Card	Minor
30	Bad checksum on configuration file Card	Major	68	Memory Usage exceeded threshold Card	Minor
31	Bad log file Card	Major	69	Software Download failed Card	Minor
32	Card missing or removed Card	Major	70	Inter Card Communication failure Card	Minor
33	Hardware Failure Card	Major	71	Firmware Version Mismatch / Invalid with Software Version Card	Minor
32	Program Fault, Software Failure Card	Major	72	72 User Authentication Failed Node	Minor
35	EEPROM Failure Card	Major	73	73 NTP Server Unreachable Node	Minor
36	FPGA Load Failure Card	Major	74	74 Factory Defaults Restored Node	Minor
37	Card mismatch Card	Major	75	75 Routing table near capacity Node	Minor
38	Card jacked out Shelf	Major	76	76 Uploading Config Card Warning	Minor



SI NUMBER	ALARM NAME-OBJECT AFFECTED	SEVERITY	SI NUMBER	ALARM NAME-OBJECT AFFECTED	SEVERITY
	<b>RADIO ALARMS</b>				
1	Cluster Alarm one Cluster_Alarm Critical	Critical	32	High BER Alarm Port_RADIO Major	Major
2	Cluster Alarm two Cluster_Alarm Critical	Critical	33	MOD Alarm Port_RADIO Major	Major
3	Cluster Alarm three Cluster_Alarm Critical	Critical	34	IF Cable Short Port_RADIO Major	Major
4	Cluster Alarm four Cluster_Alarm Critical	Critical	35	XIF Port_RADIO Major	Major
5	RFSW Cable Open Alarm RadioSwitchGroup Major	Major	36	RDI Port_RADIO Major	Major
6	RFSW CNT PS Alarm RadioSwitchGroup Major	Major	37	Maintenance State Auto Clear Port_RADIO major	Major
7	TRP Total Alarm RadioTRP Major	Major	38	LO REF RadioTRP Minor	Minor
8	TRP Alarm RadioTRP Major	Major	39	TRP Fan1 Failed RadioTRP Minor	Minor
9	TRP Type Mismatch RadioTRP Major	Major	40	TRP Fan2 Failed RadioTRP Minor	Minor
10	Tx Power Alarm RadioTRP Major	Major	41	TDM Range Mismatch Port_RADIO Minor	Minor
11	Tx Input Alarm RadioTRP Major	Major	42	AMR Range Mismatch Port_RADIO Minor	Minor
12	Rx Level Alarm RadioTRP Major	Major	43	Clock Fail Alarm Port_RADIO Minor	Minor
13	TRP CPU / Cable Open Alarm RadioTRP Major	Major	44	Low BER Alarm Port_RADIO Minor	Minor
14	TRP Power Supply Alarm RadioTRP Major	Major	45	Early Warning Port_RADIO Minor	Minor
15	SD Alarm RadioTRP Major	Major	46	UAE Port_RADIO Minor	Minor
16	SD Level RadioTRP Major	Major	47	L2 Sync Loss Port_RADIO Minor	Minor
17	SD LO RadioTRP Major	Major	48	RF OFS 15min Port_RADIO Minor	Minor
18	Main Level RadioTRP Major	Major	49	RF BBE 15min Port_RADIO Minor	Minor
19	AES Decrypt Fail Port_RADIO Major	Major	50	RF ES 15min Port_RADIO Minor	Minor
20	AES Mode Mismatch Port_RADIO Major	Major	51	RF SES 15min Port_RADIO Minor	Minor
21	AES PSK State Port_RADIO Major	Major	52	RF SEP 15min Port_RADIO Minor	Minor
22	AES Key Exchange Fail Port_RADIO Major	Major	53	RF UAS 15min Port_RADIO Minor	Minor
23	Unsupported CS Port_RADIO Major	Major	54	TCN RX Level 15min Port_RADIO Minor	Minor
24	MODULE Alarm Port_RADIO Major	Major	55	RF OFS Day Port_RADIO Minor	Minor
25	Unlocked Port_RADIO Major	Major	56	RF BBE Day Port_RADIO Minor	Minor
26	Communication Fail Port_RADIO Major	Major	57	RF ES Day Port_RADIO Minor	Minor
27	RX Bus Error Port_RADIO Major	Major	58	RF SES Day Port_RADIO Minor	Minor
28	TX Bus Error Port_RADIO Major	Major	59	RF SEP Day Port_RADIO Minor	Minor
29	MODEM PS Alarm Port_RADIO Major	Major	60	RF UAS Day Port_RADIO Minor	Minor
30	LOF Port_RADIO Major	Major	61	TCN RX Level Day Port_RADIO Minor	Minor
31	Frame ID Port_RADIO Major	Major			



SI NUMBER	ALARM NAME-OBJECT AFFECTED	SEVERITY	SI NUMBER	ALARM NAME-OBJECT AFFECTED	SEVERITY
	<b>L2 ALARMS</b>			<b>PDH ALARMS</b>	
1	Auto Negotiation Failed Ethernet Port	Critical	1	Loss of Signal Port_PDH	Major
2	Loss of Signal Ethernet Port	Critical	2	Alarm Indication Signal Port_PDH	Major
3	Connectivity Check Failed MEP	Critical	3	Alarm Indication Signal on Port Port_PDH	Major
4	No RPL Owner Configured Ringlet	Critical	4	Alarm Indication Signal Generated on Port Port_PDH	Major
5	Multiple RPLOwners Configured Ringlet	Critical	5	Loss Of Frame on Port Port_PDH	Major
6	Unexpected MAID MEP	Critical	6	Loss Of Terminal Framing Port_PDH	Major
7	Remote Defect Indication MEP	Critical	7	Loss Of MultiFrame Port_PDH	Major
8	CCM Interval Mismatch MEP	Critical	8	Remote Alarm Indication Port_PDH	Major
9	Loop Detected MEP	Critical	9	Lockout Active Port_PDH	Major
10	Unexpected MEPID MEP	Critical	10	Forced Switch Active Port_PDH	Minor
11	Unexpected MDLevel MEP	Critical	11	Manual Switch Active Port_PDH	Minor
12	FDB Limit Reached EVC	Critical	12	Protection Switch Active Port_PDH	Minor
13	Traffic Field Mismatch MEP	Critical	13	PRBS Active on Client Side Port_PDH	Warning
14	Static Unicast Add Entry Failed EVC	Critical	14	PRBS Active on Network Side Port_PDH	Warning
15	LAG members are operating at different speeds LAG Port	Critical	15	Loss of PRBS Synchronization Port_PDH	Warning
16	Total Loss of Capacity on CBG Channel Bonding Group	Critical			
17	CBG Member not Deskewable Ethernet Port	Critical		<b>SSM ALARMS</b>	
18	Loss of Connectivity on CBG member Ethernet Port	Critical	1	System clock in holdover mode TimingManager	
19	RDI on CBG member Ethernet Port	Critical	2	System clock in holdover mode Shelf	Major
20	Group label Mismatch on CBG Member Ethernet Port	Critical	3	System clock in internal mode TimingManager	Major
21	Link Down Data Port- GigE Interface	Major	4	System primary timing reference failed TimingManager	Major
22	Link Integrity on Ethernet Port	Major	5	System secondary timing reference failed TimingManager	Major
23	Forced Down - Link Integrity Ethernet Port	Major	6	Timing reference failed Timing Reference	Major
24	Excessive Error Ratio Ethernet Port	Major	7	Secondary reference out of range Synchronization	Major
25	LAG Capacity Changed LAGPort	Major	8	Primary reference clock PPM out of range Synchronization	Major
26	LAG is in Protect State LAGPort	Major	9	Loss Of Signal BITS	Major
27	LAG Link Down Data Port- GigE Interface	Major	10	Timing Generation Entry to FreeRun Shelf	Major
28	Same numbers of ports are not configured at the other end of the LAG	Major			
29	Signal Degrade Ethernet Port	Minor			
30	Port Mirroring Active Data Port- GigE Interface	Minor			
31	Remote and Local IP Match PacketTrunk	Minor			
32	PacketTrunk OperStatus Down PacketTrunk	Minor			
33	The L2Domain has become root L2Domain	Minor			
34	L2Domain detected a topology change L2Domain	Minor			
35	L2Domain detected STP FwdState change of a port Data Port	Minor			
36	Partial Loss of Capacity on CBG Channel Bonding Group	Minor			



SI NUMBER	ALARM NAME-OBJECT AFFECTED	SEVERITY	SI NUMBER	ALARM NAME-OBJECT AFFECTED	SEVERITY
	<b>SONET ALARMS</b>				
1	Connection Provisioning Failed CommonConnect	Critical	44	Section / RS DCC Link Failure Network Interface	<b>SEVERITY</b>
2	Loss of Signal OC Port	Critical	45	Line / MS DCC Link Failure Network Interface	Major
3	Loss of Frame OC Port	Critical	46	Far End Protection Line Fail OC Port	Major
4	Out of Frame OC Port	Critical	47	Start of Unavailability Period Channel	Major
5	Alarm Indication Signal OC Port	Critical	48	End of Unavailability Period Channel	Major
6	Remote Defect Indication OC Port	Critical	49	Traffic on circuit is down Circuit	Major
7	APS PDU Not Received Protection Group	Critical	50	VC Sequence Indicator Mismatch Connection	Major
8	Reversion Type Mismatch Protection Group	Critical	51	Loss of Multiframe Alignment Signal Connection	Major
9	Protection Switching Incomplete Protection Group	Critical	52	Loss of Capacity Connection	Major
10	Trace Identifier Mismatch OC Port	Major	53	Start of Unavailability Period Channel	Major
11	Trace Identifier Mismatch STS Port	Major	54	End of Unavailability Period Channel	Major
12	Trace identifier Mismatch VT	Major	55	APS/MSP Mode mismatch failure APS Group	Major
13	BER Threshold exceeded for Signal Failure OC Port	Major	56	APS/MSP Channel mismatch failure APS Group	Minor
14	BER Threshold exceeded for Signal Degrade OC Port	Major	57	APS/MSP Protect Switch Byte failure APS Group	Minor
15	BER Threshold exceeded on Far End Line for Signal Degrade OC Port	Major	58	APS/MSP Far End Protect Line failure APS Group	Minor
16	BER Threshold exceeded on Section for Signal Degrade OC Port	Major	59	Forced Switch Active OC Port	Minor
17	BER Threshold exceeded on Section for Signal Failure OC Port	Major	60	Forced Switch Active STS	Minor
18	BER Threshold exceeded on Section for Signal Failure OC Port	Major	61	Forced Switch Active VT	Minor
19	BER Threshold exceeded on Far End Line for Signal Failure OC Port	Major	62	Lockout Protection Active OC Port	Minor
20	BER Threshold exceeded on Far End Line for Signal Failure OC Port	Major	63	Manual Switch Active OC Port	Minor
21	Communication Link Failure Network Interface	Major	64	Manual Switch Active STS	Minor
22	DCN Failure Network Interface	Major	65	Manual Switch Active VT	Minor
23	Excessive Error STS	Major	66	Protection Mode Mismatch OC Port	Minor
24	Excessive Error VT	Major	67	Protection Channel Match Fail OC Port	Minor
25	Far End Signal Degrade STS	Major	68	Protection Switch Byte Fail OC Port	Minor
26	Far End Signal Degrade VT	Major	69	Switch to protecting card Card Protection Group	Minor
27	Far End Excessive Error STS	Major	70	Provisioning in progress Circuit	Minor
28	Far End Excessive Error VT	Major	71	Unprovisioning in progress Circuit	Minor
29	Loss of Multiframe STS	Major	72	Traffic on circuit is degraded Circuit	Minor
30	Loss of Pointer STS	Major	73	Trunk oper Down Trunk	Minor
31	Loss of Pointer VT	Major	74	User Authentication Failed Node	Minor
32	Alarm Indication Signal STS	Major	75	Lockout Active OC Port	Minor
33	Alarm Indication Signal VT	Major	76	Lockout Active STS	Minor
34	Alarm Indication Signal (Terminating) VT	Major	77	Lockout Active VT	Minor
35	Remote Defect Indication STS	Major	78	Documentation Version Mismatch/Invalid with Software Version Card	Minor
36	Remote Defect Indication VT	Major	79	Loopback Active - Facility Interface	Minor
37	Remote Defect Indication (Terminating) VT	Major	80	Loopback Active - Terminal Interface	Minor
38	Signal Label Unequipped STS	Major	81	Client Side PRBS Active Channel	Minor
39	Signal label Unequipped VT	Major	82	Network side PRBS active Channel	Warning
40	Path Label Mismatch STS	Major	83	Loss of PRBS Synchronization Channel	Warning
41	Path Label Mismatch VT	Major	84	Protection Switch Active OC Port	Warning
42	Signal Degrade STS	Major	85	Protection Switch Active STS	Warning
43	Signal Degrade VT	Major	86	Protection Switch Active VT	Warning



## H. NETWORK MONITORING: DTVRS, CORE, DSR, DISPATCH SITES - NOKIA MPLS MOBILE BACKHAUL (COMMON PLATFORM - HIGH LEVEL) MONITORED ELEMENTS TABLE

The table outlines a high-level view of monitored elements of the Nokia MPLS equipment that support the DTVRS, Core, DSR, Dispatch Sites Systems. Please include information on how the alarm state classification changes will be made from major to minor or vice versa.

DEVICE	TRIGGER STATE	ALARM STATE
<b>NOKIA 7705 SAR18 (CORE LOCATIONS)</b>		
<b>Major/Minor Severity Categories</b>		
tmnxBFdSessions	Main State Options Up/Down	Major
tmnxBgpPeers	Main State Options:Established/Not Established	Major
tmnxMpls-MplsLsp	Main State Options: Up/Down	Major
tmnxOam	Main State Options: Test Complete/Test Failed	Minor
<b>Critical Severity Categories</b>		
tmnxPorts-Port	Main State Options: Up/Down/Admin Down	Critical
CommFailure		
<b>NOKIA 7705 SAR8 (SIMULCAST AND ASR SITES)</b>		
<b>Major/Minor Severity Categories</b>		
tmnxBFdSessions	Main State Options: Up/Down	Major
tmnxBgpPeers	Main State Options: Established/Not Established	Major
tmnxMpls-MplsLsp	Main State Options: Up/Down	Major
tmnxHardware-Csm	Main State Options: In Service/Provisioned Card Missing	Major
tmnxOam	Main State Options: Test Complete/Test Failed	Minor
<b>Critical Severity Categories</b>		
tmnxPorts-Port	Main State Options: Up/Down/Admin Down	Critical
tmnxHardware-Chassis	Main State Options: In Service/Out of Service	Critical
CommFailure		
<b>NOKIA ALE ONMISWITCH 6450 (ALL SITES)</b>		
<b>Major/Minor Severity Categories</b>		
Config	Main State Options: Configuration Saved/Configuration Not Saved	Major
Switch	Main State Options: Port Up/Port Down	Major
VLAN	Main State Options: VLAN Active/VLAN Inactive	Major
Certification-Certification	Main State Options: Switch Certified/Switch Needs Certification	Minor
NTP	Main State Options: NTP Peer Synchronized/NTP Peer No Synchronized	Minor
<b>Critical Severity Categories</b>		
Physical-PS_1 and PS_2	Main State Options: PS Down/Clear	Critical
CommFailure		



# I. NETWORK MONITORING: COMMON PLATFORM, DTVRS, CORE AND DISPATCH SITE ENVIRONMENTAL/SITE SYSTEMS MONITORED ELEMENTS TABLE

(NOTE: Monitored Elements may vary by site)

The table outlines the monitored elements of Common Platform systems and equipment that support the DTVRS, Core, DSR and Dispatch Sites.

MONITOR DEVICE	DIGITAL INPUT	ALARM DESCRIPTION	ALARM PRIORITY	MONITOR DEVICE	DIGITAL INPUT	ALARM DESCRIPTION	ALARM PRIORITY
NG480	DI-1	ATS1: Utility Power Connected	1	NG480	DI-41	LowBand-2-2: Station Environmental	1
NG480	DI-2	ATS1: Site Generator Connected	2	NG480	DI-42	LowBand-2-3: Station Synthesizer	1
NG480	DI-3	ATS1: Utility Power Available	1	NG480	DI-43	SAR Major: Alarm	1
NG480	DI-4	ATS1: Site Generator Available	2	NG480	DI-44	SAR Minor: Alarm	1
NG480	DI-5	ATS1: Test Active		NG480	DI-45	SAR Critical: Alarm	1
NG480	DI-6	ATS1: Not in Auto	2	NG480	DI-46	Microwave-1-1: Critical	1
NG480	DI-7	ATS2: Utility Power Connected	2	NG480	DI-47	Microwave-1-2: Major	2
NG480	DI-8	ATS2: Mobile Generator Connected	2	NG480	DI-48	Microwave-1-3: Minor	2
NG480	DI-9	ATS2: Utility Power Available	2	NG480	DI-49	Door: Entry Alarm	2
NG480	DI-10	ATS2: Mobile Power Available	2	NG480	DI-50	UPS Utility Line Failure	1
NG480	DI-11	ATS2: Mobile Power Test Active		NG480	DI-51	UPS Battery Low	1
NG480	DI-12	ATS2: Not in Auto	2	NG480	DI-52	UPS General Alarm	1
NG480	DI-13	Generator: Low Oil Pressure	1	NG480	DI-53	UPS Bypass Mode	1
NG480	DI-14	Generator: High Engine Temp	1	NG480	DI-54	Microwave-2-1: Critical	1
NG480	DI-15	Generator: Charger AC Failure	2	NG480	DI-55	Microwave-2-2: Major	2
NG480	DI-16	Generator: Battery Alarm	2	NG480	DI-56	Microwave-2-3: Minor	2
NG480	DI-17	Generator: Engine Overspeed	1	NG480	DI-57	FSS: Trouble Alarm	1
NG480	DI-18	Generator: Overcrank	1	NG480	DI-58	FSS: Supervisory Alarm	1
NG480	DI-19	Generator: Not in Auto	2	NG480	DI-59	FSS: General Alarm	1
NG480	DI-20	Generator: Online	2	NG480	DI-60	NOT USED	
NG480	DI-21	NOT USED		NG480	DI-61	NOT USED	
NG480	DI-22	NOT USED		NG480	DI-62	NOT USED	
NG480	DI-23	NOT USED		NG480	DI-63	Unit reset	2
NG480	DI-24	TVSS Main: Alarm	1	NG480	DI-64	NTP failed	2
NG480	DI-25	TVSS Subpanel 1: Alarm	1	NG480	DI-65	Timed tick	2
NG480	DI-26	TVSS Subpanel 2: Alarm	1	NG480	DI-66	Serial 1 RcvQ full	2
NG480	DI-27	TVSS Subpanel 3: Alarm	1	NG480	DI-67	Dynamic memory full	2
NG480	DI-28	Camera: Alarm	2	NG480	DI-68	Notification 1 failed	
NG480	DI-29	Exterior Motion Detector: Alarm	2	NG480	DI-69	Notification 2 failed	
NG480	DI-30	Tower Lights: ON/OFF	3	NG480	DI-70	Notification 3 failed	
NG480	DI-31	Tower Lights: Control Power	1	NG480	DI-71	Notification 4 failed	
NG480	DI-32	Tower Lights: Beacon	1	NG480	DI-72	Notification 5 failed	





MONITOR DEVICE	DIGITAL INPUT	ALARM DESCRIPTION	ALARM PRIORITY	MONITOR DEVICE	DIGITAL INPUT	ALARM DESCRIPTION	ALARM PRIORITY
NG480	DI-33	Tower Lights: Side Light	1	NG480	DI-73	Notification 6 failed	
NG480	DI-34	DC Plant Inverter Major Failure	1	NG480	DI-74	Notification 7 failed	
NG480	DI-35	DC Plant Inverter Minor Failure	2	NG480	DI-75	Notification 8 failed	
NG480	DI-36	DC Plant Inverter Redundancy Lost	2	NG480	DI-76	Expansion 1 failed	2
NG480	DI-37	LowBand-1-1: Station Power	1	NG480	DI-77	DCP poller inactive	1
NG480	DI-38	LowBand-1-2: Station Environmental	1	NG480	DI-78	Default configuration	2
NG480	DI-39	LowBand-1-3: Station Synthesizer	1	NG480	DI-79	Dipswitch Configuration	2
NG480	DI-40	LowBand-2-1: Station Power	1	NG480	DI-80	MAC address not set	2
NG480	DI-81	IP address not set	2	HVAC MCU	DI-121	One or More Ambient Sensor(s) Failed	2
NG480	DI-82	LAN hardware error	2	HVAC MCU	DI-122	All Ambient Sensors Failed	1
NG480	DI-83	SNMP processing error		HVAC MCU	DI-123	Comfort Mode Active	
NG480	DI-84	SNMP community error		HVAC MCU	DI-124	Total Failure (HVACs Shutdown)	1
NG480	DI-85	LAN TX packet drop	2	HVAC MCU	DI-125	TEMP HIGH	1
NG480	DI-86	Received SNMP Trap		HVAC MCU	DI-126	TEMP LOW	2
NG480	DI-87	Device not responding to SNMPGET		HVAC MCU	DI-127	Default configuration	1
NG480	DI-88	Authentication Failure	2	HVAC MCU	DI-128	DIP Switch Config	2
NG480	DI-89	Device Failure	1	HVAC MCU	DI-129	MAC address not set	2
NG480	DI-90	Device Offline	1	HVAC MCU	DI-130	IP address not set	2
NG480	DI-91	Device Inactive	2	HVAC MCU	DI-131	Generator on	
NG480	DI-92	IP/Name Mismatch	2	HVAC MCU	DI-132	Generator load applied	
NG480	DI-93	RTU reboot with new config	2	HVAC MCU	DI-133	SNMP community error	
NG480 Controls	DI-94	Not Used		HVAC MCU	DI-134	Lag HVAC Running	2
NG480 Controls	DI-95	Not Used		HVAC MCU	DI-135	LAN TX Packet Drop	2
NG480 Controls	DI-96	Not Used		HVAC MCU	DI-136	Device not responding to SNMPGET	2
NG480 Controls	DI-97	Not Used		HVAC MCU	DI-137	Authentication Failure	1
HVAC MCU	DI-98	HVAC 1 Fail	2	HVAC MCU	DI-138	Device Failure	1
HVAC MCU	DI-99	HVAC 2 Fail	2	HVAC MCU	DI-139	Device Offline	1
HVAC MCU	DI-100	HVAC 3 Fail	2	HVAC MCU	DI-140	Device Inactive	1
HVAC MCU	DI-101	HVAC 4 Fail	2	HVAC MCU	DI-141	Received SNMP Trap	
HVAC MCU	DI-102	HVAC 5 Fail	2	HVAC MCU	DI-142	Indoor Temp Minor Under	2
HVAC MCU	DI-103	HVAC 6 Fail	2	HVAC MCU	DI-143	Indoor Temp Major Under	2
HVAC MCU	DI-104	NOT USED		HVAC MCU	DI-144	Indoor Temp Minor Over	2
HVAC MCU	DI-105	Smoke Detected	1	HVAC MCU	DI-145	Indoor Temp Major Over	1
HVAC MCU	DI-106	Hydrogen Sensed	1	HVAC MCU	DI-146	Indoor Temp Not Detected	1
HVAC MCU	DI-107	Condenser Pump Failure Alarm	1	HVAC MCU	DI-147	Indoor Humidity Minor Under	
HVAC MCU	DI-108	Unit Reset	2	HVAC MCU	DI-148	Indoor Humidity Major Under	
HVAC MCU	DI-109	NTP failed	2	HVAC MCU	DI-149	Indoor Humidity Minor Over	





MONITOR DEVICE	DIGITAL INPUT	ALARM DESCRIPTION	ALARM PRIORITY	MONITOR DEVICE	DIGITAL INPUT	ALARM DESCRIPTION	ALARM PRIORITY
HVAC MCU	DI-110	Timed tick	2	HVAC MCU	DI-150	Indoor Humidity Major Over	
HVAC MCU	DI-111	Serial 1 RcvQ full	2	HVAC MCU	DI-151	Indoor Humidity Not Detected	2
HVAC MCU	DI-112	Dynamic memory full	2	HVAC MCU	DI-152	Outdoor Temp Minor Under	
HVAC MCU	DI-113	Notification 1 failed		HVAC MCU	DI-153	Outdoor Temp Major Under	
HVAC MCU	DI-114	Notification 2 failed		HVAC MCU	DI-154	Outdoor Temp Minor Over	
HVAC MCU	DI-115	Notification 3 failed		HVAC MCU	DI-155	Outdoor Temp Major Over	
HVAC MCU	DI-116	Notification 4 failed		HVAC MCU	DI-156	Outdoor Temp Not Detected	2
HVAC MCU	DI-117	Notification 5 failed		HVAC MCU	DI-157	Chassis Temp Minor Under	
HVAC MCU	DI-118	Notification 6 failed		HVAC MCU	DI-158	Chassis Temp Major Under	
HVAC MCU	DI-119	Notification 7 failed		HVAC MCU	DI-159	Chassis Temp Minor Over	
HVAC MCU	DI-120	Notification 8 failed		HVAC MCU	DI-160	Chassis Temp Major Over	1
HVAC MCU	DI-161	Chassis Temp Not Detected	2	HVAC Controls	DI-201	Not Used	
HVAC MCU	DI-162	Vent 1 Temp Minor Under		VoIP OrderWire	DI-202	DCP channel is inactive	1
HVAC MCU	DI-163	Vent 1 Temp Major Under		VoIP OrderWire	DI-203	MAC address not set	2
HVAC MCU	DI-164	Vent 1 Temp Minor Over		VoIP OrderWire	DI-204	IP address not set	2
HVAC MCU	DI-165	Vent 1 Temp Major Over		VoIP OrderWire	DI-205	LAN hardware error	2
HVAC MCU	DI-166	Vent 1 Temp Not Detected	2	VoIP OrderWire	DI-206	SNMP processing error	
HVAC MCU	DI-167	Vent 2 Temp Minor Under		VoIP OrderWire	DI-207	SNMP community error	
HVAC MCU	DI-168	Vent 2 Temp Major Under		VoIP OrderWire	DI-208	LAN TX packet drop	2
HVAC MCU	DI-169	Vent 2 Temp Minor Over		VoIP OrderWire	DI-209	Notification 1 failed	
HVAC MCU	DI-170	Vent 2 Temp Major Over		VoIP OrderWire	DI-210	Notification 2 failed	
HVAC MCU	DI-171	Vent 2 Temp Not Detected	2	VoIP OrderWire	DI-211	Notification 3 failed	
HVAC MCU	DI-172	Vent 3 Temp Minor Under		VoIP OrderWire	DI-212	Notification 4 failed	
HVAC MCU	DI-173	Vent 3 Temp Major Under		VoIP OrderWire	DI-213	Notification 5 failed	
HVAC MCU	DI-174	Vent 3 Temp Minor Over		VoIP OrderWire	DI-214	Notification 6 failed	
HVAC MCU	DI-175	Vent 3 Temp Major Over		VoIP OrderWire	DI-215	Notification 7 failed	
HVAC MCU	DI-176	Vent 3 Temp Not Detected	2	VoIP OrderWire	DI-216	Notification 8 failed	
HVAC MCU	DI-177	Vent 4 Temp Minor Under		VoIP OrderWire	DI-217	NTP failed	2
HVAC MCU	DI-178	Vent 4 Temp Major Under		VoIP OrderWire	DI-218	Timed tick	2
HVAC MCU	DI-179	Vent 4 Temp Minor Over		VoIP OrderWire	DI-219	Serial 1 RcvQ full	2
HVAC MCU	DI-180	Vent 4 Temp Major Over		VoIP OrderWire	DI-220	Dynamic memory full	2
HVAC MCU	DI-181	Vent 4 Temp Not Detected	2	VoIP OrderWire	DI-221	Unit reset	2
HVAC MCU	DI-182	Vent 5 Temp Minor Under		VoIP OrderWire	DI-222	No phone line connected	2



MONITOR DEVICE	DIGITAL INPUT	ALARM DESCRIPTION	ALARM PRIORITY	MONITOR DEVICE	DIGITAL INPUT	ALARM DESCRIPTION	ALARM PRIORITY
HVAC MCU	DI-183	Vent 5 Temp Major Under		VoIP OrderWire	DI-223	DCPI Failed	1
HVAC MCU	DI-184	Vent 5 Temp Minor Over		VoIP OrderWire	DI-224	Device not responding to SNMPGET	
HVAC MCU	DI-185	Vent 5 Temp Major Over		VoIP OrderWire	DI-225	Authentication Failure	1
HVAC MCU	DI-186	Vent 5 Temp Not Detected	2	VoIP OrderWire	DI-226	Device Failure	1
HVAC MCU	DI-187	Vent 6 Temp Minor Under		VoIP OrderWire	DI-227	Device Offline	1
HVAC MCU	DI-188	Vent 6 Temp Major Under		VoIP OrderWire	DI-228	Device Inactive	1
HVAC MCU	DI-189	Vent 6 Temp Minor Over		VoIP OrderWire	DI-229	Received SNMP Trap	
HVAC MCU	DI-190	Vent 6 Temp Major Over		Omnitec Fuel Monitor	DI-230	Product Height - Minor Under	
HVAC MCU	DI-191	Vent 6 Temp Not Detected	2	Omnitec Fuel Monitor	DI-231	Product Height - Minor Over	2
HVAC MCU	DI-192	Vent 1 Temp HVAC Cooling Temp Fail	2	Omnitec Fuel Monitor	DI-232	Product Height - Major Under	
HVAC MCU	DI-193	Vent 2 Temp HVAC Cooling Temp Fail	2	Omnitec Fuel Monitor	DI-233	Product Height - Major Over	1
HVAC MCU	DI-194	Vent 3 Temp HVAC Cooling Temp Fail	2	Omnitec Fuel Monitor	DI-234	Water Height - Minor Under	
HVAC MCU	DI-195	Vent 4 Temp HVAC Cooling Temp Fail	2	Omnitec Fuel Monitor	DI-235	Water Height - Minor Over	2
HVAC MCU	DI-196	Vent 5 Temp HVAC Cooling Temp Fail	2	Omnitec Fuel Monitor	DI-236	Water Height - Major Under	
HVAC MCU	DI-197	Vent 6 Temp HVAC Cooling Temp Fail	2	Omnitec Fuel Monitor	DI-237	Water Height - Major Over	1
HVAC Controls	DI-198	Not Used		Omnitec Fuel Monitor	DI-238	Product Volume - Minor Under	2
HVAC Controls	DI-199	Not Used		Omnitec Fuel Monitor	DI-239	Product Volume - Minor Over	2
HVAC Controls	DI-200	Not Used		Omnitec Fuel Monitor	DI-240	Product Volume - Major Under	2
Omnitec Fuel Monitor	DI-241	Product Volume - Major Over	2	Eltek Smartpack	DI-281	Battery Breaker/Fuse	2
Omnitec Fuel Monitor	DI-242	Water Volume - Minor Under		Eltek Smartpack	DI-282	Load Distribution Breaker/Fuse	2
Omnitec Fuel Monitor	DI-243	Water Volume - Minor Over	2	Eltek Smartpack	DI-283	Major Rectifier	2
Omnitec Fuel Monitor	DI-244	Water Volume - Major Under		Eltek Smartpack	DI-284	Minor Rectifier	2
Omnitec Fuel Monitor	DI-245	Water Volume - Major Over	1	Eltek Smartpack	DI-285	Major Battery Symmetry	2
Omnitec Fuel Monitor	DI-246	Temperature - Minor Under		Eltek Smartpack	DI-286	Minor Battery Symmetry	



MONITOR DEVICE	DIGITAL INPUT	ALARM DESCRIPTION	ALARM PRIORITY	MONITOR DEVICE	DIGITAL INPUT	ALARM DESCRIPTION	ALARM PRIORITY
Omntec Fuel Monitor	DI-247	Temperature - Minor Over		Eltek Smartpack	DI-287	Battery Life Ended	2
Omntec Fuel Monitor	DI-248	Temperature - Major Under		Eltek Smartpack	DI-288	Battery Testmode Entered	
Omntec Fuel Monitor	DI-249	Temperature - Major Over		Eltek Smartpack	DI-289	Battery Boostmode Entered	
Omntec Fuel Monitor	DI-250	T.C. Volume - Minor Under	2	Eltek Smartpack	DI-290	Control Unit 1 Programmable Alarm	
Omntec Fuel Monitor	DI-251	T.C. Volume - Minor Over	2	Eltek Smartpack	DI-291	Control Unit 2 Programmable Alarm	
Omntec Fuel Monitor	DI-252	T.C. Volume - Major Under	2	Eltek Smartpack	DI-292	Control Unit 3 Programmable Alarm	
Omntec Fuel Monitor	DI-253	T.C. Volume - Major Over	2	Eltek Smartpack	DI-293	Control Unit 4 Programmable Alarm	
Omntec Fuel Monitor	DI-254	Ullage - Minor Under		Eltek Smartpack	DI-294	Control Unit 5 Programmable Alarm	
Omntec Fuel Monitor	DI-255	Ullage - Minor Over		Eltek Smartpack	DI-295	Control Unit 6 Programmable Alarm	
Omntec Fuel Monitor	DI-256	Ullage - Major Under		Eltek Smartpack	DI-296	Control Unit 7 Programmable Alarm	
Omntec Fuel Monitor	DI-257	Ullage - Major Over		Eltek Smartpack	DI-297	Control Unit 8 Programmable Alarm	
Omntec Fuel Monitor	DI-258	BX 1 Remote Fill Leak Detected	1	Eltek Smartpack	DI-298	Heartbeat Received	
Omntec Fuel Monitor	DI-259	BX 2 Interstitial Leak Detected	1	Eltek Smartpack	DI-299	Unit Temperature 1	2
Omntec Fuel Monitor	DI-260	BX 3 Gen Leak Tray Detected	1	Eltek Smartpack	DI-300	Unit Temperature 2	2
Omntec Fuel Monitor	DI-261	Tank 1 Over Fill Alarm	1	Eltek Smartpack	DI-301	Unit Fan Speed Delta 1	2
Omntec Fuel Monitor	DI-262	Fuel Level - Minor Under	2	Eltek Smartpack	DI-302	Unit Fan Speed Delta 2	2
Omntec Fuel Monitor	DI-263	Fuel Level - Minor Over	2	Eltek Smartpack	DI-303	IO Unit 1 Programmable Alarm	
Omntec Fuel Monitor	DI-264	Fuel Level - Major Under	2	Eltek Smartpack	DI-304	IO Unit 2 Programmable Alarm	
Omntec Fuel Monitor	DI-265	Fuel Level - Major Over	2	Eltek Smartpack	DI-305	IO Unit 3 Programmable Alarm	
Omntec Fuel Monitor	DI-266	BX 5 Heat Probe Alarm	1	Eltek Smartpack	DI-306	IO Unit 4 Programmable Alarm	
Omntec Fuel Monitor	DI-267	Device Offline	1	Eltek Smartpack	DI-307	IO Unit 5 Programmable Alarm	
Omntec Fuel Monitor	DI-268	Device Inactive	1	Eltek Smartpack	DI-308	IO Unit 6 Programmable Alarm	



MONITOR DEVICE	DIGITAL INPUT	ALARM DESCRIPTION	ALARM PRIORITY	MONITOR DEVICE	DIGITAL INPUT	ALARM DESCRIPTION	ALARM PRIORITY
Omntec Fuel Monitor	DI-269	Device Failure	1	Eltek Smartpack	DI-309	IO Unit 7 Programmable Alarm	
Eltek Smartpack	DI-270	Major High Battery Voltage	1	Eltek Smartpack	DI-310	IO Unit 8 Programmable Alarm	
Eltek Smartpack	DI-271	Minor High Battery Voltage	2	Eltek Smartpack	DI-311	IO Unit 9 Programmable Alarm	
Eltek Smartpack	DI-272	Major Low Battery Voltage	1	Eltek Smartpack	DI-312	IO Unit 10 Programmable Alarm	
Eltek Smartpack	DI-273	Minor Low Battery Voltage	2	Eltek Smartpack	DI-313	IO Unit 11 Programmable Alarm	
Eltek Smartpack	DI-274	Major Battery High Temperature	1	Eltek Smartpack	DI-314	IO Unit 12 Programmable Alarm	
Eltek Smartpack	DI-275	Minor Battery High Temperature	2	Eltek Smartpack	DI-315	IO Unit 13 Programmable Alarm	
Eltek Smartpack	DI-276	Battery Contactor Disconnect	1	Eltek Smartpack	DI-316	IO Unit 14 Programmable Alarm	
Eltek Smartpack	DI-277	Load Contactor 1 Disconnect		Eltek Smartpack	DI-317	Major Solar Charger	2
Eltek Smartpack	DI-278	Load Contactor 2 Disconnect		Eltek Smartpack	DI-318	Minor Solar Charger	2
Eltek Smartpack	DI-279	Load Contactor 3 Disconnect		Eltek Smartpack	DI-319	Major Rectifier Capacity	2
Eltek Smartpack	DI-280	AC Mains Voltage Low	1	Eltek Smartpack	DI-320	Minor Rectifier Capacity	2
Eltek Smartpack	DI-321	Minor Solar Charger	2	Eltek Smartpack	DI-323	Minor Rectifier Capacity	2
Eltek Smartpack	DI-322	Major Rectifier Capacity	2	Eltek Smartpack	DI-324	Device not responding to SNMPGET	2

## J. RESPONSIBILITY MATRIX

This RACI table identifies roles and chain of communication for specific tasks and deliverables associated with the LA-RICS, DTVRS, Core, DSR, Dispatch Site Warranty Support Plan and Services delivery

The terminology includes the following definitions:

RACI Matrix					
R	Responsible	Those who do the work to achieve the task. There is typically one role with a participation type of Responsible.			
A	Accountable	Those who are ultimately accountable for the correct and thorough completion of the deliverables or task, and the one to whom Responsible is accountable. Typically, the Process Owner is Accountable for a process, and there must be only one Accountable specified for each task or deliverable.			
C	Consulted	Those who are not directly involved in a process but provide inputs and whose opinions are sought.			
I	Informed	Those who receive outputs from a process or are kept up-to-date on progress, often only on completion of the task or deliverable.			
RESPONSIBILITY (RACI) MATRIX		NETWORK ELEMENT/SUBSYSTEM			
Warranty Services		LA-RICS	MSI	LA-RICS	MSI
NOC – System Monitoring					
Event Monitoring		I	RA	I	RA



RESPONSIBILITY (RACI) MATRIX	NETWORK ELEMENT/SUBSYSTEM			
Warranty Services	LA-RICS	MSI	LA-RICS	MSI
Continuous monitoring	I	RA	I	RA
<b>TSO and Service Desk - Incident Management</b>				
Technical support, dispatch	I	RA	I	RA
<b>FSO Field Services</b>				
Onsite response	I	RA	I	RA
Problem Identification and resolution	I	RA	I	RA
Engagement of OEM/Third Party Servicers	I	RA	I	RA
Tracking changes to the network	I	RA	I	RA
<b>Access Management</b>				
Password Management	CI	RA	CI	RA
Role Based Application Access Management	CI	RA	CI	RA
System keys	-	-	-	-
Site Access, Facility Access, Badging, Keys, Cardkeys, escorts, etc.	RA	A	RA	A
<b>Release/Deployment Coordination</b>				
Patching/Technical Bulletins	CI	RA	CI	RA
System Release Management	CI	RA	CI	RA
<b>Network Provisioning</b>				
Patch Implementation, including Window Servers and Clients as applicable	CI	RA	CI	RA
Network change provisioning	CI	RA	CI	RA
<b>Network Performance Management</b>				
Application of tools, etc to be proactive	CI	RA	CI	RA
<b>Radio Fleet Provisioning</b>				
Device provisioning on the network	RA	-	-	-
<b>Spares Management</b>				
Spares tracking/management	CI	RA	CI	RA
<b>Preventative Maintenance Management</b>				
Perform Proactive PM Warranty Services	CI	RA	CI	RA
<b>Repair</b>				
Repair broken infrastructure	I	RA	I	RA



RESPONSIBILITY (RACI) MATRIX	NETWORK ELEMENT/SUBSYSTEM			
	LA-RICS	MSI	LA-RICS	MSI
<b>Warranty Services</b>				
Tracking of asset/model/serial numbers of FRU's, spares and/or exchanged equipment	I	RA	I	RA
<b>Service Level Management</b>				
Track and report performance to commitments	CI	RA	CI	RA
Service Reporting	CI	RA	CI	RA
IMTS (InforEAM) System Access and Use	CI	RA	CI	RA
<b>LA-RICS will need to provide a specific list of alarm notifications and the time frame LA-RICS is expected to need to respond so that may be addressed individually and agreed upon.</b>				

## K. SERVICE REPORTING AND SCHEDULE

During the specified Warranty Period Motorola will provide a monthly status report itemizing DTVRS, Core, DSR and Dispatch Site System availability including the Incident Numbers of the outages/failures that occurred since last report as well as the Incident Numbers of any outstanding problems that have not been resolved since last report.

The list of outages/failures will include the Incident Number, Date and Time of Outage, Duration of the Outage, description of the failure, date and time stamps as well as the description of the actions performed, and the details of the resolution.

In addition, the report will include information documenting who has made each entry listed on the report and details as to who opened the issue, who updated the issue, who closed the issue.

## L. INVENTORY AND WARRANTY SERVICES TRACKING

Motorola plans to utilize the Inventory Management and Tracking Subsystem (IMTS) possessed by LA-RICS, (currently InforEAM) to track LA-RICS owned equipment and inventory as needed, as well as the tracking of any LA-RICS owned spare or FRU inventory if utilized by Motorola.

During the specified warranty period Motorola plans to utilize Motorola owned spare and FRU equipment to support warranty repair and restoration efforts for DTVRS, Core, DSR, and Dispatch Sites, and the Common Platform Systems. Asset, Model and Serial Number data of utilized spares and FRU's as well as that of any exchanged equipment will be recorded in the IMTS as applicable.

Motorola will also utilize the IMTS for recording of work orders and work order management, including warranty repairs, service history, and related data capture and documentation as detailed in Section M referenced above.

LA-RICS shall be responsible to allow and provide access to the LA-RICS - IMTS system database via a VPN or other approved method without cost to Motorola. Motorola personnel engaged in the performance of warranty services during the warranty period will maintain valid access licenses for the InforEAM system and utilize Motorola provided devices for system access.



## M.MOTOROLA SUBCONTRACTED SERVICE ENTITIES

CONTRACTOR	ADDRESS	CITY	STAFF	YEARS IN BUSINESS	SERVICES PROVIDED	NOTES
RadioMobile	8801 Kenamar Drive	San Diego, CA	25+	10	NMDN System Services Support	OEM
AVIAT Networks (NEC Microwave)	860 N. McCarthy Bl Ste 200	Milpitas, CA	100+	70	Microwave / Backhaul Services Support	Motorola Preferred Vendor
Nokia Networks	440 N. Bernardo Ave	Mountain View, CA	100+	155	MPLS System Services Support	Motorola Preferred Vendor
DPS Telecom	4955 E Yale Ave	Fresno, CA	40+	36	Site/System Monitoring System Services Support	OEM
Flynn Air	7611 Slater Ave Ste G,	Huntington Beach, CA	12	6	HVAC System Services Support	Manufacturer authorized agent
SEPS, Inc / Unified Power Systems	7531 Brush Hill Rd	Burr Ridge, IL	100+	40	DC Power Plant & Battery Bank Services Support	Motorola Preferred Vendor
Cummins Sales and Service	11725 Willake St	Santa Fe Springs, CA	100+	103	Generator and ATS Services Support	Cummins OEM agent
Bay City Electric Works	8647 Helms Ave	Rancho Cucamonga, CA	100+	25	Generator and Services (PMT) and DPF Services	Kohler OEM Agent
West Coast Energy Systems, LLC	7 Latitude Way	Corona, CA	50+	25	Generator and ATS Services Support (SPH)	Generac OEM Agent
Amber Resources/Deon & Sons	1543 W. 16th St	Long Beach, CA	100+	92	Fueling, Fuel Polishing and Tank Systems Services & Support	Fuel Services
JDS Tank Testing & Repair	10612 Lexington St	Stanton, CA	5+	16	Fuel Tank System Testing and Services Support	Fuel Services
FPS Facilities Protection Systems	1150 W. Central Ave., Suite D	Brea, CA	25+	32	Fire Suppression Systems Service Support	Manufacturer Authorized agent





CONTRACTOR	ADDRESS	CITY	STAFF	YEARS IN BUSINESS	SERVICES PROVIDED	NOTES
Airwave Communications Enterprises	2727 Supply Avenue	Commerce, CA	50+	40	Site Services, Shelter and Tower Services Support	Authorized Motorola Service Partner

## N. CHANGE REQUEST AND MANAGEMENT PROCEDURE

Below is a description and process map of the Motorola Change Management process.

**Motorola understands and acknowledges LA-RICS desire to meet with MSI to review and document the LA-RICS' Change Management process in order to further incorporate them in to a formalized process as part of the warranty plans.**

The Motorola Change Management process is a standardized process and set of procedures that are used for efficiently managing changes in a customer network. Change Management (CRQs) should be used to document ALL planned work, including Routine and Preventive Maintenance (PM), Software Upgrades, Hardware replacements (power supplies, GPS Antennas, etc.).

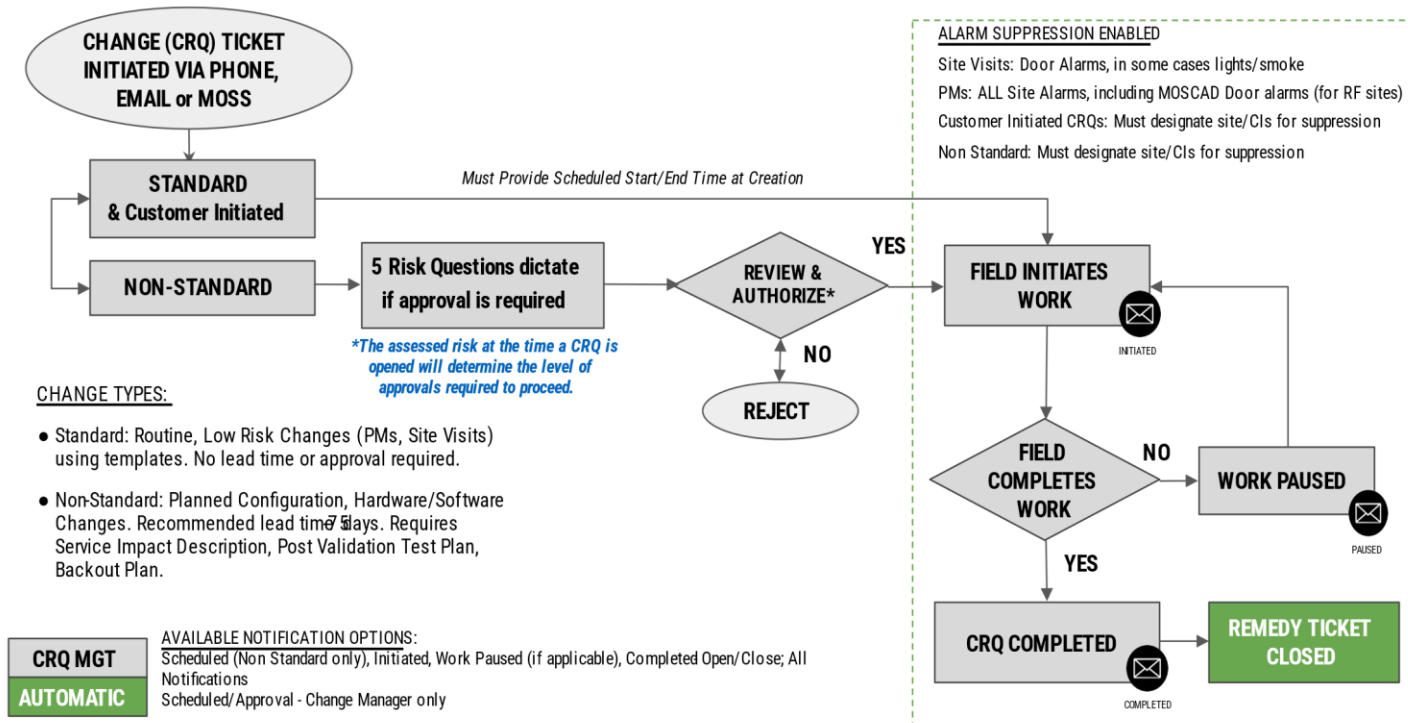
CRQs 'suppress' alarms generated as a result of planned work, thus reducing false dispatches, escalations and overall incident creation.

CRQ's can be initiated for some requests by Motorola FSO technicians via the Motorola - Mobile OSS application, as well as via telephone to the Motorola CMSO Service Desk (800-814-0601) or via email via to: [dispatch@motorolasolutions.com](mailto:dispatch@motorolasolutions.com).

CRQ's are not visible in the My View Portal, but can be emailed or send via SMS to the appropriate parties by the NOC / Service Desk.



# HIGH LEVEL CHANGE MANAGEMENT PROCESS



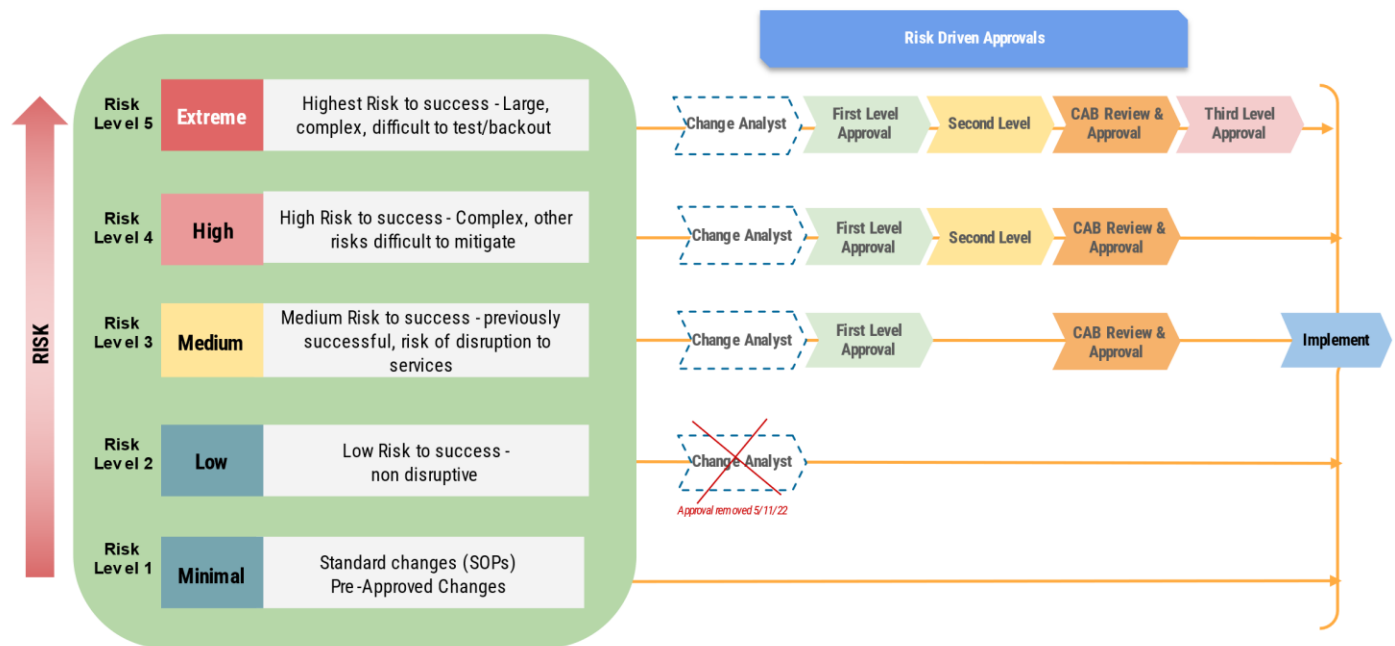
## DEFINING CHANGE (CRQ) RISK

### Risk Assessment

Risk Questions	Risk Value		
	Yes	No	
Is the change to a critical service or services	2	1	These define the core risk <i>of the change</i> . The services impacted and <i>how the change actions</i> will impact those services.
Is the change implementation disruptive to services	3	1	
Has the implementation previously been tested or successfully implemented	1	2	These are essentially <i>risk escalators</i> and are designed to drive up the level of risk thereby necessitating more governance. Change Implementer can reduce the risk, and the required governance by providing the element.
Is there a valid backout plan	1	2	
If the change fails is there disruption to customer services	2	1	



# CHANGE MGT (CRQ) APPROVALS



## Motorola Change Management Approval Levels

**Initiator:** Person opening up the change request, typically a Field Technician, or other SME Support specialist. They are often the implementer of the change.

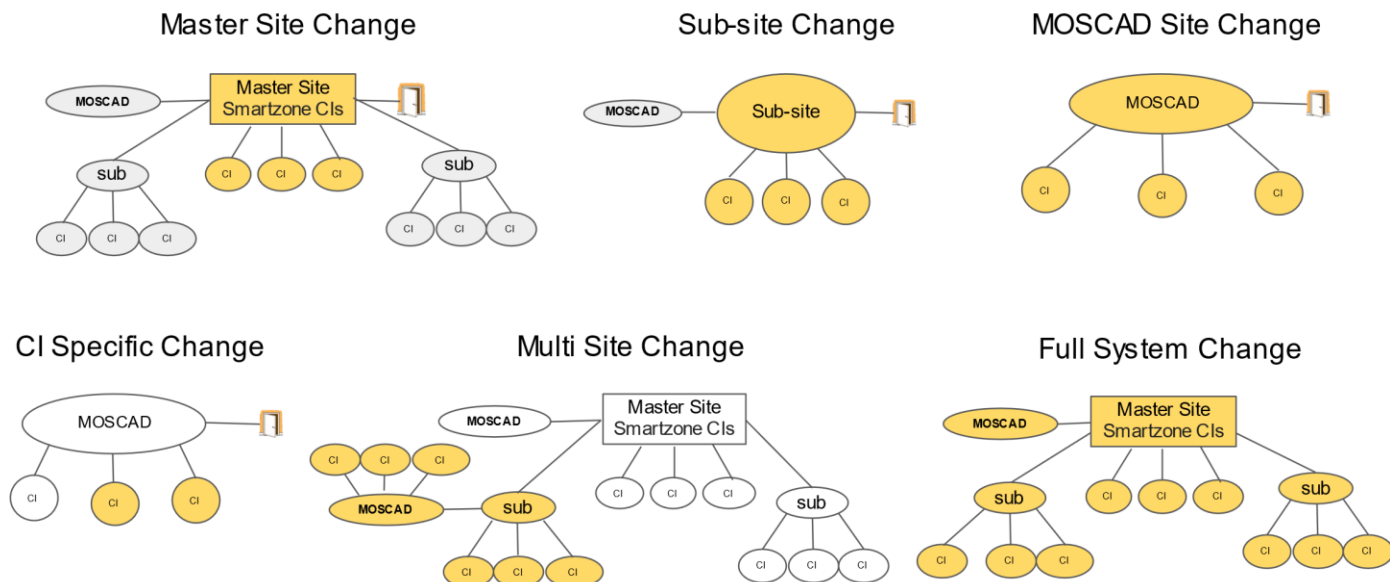
**First Approver:** Stakeholder with localized view/awareness and interest over the change. First line group manager, Customer Success Manager or Service Delivery Manager or equivalent. Governance view is around the success of the change, possible Customer management in the event of failure, disruption etc.

**Second Approver:** Stakeholder with wider level view/awareness interest over the change. Senior Group Manager, or Director or equivalent. This higher-level governance view is around success and possible broader or sensitive impact of the change in the event of disruption or failure.

**Third Approver:** Senior or Executive leader with the overall accountability for the service delivery within their organization. Typically, a VP level or equivalent.

**Change Advisory Board:** Cross organization Senior Managers with a broad end to end CMSO and key Partners view/awareness over the change.

# CRQ ALARM SUPPRESSION OPTIONS



## CRQ TYPES...

CRQ Template	Used For..	Suppresses..	NOTES/TIPS
Site Visit Avail in MOSS: Yes Approval Req'd: No	Visual Inspections ONLY	Designated site Door alarm only	<ul style="list-style-type: none"> <li>Can add Smoke alarm DIs and Lights if included in Site Visit, by calling the Service Desk</li> <li>CRQ must be in 'Implementation in Progress' BEFORE entering the site</li> </ul>
PM Avail in MOSS: Yes Approval Req'd: No	'Contractual' PMs ONLY, including 3 <sup>rd</sup> Party equipment and systems, i.e. Generator, HVAC, etc.	Suppresses the designated site and it's related Door Alarm	<ul style="list-style-type: none"> <li>If the corresponding MOSCAD site will be impacted it should be added to the CRQ</li> <li>Additional sites can NOT be added via MOSS- must be called into Service Desk</li> <li>CRQ must be in 'Implementation in Progress' BEFORE entering the site</li> <li>Allow yourself enough time when establishing the Change window</li> </ul>
Non Standard Avail in MOSS: Yes Approval Req'd: Yes	All Other Planned Work	Suppresses designated sites or CIs	<ul style="list-style-type: none"> <li>Should be opened in advance to allow time for approvals</li> <li>Must contact Service Desk to add more than 1 site</li> <li>CRQs at Master do NOT suppress the entire system</li> <li>If system wide suppression is required, contact Service Desk and request to speak to NOC</li> </ul>
Known Issue Avail in MOSS: No Approval Req'd: No	Known Issues preventing Incidents from being Resolved	Suppresses designated sites or CIs	<ul style="list-style-type: none"> <li>Can only be opened by Operations Managers</li> <li>Used for Known Issues occurring at site where we are waiting on customer approval, quotes, delivery of equipment, tower climbs, upgrades, etc.</li> </ul>
Customer Initiating Change Avail in MOSS: No Approval Req'd: No	When customers are doing/initiating the work	Suppresses designated sites or CIs	<ul style="list-style-type: none"> <li>Used for customer initiated changes only</li> <li>CRQ must be in 'Implementation in Progress' BEFORE entering the site</li> </ul>



## Alarm Suppression Process – Change Request (CRQ)

Call the Motorola NOC/Service Desk: 800-814-0601, available 24/7 365/366 days per year

Information to be provided at time of CRQ creation:

- Type of Change Request being requested (Site Visit, PM or Customer Initiated Change)
- Site ID impacted....
  - If working on environmental equipment, use MOSCAD (MOS) site ID
  - For Door Alarm suppression use MOSCAD (MOS) site ID, indicate “Site Visit”
- Description of work being performed, and who is performing the work
- Scheduled Start and End Time
  - Estimated time to complete work
  - Time can be extended as necessary based on progress to completion

NOTE:

- Do NOT enter site until agent acknowledges CRQ is “In Progress” and alarms are suppressed.

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### SAMPLE CHANGE REQUEST FORM FOR SYSTEM WORK PERFORMANCE

<b>MOTOROLA – LA-RICS CUSTOMER NOTIFICATION CRITICAL AND NON-EMERGENCY CHANGE REQUEST FORM</b>
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1. Choose the type of request that is being submitted (Place an X in front of the selected request)

- ☐ Critical Change – DTVRS  
☐ Critical Change – Core  
☐ Critical Change – DSR  
☐ Critical Change – Dispatch Site  
☐ Critical Change – MICROWAVE and/or MPLS related requests  
☐ Critical Change – COMMON PLATFORM EQUIPMENT related requests- DESCRIBE: \_\_\_\_\_

- ☐ Non-Emergency Change - DTVRS  
☐ Non-Emergency Change - Core  
☐ Non-Emergency Change - DSR  
☐ Non-Emergency Change – Dispatch Site  
☐ Non-Emergency Change - MICROWAVE and/or MPLS  
☐ Non-Emergency Change -COMMON PLATFORM EQUIPMENT related requests - DESCRIBE: \_\_\_\_\_

2. Description of the proposed change/activity (State the nature and scope of the change/activity)

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<b>3. Reason or issue the change activity will address (State the reasons or issues that require this change activity)</b>
<b>4. System(s) known to be affected by the proposed activity (Name all the systems that are affected and the extent to which each system is affected)</b>
<b>5. Description of the process that will be followed to conduct the change (Enter a description of the steps involved in this change or a Method of Procedure (MOP))</b>
<b>6. Estimated period of outage, if any (If there is an outage give an estimate of the duration of the outage and which systems will be down)</b>
<b>7. Description of the fallback process (Describe the fallback process that will allow operation to continue)</b>
<b>8. Estimate of recovery time, if the fallback process is invoked (Give a time estimate to implement the fallback process)</b>
<b>9. Test verification conducted on soft/hardware changes (List the steps taken to verify this change)</b>
<b>10. Names and contact info for staff involved in the upgrade (List the names, company affiliation, and phone number of staff involved in the change)</b>



11. Requested date and start time for the change to be scheduled (Date, start time, and duration for which this change is scheduled)


12. LA-RICS Approval: Name: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

13. Change Request (CRQ Incident) opened with NOC, CRQ Number: \_\_\_\_\_

